Comment Summary and Response on November 5, 2013 Draft:
Reconsideration of the Total Maximum Daily Load for Toxic Pollutants in Marina del Rey Harbor
Comment due date: January 15, 2014

1. U.S. EPA
2. Heal the Bay and LA Waterkeeper
3. City of LA, Bureau of Sanitation
4. City of Newport Beach
5. Los Angeles County Department of Public Works (LACDPW)
6. Debbie Talbot, LA County Dept. of Beaches and Harbors
7. Gerenew Amenu, LACFCD
8. Small Craft Harbor Commission, County of Los Angeles
9. Ted W. Lieu, Senator
10. John Tommy Rosas, Tongva Ancestral Territorial Tribal Nation
11. Douglas Fay
12. Patricia McPherson
13. Neal Blossom with attachments
14. Greg Schem
15. Port of San Diego, Karen Holman
16. Recreational Boaters of California (RBOC), Jack Michael
17. Form Letter A
    a. Ed Lavelle
    b. Linda Stern
    c. Pamela Phelps
    d. Jerry Cunningham-Rathner
    e. Gareth and Chola Thomas
    f. Kenneth Huff
    g. Ceasar Berger
    h. Daniel Feldman
    i. Karen Holman
    j. Connie Martindale
    k. Mike McCollough
    l. Barry Pezzner
    m. Jamen Tabesh
    n. Joel B Weinberg
    o. Robert Snelson

p. Shore Sedghi q. Stephen Carlson r. Timothy Sheehan s. William dale Brantley t. William G. Johns
18. Form Letter B a. Davi Canzoneri b. Valter Golfierie c. Steve Hathaway d. Gardenia Cercado e. Tony Mira f. John Tallichet g. Janet Zaldua h. Sherman Gardner i. Alicia Kunz j. Michael K Smith k. Arnold Warner
19. Form Letter C a. Alan Licht b. William Wells c. Gary S. Brockman d. Andy Natkar e. Bruce Warner f. Christine Rohde g. Eric Sorenson h. Jim Ach i. Stephen R. Mueller j. Ted Folkert, Accorp Inc.
20. Form Letter D a. Keith H. Dager b. Randy Sprout c. Raymond Sponsler d. Sean Barnett

e. Thomas R. Mulally
21. Form Letter E a. Steve Leshner b. Roger Rotondi c. David Josh Staub d. Joel Eve
22. Form Letter F-Time Extension Request a. T.J. Harding b. John Brsan c. Greg Palmer d. Rick Oefinger, MdR Sportfishing e. Horia Ispas f. James Swing
23. Tom Ross
24. Charles Hentges
25. Dean Westcott
26. J Simon
27. Don Davis
28. Bert Titeji
29. Jack Rackliffe
30. Matthew Humphreys
31. Ilona Fellow
32. John Hopwell, American Coatings Assoc.
33. Ronnie in California
34. Jack Monger, Industrial Env. Association
35. Dennis Smith
36. Alan Weiss
37. Robert Grycan
38. Richard Schaefer
39. Horacio Vieytes
40. Scott Smith
41. Robert Neches
42. Bruce Glimpse

43. Mitchell Morris
44. Alexander Balian
45. Anthony Sharki
46. Jonathan Schwartz
47. Harris Gabel
48. William Johnston
49. Joel Young
50. Dirk van Schoonboven
51. Adam Faura
52. Rennell
53. Daniel Ginzburg-FantaSea Yachts
54. John Adriany, ChemMetrics
55. Richard Hamlin
56. Jeff Pielet
57. Bruce Schaffer
58. Richard S. Griffin
59. B. Daniel Binafard
60. Bruce C Stone
61. Burt Bochner
62. Peter Glick
63. Carolene R. Bookman
64. Christina V. Davis, LAX Coastal Chamber of Commerce
65. Maureen Gorsen Alston & Bird
66. Thomas Santogrossi
67. Asher Berlan
68. Essex Property Trust, Inc.
69. Glen Solomon, Pacific Mariners Yacht Club
70. Greg Brinson
71. Hedy Aref
72. James Ferris
73. Jeff Pence, Pacific Marina Development
74. John R. Walczyk

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75. John Rushing
76. Joseph Nasser
77. Keith Lambert
78. Mark Childir
79. Marvin H. Sachse
80. Michael Auer
81. Michael Riley
82. Neil Hamadey
83. Randy Short, Amar Marinas
84. Richard Schaefer
85. Robert Godfrey
86. Roger West
87. Ronald Hasson
88. Sean Caples
89. Sharow Cloward, San Diego Port Tenants Association
90. Simon Landt, Windward Yacht Center
91. StephenGreg Campbell
92. Sue Breitrose
93. Tim Hollar
94. Manfred Borks
95. Iprater
96. Michael Geraghty
97. Roger Gripe
98. Fred Weinhard-SMWYC
99. Gary Magnuson
100. Richard Jacobs
101. Jennifer Huntzicker
102. Larry Silver DVM
103. D. Joshua Staub

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No.	Author	Comment	Response
01.1	U.S. EPA	The U.S. Environmental Protection Agency (EPA) appreciates the opportunity to comment on the proposed Basin Plan Amendment (BPA) (January 2014) and Staff Report (November 5. 2013) to revise the Total Maximum Daily Load (TMDL) for Marina del Rey Harbor Toxic Pollutants. This revised TMDL includes changes based on additional monitoring data and analyses. These include (1) increasing the geographic extent of the TMDL to cover the front basins of the Marina del Rey Harbor: (2) addition of load allocations for contaminated Marina sediments; and (3) the addition of load allocations for discharges from copper-based antifouling paints. We strongly urge the Regional Board to adopt the TMDLs to meet California's TMDL commitments to EPA. This TMDL provides all the necessary elements of a TMDL as required in Clean Water Act Section 303(d), including applicable numeric targets, numeric allocations, consideration of seasonal variations and a margin of safety.	Comment noted
01.2		This revised TMDL includes extensive and robust data review and analysis, and provides beneficial follow-up technical assessments of the impairment condition and status of Marina del Rey Harbor front and back basins. EPA finds the changes in the reconsidered TMDL reasonable based on the recent available monitoring data and analyses. We support the finding of copper impairment in the water column and sediment due primarily to sources of copper-based antifouling paints used on boats. We reviewed the linkage analysis for copper and sources of discharges, and conclude the analysis to be reasonable and comparable to those conducted for the Shelter Island Yacht Basin Copper TMDL in the San Diego region, which EPA approved on February 8, 2006.	Comment noted

01.3		A TMDL must include the applicable water quality objectives to protect the beneficial uses identified for the impaired waterbody. Under section 303(c)(2)(B) of the Clean Water Act states must adopt numeric criteria for the priority toxic pollutants listed under section 307(a) if those pollutants could be reasonably expected to interfere with the designated uses of States waters. In this case, the applicable water quality objectives for Marina del Rey Harbor are defined by the California Toxics Rule, which includes ambient aquatic life criteria for 23 priority toxics and ambient human health criteria for 57 priority toxics. This TMDL appropriately includes the CTR criteria for copper and PCBs, which are used as the numeric targets for this TMDL. Furthermore, based on the wide range of aquatic life and human health beneficial uses to be protected in Marina del Rey 1-larbor front and hack basins, it is appropriate and critical to include multiple lines of evidence to evaluate the impairment condition and to provide the applicable numeric targets for sediment, fish tissue and benthic community.	Comment noted
01.4		EPA reviewed the proposed BPA and technical staff report and finds two points warranting clarification. First, the BPA section on Load Allocation, which describes the copper load allocation to County of Los Angeles, boats and individual anchorages, should be specific and include the numeric targets. We recommend that the provided three ways to show compliance with this load allocation be included in the Load Allocation section (BPA Attachment A, p.5): (a) meeting numeric targets in the water column; (b) demonstrating that 85% of boats in the harbor are using non-copper hull paints, or (c) another acceptable means of compliance approved by the Regional Board. For option (c), please include specific examples of other acceptable means of compliance that would be considered by the Regional Board.	The Regional Board agrees that this would enhance clarification. The requested changes have been included in the Basin Plan Amendment. Option (c) has been revised to state, "Another acceptable means of demonstrating compliance as approved by the Executive Officer of the Regional Board that would result in attainment of copper numeric targets in the water column (e.g. demonstrating that 100% of boats in the harbor are using hull paint that discharges 85% less copper than the baseline load).

01.5		Second. we recommend more clarity on the compliance language provided for the General Industrial and Construction Permitees and the MS4 and Caltrans Permittees (Implementation Section. BPA Attachment A. p10-1l). Please clarify the exact compliance endpoint or benchmark provided in the following language. ".. ..if permittees provide a quantitative demonstration that control measures and best management practices (BMPs) will achieve WLAs consistent with the schedule in Table 7-21 8.2, then compliance may he demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval." Please specify how the waste load reductions will be quantitatively demonstrated.	The Regional Board agrees that clarification would improve the proposed TMDL. The requested change has been included in the Basin Plan Amendment. The language has been revised to state, "If permittees provide a quantitative demonstration as part of a watershed management program similar to the "reasonable assurance analysis" required by the recently adopted Los Angeles County MS4 Permit (Order No. R4-2012-0175) that control measures and BMPs will achieve WLAs consistent with the schedule in Table 7-18.2, then compliance with permit water quality based effluent limitations (WQBELs) may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval."
01.6		Overall. EPA finds the proposed revised TMDLs provide a reasonable technical analysis of addressing toxics impairments for those pollutants included on California's Section 303(d) List, and those confirmed pollutants (i.e.. copper, DDT) in this TMDL evaluation. We believe the numeric targets set as the basis for the WLAs and LAs are appropriate and should result in toxics pollutant reduction. These TMDLs clearly assigned allocations to all sources and appropriately defined TMDLs for existing permits, where applicable.	Comment noted
01.7		Finally, we appreciate an implementation plan and schedule with clear interim targets and milestones established to show progress and meet compliance. We commend your hard work on the reconsideration of this TMDL and strongly recommend adoption by the Regional Board.	Comment noted
02.1	Heal the Bay, LA Waterkeeper	On behalf of Los Angeles Waterkeeper ("Waterkeeper") and Heal the Bay, we submit the following comments to the Los Angeles Water Quality Control Board ("Regional Board") on the proposed amendments to the Water Quality Control Plan – Los Angeles Region (Basin Plan(to revise the Marina del Rey	Comment noted

		Harbor Toxic Pollutants Total Maximum Daily Load ("Draft Toxics TMDL"). We support many of the proposed revisions of the Draft Toxics TMDL, specifically the expansion of the geographic reach of the TMDL, the inclusion of dissolved copper and in-harbor sediment load allocations and the requirements to replace copper-based boat hull paints. Our major concerns with the Draft Toxics TMDL are the extension of interim and final compliance deadlines, the proposed alternative compliance demonstration, as well as some of the technical calculations of the waste load allocations.	
02.2		Chlordane, copper, lead, zinc, PCBs, DDT, and sediment toxicity negatively affect the beneficial uses of water contact recreation (REC 1), marine habitat (MAR), wildlife habitat (WILD), commercial and sport fishing (COMM), and shellfish harvesting (SHELL) in Marina del Rey Harbor ("MDR Harbor" or "Marina"). In 2009, the MDR Harbor was found to be the most toxic marina in California. Activities involving human contact with during boating or other recreational activities in the MDR Harbor waters or ingesting seafood originating from these waters is potentially harmful. Additionally, many of the species impacted by these impairments support food chains for birds, fish and wildlife that residents of the Marina, boaters, fishers, and visitors enjoy. Polluted water decreases overall use of the Harbor, with economic impacts to recreational businesses, shopping venues, and nearby hospitality businesses; thus, improving water quality throughout the MDR Harbor will yield numerous economic benefits. The Marina del Rey Harbor Toxics TMDL is critical for marine life and the Los Angeles community that relies on its myriad of beneficial uses. For this reason, Waterkeeper and Heal the Bay urge the Regional Board to revise the Draft Toxics TMDL to address our comments below.	Comment noted

02.3		The Draft Toxics TMDL Appropriately Expands the Geographic Extent of the TMDL and Includes WLAs and LAs for DDT. Studies carried out since the 2005 adoption of the Marina del Rey Harbor Toxics TMDL, namely the Marina del Rey Toxics TMDL Coordinated Monitoring Plan, Bight 2008 Study, and the Sediment Characterization Study, indicate water column and sediment impairment throughout the Marina del Rey Harbor. Data collected indicates impairments are not solely confined to the back basins (Basins D, E, and F) or hotspots as previously perceived, but also extend to the front basins (Basins A, B, C, G, and H). Sediment samples for copper, zinc, chlordane, DDT, and PCBs in the front basin meet or exceed the minimum number of sampling exceedances required to be placed on the Clean Water Act Section 303(d) list for impaired waterbodies. Based on the data analysis demonstrating additional impairments in the front basins, we support the Regional Board in extending the geographic area of the Marina del Rey Harbor Toxics TMDL for metal and organic constituents in sediments. Moreover, we support the addition of Waste Load Allocations ("WLAs") and Load Allocations ("LAs") for DDT in the Draft Toxic TMDL	Comment noted
02.4		The Draft TMDL Appropriately Includes LAs for Dissolved Copper. Waterkeeper and Heal the Bay support the inclusion of a dissolved copper LAs in the Draft Toxic TMDL, as its inclusion is necessary to protect beneficial uses of the MDR Harbor. The Toxicant Identification Evaluation (TIE) study concluded that copper is the most significant cause of toxicity in the Marina. Elevated dissolved copper levels affect growth, development, feeding, reproduction, mobility, and survival at	Comment noted

		various life stages of mussels, oysters, scallops, crustaceans and sea urchins. Elevated dissolved copper also changes the types of phytoplankton that thrive in boat basins, which can have effects throughout the food web. Dissolved copper also affects fish in general, negatively impacting fish gills, kidneys, tissues and sensory receptors function. Due to it is well-known impacts, copper is a priority pollutant in the California Toxics Rule.	
02.5		The Alternative Compliance Mechanism for General Industrial, General Construction, MS4, and CalTrans Storm Water Permits Should Be Removed The Draft Toxics TMDL provides a new alternative compliance mechanism allowing dischargers to demonstrate compliance with WLAs by providing "quantitative demonstrations that control measures and best management practices will achieve" WLAs and Water Quality-Based Effluent Limits ("WQBELs") consistent with the TMDL's implementation schedule and implementing these BMPs and control measures subject to Executive Officer approval. This proposed alternative compliance mechanism is improper and unjustified and must be removed. While both Heal the Bay and Waterkeeper are supportive of BMPs and storm water and non-storm water control measures as an important method for achieving compliance with WLAs, effluent limits and water quality standards, BMPs and other measures cannot be used as a measure for compliance with water quality standards, effluent limits and TMDLs. Providing quantitative demonstrations of BMP effectiveness and/or installation of Regional Board-approved BMPs do not ensure that TMDL WLAs and WQBELs are actually met and achieve compliance with water quality standards in the impaired	The provisions providing compliance demonstration through *"quantitative demonstrations that control measures and best management practices will achieve WLAs and WQBELs consistent with implementation schedules for the TMDLs and subject to Executive Office approval"* allow for appropriate permitting flexibility and are consistent with the Regional Board's undertakings in many TMDLs and permits. Required monitoring will demonstrate if the WLA and targets are actually met and if they are not met according to the TMDL schedule, the Regional Board has a variety of options for recourse. Provisions to address the failure to meet targets or allocations may also be written into the applicable permits. The evidence to support its decision to allow the alternative compliance demonstration must be provided by the discharger or responsible party prior to Executive Officer approval or no such approval will be made. The TMDL establishes the WLAs that the permittees must achieve. The WLAs are supported by findings and evidence in the record of the TMDL and the proposed amendment. The proposed amendment provides alternative methods for demonstrating compliance with the WLAs, consistent with federal regulation and the Los Angeles County MS4 Permit. The commenter appears to

		waterbodies. Neither is the implementation of these BMPs and control measures in itself sufficient to show WQBELs and WLAs are met. Importantly, the Regional Board fails to provide any evidence to support its decision to allow the alternative compliance demonstration with the Draft Toxics TMDL, let alone explain how any of the quantitative demonstrations for BMPs or measures to be implemented in the future will be sufficient to achieve WLAs or WQBELs. The alternative compliance demonstration mechanism provided in the Draft Toxics TMDL is therefore not supported by the findings and the evidence and violate state law. See Topanga Ass'n for a Scenic Cmty, (1974) 11 Cal.3d 506, 515 (the administrative agency's analysis must "bridge the analytic gap between the raw evidence and [the] ultimate decision or order"); see also Zuniga v. Los Angeles County Civil Serv. Comm'n (2006) 137 Cal.App.4th 1255, 1258 (abuse of discretion is established when the administrative order or decision is not supported by the findings or the findings are not supported by the evidence). For these reasons, the alternative compliance demonstrations must be deleted from the Draft Toxics TMDL or, at a minimum, revised to require post BMP implementation monitoring, to verify compliance with WLAs and WQBELs before the final compliance date of the TMDL.	be suggesting that the Board may not provide alternative compliance methods without a demonstration that the alternative methods, in this case, control measures and BMPs, will in fact work to achieve the WLAs. Such a demonstration is not necessary at this stage. The permittees must demonstrate, if they propose to use such a compliance demonstration approach, that the control measures and BMPs have a reasonable assurance of achieving the WLAs. The permittees are subject to the Los Angeles County MS4 Permit which provides for various methods to demonstrate compliance with water quality standards, including use of control measures and BMPs that are supported by a "Reasonable Assurance Analysis". The TMDLs are implemented, in part, through the Los Angeles County MS4 Permit. The proposed amendments to the TMDL s clarify that the permittees may demonstrate compliance with the WLAs in a manner consistent with the provisions of the Los Angeles County MS4 Permit.
02.6		Extension of Implementation Schedule for Stormwater Permittees Is Not Justified. While, as discussed above, we support the expansion of the Draft Toxics TMDL to include Basins A, B, C, G, and H (front basin) of Marina del Rey Harbor, we do not believe it merits the extension of interim and final compliance points for permittees given eight years has already passed since the adoption of the original TMDL.	An extension of the TMDL timeline for MS4 discharges to the back basins is warranted due to the increased efforts necessitated by the findings of data collected in compliance with the 2005-adopted TMDL. For example, data collected in 2013 under the coordinated monitoring plan (see section 2.1.3 of staff report) demonstrates that levels of pollutants in storm borne sediment are greater than MS4 dischargers estimated when developing their

		The 2005 adopted TMDL established implementation schedules for stormwater permits in the back basins, thus it is inappropriate to extend back basin interim and final compliance deadlines as Permittees should have already been working to comply with these allocations. The previously adopted TMDL encouraged hotspot dredging be conducted to remove MDR Harbor contaminated sediments in the near term; this dredging was not performed over the last eight years. We are unsure if any projects have been implemented other than the Oxford Basin Enhancement Project. Have Permittees implemented projects over the last eight years to achieve compliance? This should be outlined in the staff report. In any event, because Permittees have been aware of the implementation schedule and compliance deadlines of the TMDL since it was originally adopted in 2005, and should have been working on projects to comply with the TMDL limits, no extension of the final and interim deadline is justified and the original schedule should remain.	implementation plan. Thus, the MS4 dischargers will need to implement more structural BMPs than they anticpated in their implementation plan. In addition, while the implementation plans submitted by the MS4 dischargers did not support an integrated water resources approach that would justify the timeline extension allowed for by the 2005-adopted TMDL, responsible parties are still considering an integrated water resources approach and have submitted an intent to develop an Enhanced Watershed Management Progam (EWMP) to comply with the Los Angeles County MS4 Permit. Thus, it is possible that MS4 dischargers will implement regional structural BMPs to comply with the TMDL that will take additional time to complete. The Regional Board agrees that consideration should be given to the fact that the TMDL was adopted in 2005 and has been in effect since January 2006, and that MS4 permittees should have been working on projects to comply with the TMDL. Thus the timeline revision in the proposed TMDL is shorter than would have been granted through the integrated water resources approach in the original TMDL. However, the Regional Board also acknowledges the implementation efforts currently underway that will help to achieve the TMDL. Oxford Basin is currently undergoing significant upgrades and this project is anticipated to be completed in 2015. Parking lot retrofits in the back basins necessary to achieve the TMDL are projected to be completed in 2017. The proposed schedule of 2018 to attain WLAs for the back basins is thus reasonable and acknowledges initial efforts to comply with the TMDL. Please refer to Table 2-2 in the Draft Staff Report for a list of BMPs implemented in the watershed to date. Regarding the schedule for sediment remediation, the proposed schedule allows for the cessation of ongoing discharges prior to

			the required cleanup of the contaminated sediments. Under the proposed TMDL revisions, the discharges to the back basins must attain WLAs by 2018, the discharges to the front basins must attain WLAs by 2021, and the discharge from copper in boats must attain LAs by 2024. The final compliance deadline for sediment remediation allows for planning, design, and phased implementation of remediation efforts.
02.7		A Load Allocations for In-Harbor Sediments Should Be Implemented Through a Clean Up and Abatement Order The Draft Toxics TMDL proposes two methods of implementing the LAs for in-harbor sediments-- through a Memorandum of Agreement ("MOA") with the County of Los Angeles or a Clean Up and Abatement Order ("CAO"). We believe that the best approach is to issue a CAO pursuant to Section 13304 of the Water Code because, unlike an MOA, a CAO is enforceable by the Regional Board and is therefore the best mechanism to ensure the LAs are in fact met by the TMDL deadline.	The proposed TMDL revision allows for the use of an MOA to attain sediment LAs, but only if progress is made and conditions are met. If progress is not made, the proposed TMDL contains a "backstop" requirement that a CAO be issued. A similar approach has been successful in the implementation of the Machado Lake Toxics TMDL, adopted in 2008. In that case, the Regional Board and the City of Los Angeles entered into an MOA, the City prepared a sediment remediation plan, and the City is on track to completing the sediment remediation project ahead of the schedule provided for in the TMDL. To ensure that a good faith effort is being made by the County of Los Angeles to remediate in-harbor contaminated sediment, the following language has been added to the proposed Basin Plan Amendment: "The MOA shall contain interim deliverables so that compliance can be assessed throughout implementation of the MOA and prior to the final sediment remediation deadline." Additional language is also included in the staff report detailing the requirements of the MOA and the sediment remediation plan that must be executed under the MOA. Should deliverables required by the MOA not be met, the Regional Board will issue a Clean Up and Abatement Order or other acceptable order.

02.8		Load Allocation for Dissolved Copper in the Water Column Should be Implemented Through a Waiver Given that data and modeling indicate leaching of antifouling copper paint from boats to be the leading source of copper to Marina del Rey Harbor waters7, we support the use of non-copper and non-toxic hull paints on all boats moored in Marina del Rey Harbor. We do, however, ask the Regional Board to revise the TMDL to require that compliance with the LAs should be achieved by demonstrating that 100% of the boats in the Harbor are using non-copper hull paint instead of just 85% of the boats, as stated by the Draft TMDL now. Clearly, in light of the proven impacts of copper leaching from boat hulls on water quality and aquatic life, requiring 100% of the boats in the Marina del Rey Harbor to replace copper-based paints will result in significant improvement in the water quality of the Marina and ensure that the LAs are met by the March 22, 2024 deadline.8 Finally, requiring the removal of copper-based paints from 100% of the boats in Marina del Rey, rather than just 85% of the boats, will result in a fair, consistent and easy administration of the TMDL provisions with respect to all boat owners in MDR Harbor.	Comment noted Modeling results on which the proposed TMDL is based show that an 85% reduction in copper load from leaching of hull paint should achieve the TMDL for dissolved copper in the water column. A requirement to reduce the copper load from leaching of hull paint by 100% is not supported as necessary to achieve the water quality objectives and protect beneficial uses of the harbor based on these findings.
02.9		In order to ensure early implementation of the LAs, we recommend the Regional Board work with state and federal agencies to explore the possibility of grants to supports individual boat owners, similar to that seen at Shelter Island Yacht Basin in San Diego and Newport Bay in Orange County (i.e. EPA 319(h) grant funds). Regional Board staff should also provide education and outreach to boaters regarding the requirements of the TMDL, alternative hull paints, and available grants/subsidies in an effort prevent misinformation	The Regional Board anticipates availability of grant funds, similar to that available in Shelter Island and Newport Bay, which should cover a significant share of the cost in repainting boat hulls. The Regional Board will ensure that paint conversions in Marina del Rey are identified as a preferred project in the Los Angeles Region to receive 319(h) grant funds in upcoming funding cycles. Assuming that grant funding is obtained, given that repainting costs would be incurred whether or not the proposed TMDL is adopted, boaters may in fact spend less money applying an

		and streamline the Draft Toxics TMDL implementation process and compliance.	alternative antifouling paint using grant money than they would reapplying copper based antifouling paint. Regional Board agrees that education and outreach to the boating community is critical to achieving the TMDL. Regional Board staff participated in 14 outreach meetings and sent a mailing to 4,337 boat owners in Marina del Rey Harbor containing details regarding the proposed TMDL. The mailing list utilized was provided by the County of Los Angeles, Department of Beaches and Harbors as their most recent mailing list. The Regional Board plans to continue working with and educating the boating community as TMDL implementation proceeds. Additionally, the Regional Board hopes the environmental NGOs will be able to assist in education efforts and looks forward to working together to provide reassurance to the community regarding the scientific validity and necessity of this TMDL.
02.10		Additionally, to avoid a strain on staff resources associated with issuing individual Waste Discharge Requirements for anchorages and boaters owning boats moored in the Marina Del Rey Harbor, we support the use of a conditional waiver under Water Code Section 132699 to implement the LAs for dissolved copper applicable to these entities. Any conditional waiver should require a robust monitoring program to demonstrate compliance with the LAs. We do not believe, however, that a conditional waiver is justified to implement the load allocations for discharges of dissolved copper as they apply to the County of Los Angeles. Rather, because the County of Los Angeles is the agency operating the Marina del Rey Harbor and none of the reasons justifying the use of a conditional waiver apply, the Regional Board should issue the County of Los Angeles a WDR.	Regional Board agrees that a conditional waiver for boaters and WDRs for the County of Los Angeles may be one of the most appropriate and effective implementation mechanisms for the proposed LAs assigned to copper discharges from boat hulls TMDL. It would not be an efficient use of resources to issue WDRs to all boat owners in Marina del Rey Harbor. Selection of the most appropriate implementation mechanisms will be finalized over the first two years of TMDL implementation. A hard date for development of an implementation mechanism has been added to the revised draft TMDL.

02.11		Toxicity Numeric Limits Should be added to the TMDL Marina del Rey Harbor is included in Clean Water Act Section 303(d) list of impaired waterbodies for metals and organic compounds in sediment. We acknowledge sediment toxicity and benthic community effects are indirectly addressed in the TMDL through the inclusion of the State's Water Quality Control Plan for Enclosed Bays and Estuaries - Part 1 Sediment Quality Objectives. However, we believe a numeric target for toxicity should be included in the Draft Toxics TMDL, similar to that seen in the Calleguas Creek Watershed Toxicity TMDL. Toxicity testing (Coordinated Monitoring Plan, Bight 2008 Study, Sediment Characterization Study) conducted in Marina del Rey Harbor shows a high variation in toxicity results (High Toxicity to Nontoxic). Requiring the inclusion of L. pulumulosus 10-day survival test cannot alone account for this variation in toxicity testing. Given this variability in concurrent studies, it is imperative that a toxicity numeric limit and WLA be included in the TMDL to safeguard against type II errors for sediment toxicity. Additionally, given the variation in toxicity results and toxic condition of Harbor sediments, we suggest sediment quality objective evaluations be conducted more often than every five years for the Harbor in an effort catalogue progress of TMDL compliance.	As stated in the proposed Basin Plan Amendment, " this TMDL implicitly includes sediment toxicity and benthic community targets by its application of the EBE Plan Part 1." The categories designated in the EBE Plan Part 1 as Unimpacted and Likely Unimpacted are based on multiple lines of evidence. The thresholds established in the EBE Plan Part 1 are based on statistical significance and magnitude of the effect. Monitoring requirements in the proposed TMDL will ensure that toxicity water quality objectives are met in Marina del Rey Harbor. Should monitoring results indicate toxicity water quality objectives will not be met, the TMDL will be adjusted to ensure water quality objectives are attained. Sediment toxicity testing is required as part of the suite of analyses comprising the sediment triad analysis. Two toxicity tests are required to meet the sediment monitoring requirements of the proposed TMDL, with one of these utilizing *L. plumulosus* as the test organism. Sediment toxicity samples shall also be collected annually addition to, and in between, the sediment triad sampling events to evaluate trends and track TMDL compliance.
02.12		More Stringent Numeric Targets for PCBs are Appropriate to Protect Beneficial Uses The previously adopted TMDL established a sediment numeric target for total PCBs based upon NOAA's ERL value. Since the adoption of the original TMDL, precedent has	Comment noted

		been set requiring numeric sediment targets be established which protect human consumption of contaminated fish tissue. We are supportive of the new, more stringent, numeric target for total PCBs in the TMDL, 3.2 µg/kg, as it is more protective of all beneficial uses and water quality objectives in Marina del Rey and takes into account uncertainty in the relationship between pollutant loading and beneficial use effects. Additionally, we are supportive of the revised numeric target for total PCBs in fish tissue as this establishes more protective numeric targets for fish consumption.	
02.13		PCBs Implementation Need to Protect all Beneficial Uses The TMDL states "MS4 and Caltrans Storm Water Permittees can demonstrate compliance with TMDL sediment waste load allocations for total PCBs via one of four different ways: a. Sediment numeric targets are met in bed sediments. b. Fish tissue targets are met in species resident to waterbody. c. Final sediment allocations, as presented above, are met. d. Demonstrate that the sediment quality condition protective of fish tissue is achieved per the Statewide Enclosed Bays and Estuaries Plan, as amended to address contaminants in resident finfish and wildlife." We believe that TMDL language should be modified to require that "a" and "b" and "c" must be met in order to be deemed in compliance. The goal of any TMDL is for all beneficial uses to be protected, not just one. If you only have one compliance endpoint, it is uncertain if all beneficial uses will be met. In addition, fish tissue concentration of PCBs can	It is not uncertain that the beneficial use (in this case, COMM to protect human health and MAR to protect aquatic life) will be met because all the compliance endpoints support the beneficial use. Should additional monitoring or special studies show that the sediment or fish tissue targets do not support the human health beneficial use, the TMDL may be revised.

		vary depending on size and age of fish as well as season. Furthermore, fish migration in the marina can influence constituent concentrations. Because of fish tissue concentration variability, we ask that the Regional Board modify the Draft Toxics TMDL compliance point for total PCBs to combine option "a", "b", and "c" into one compliance point and specify as to how fish tissue sampling should be conducted	
02.14		Waste Load Allocations Should be Re-Calculated On pages six and seven of the Draft Toxics TMDL, Metals and Organics Stormwater WLAs appear to be incorrectly calculated. The load allocations were subtracted twice from loading capacities when the WLAs for MS4, Caltrans, general construction, and general industrial stormwater permittees were calculated. We ask that these WLAs be changed to correct the miscalculation	Wasteload allocations have been recalculated and updated to rectify this miscalculation. The grouped WLA remains the same as the adjustments pertain only to how the grouped WLA was distributed between storm water permittees.
02.15		Reconsideration of TMDL Needs to be Clarified The Draft Toxics TMDL states that "Compliance with the TMDL for total PCBs shall be based on achieving the LAs or WLAs, the PCB fish tissue related sediment target, or, alternatively, by meeting fish tissue targets. If monitoring data or special studies indicated 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 allocation and load allocation to ensure that the fish tissue targets are attained" (Draft TMDL at 8). In contrast, the staff report states that "Should the numeric targets for total PCBs in fish tissue be met, while the concentration of total PCBs in Marina del Rey Harbor sediment continues to exceed the sediment numeric target designed to be protective of fish tissue, the TMDL should be	Regional Board finds the language in the Basin Plan Amendment and Staff Report to be consistent. The language on page 8 of the draft BPA refers to compliance demonstration. The language stating that, "if 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," is included because the sediment targets and allocation for PCBs are estimated. In other words, if the sediment targets and allocations are achieved, but there is still an impairment in fish tissue, then it can be assumed that the numeric targets and allocations were overestimated and must be recalculated so that the numeric targets for fish tissue will be attained.

		reconsidered to include a numeric sediment target for total PCBs that is protective of the benthic community." As stated, the goal of any TMDL is for all beneficial use to be protected. The statement in the staff report appears to indicate that benthic communities were not considered while developing the TMDL. It is important that WLAs and LAs be established that protect human consumption as well as aquatic life. Any reopening/reconsideration of the TMDL should reflect this goal, and we ask that the Regional Board for clarification.	As a separate matter, the language in the staff report cited in this comment refers to development of numeric targets. Currently, the proposed numeric targets for PCBs in sediment are derived from the numeric targets for PCBs in fish tissue in order to protect the beneficial use associated with fishing and fish consumption. Benthic communities were also considered when developing the numeric target for PCBs in sediment. The ERL, which is set to protect the benthic community, is 22.7 µg/kg. The proposed numeric target for PCBs in sediment, derived from the fish tissue numeric target, is 3.2 µg/kg. The lower, more protective number was chosen as the proposed numeric target (see table 4-32). The language cited in this comment is included in the event that the fish tissue numeric targets are attained, but the numeric target for sediment is not attained. In this situation, it can be assumed that the sediment numeric targets were overestimated and a greater sediment numeric target (perhaps based on the ERL) could apply. Thus, the two sets of language cited in this comment are not inconsistent.
03.1	City of L.A., Bureau of Sanitation	The City of Los Angeles, Bureau of Sanitation (Bureau) appreciates the opportunity to provide technical comments on the proposed amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to revise the Total Maximum Daily Load (TMDL) for Marina del Rey Harbor Toxic Pollutants (Toxics TMDL). The City appreciates the time Regional Board staff spent to meet and discuss the pending draft amendment, and is committed to improving water quality in the Marina del Rey Harbor. Technical comments are provided below. This letter also incorporates by reference Attachment 1, which provides additional technical comments, proposed revisions, and further details on the above and other issues.	Comment noted

03.2		The Bureau appreciates the inclusion of an approach that allows for compliance with interim allocations to be based on load reduction in addition to the percent area approach. The addition of this approach is important as the purpose of the TMDL is to reduce the loading of toxics to the harbor, and BMPs are selected and located within the watershed based on their efficiency and effectiveness at reducing pollutant loadings. However, it is requested that the term "current loading" be replaced with "baseline loading". This would help to avoid confusion on the intent of the revision. The goal is to reduce loadings from the "baseline" that existed when the impairment was identified to meet the TMDL targets and attain the beneficial uses. The requested change would need to be made throughout the BPA and Staff Report. *Requested Action: Replace the term "current loading" with "baseline loading" throughout the TMDL BPA and Staff Report.*	Regional Board agrees and corresponding changes have made to the Draft Basin Plan Amendment. No changes are needed for the staff report
03.3		The compliance demonstration methods for the interim dates of March 22, 2016, 2019 and final WLAs in the implementation schedule should include all of the compliance related language on page 11 of the BPA for consistency. *Requested Action: Incorporate strikeout-underline language found in comments #6, #7, #8, and #9 of Attachment 1 into the Implementation section of the BPA and the BPA Implementation Schedule (Table 7-18.2).*	The compliance language requested is included in the Draft Basin Plan Amendment. However, adding the language in the multiple locations requested will unnecessarily increase the length of the Basin Plan Amendment.
03.4		Responsible parties have been developing plans and implementing best management practices (BMPs) to address stormwater discharges to the back basins of the marina since the inception of the TMDL in	The timeline to achieve the TMDL is appropriate given the eight years that have passed since the original TMDL became effective and the relatively small size of the area draining to the back basins (1.42 square miles). The proposed TMDL revision already extends

		2006. The continued implementation of originally planned BMPs, in conjunction with the implementation of new projects under the MS4 permit, has created a need for additional time to complete the projects and assess the resulting water quality improvements. The compliance schedule currently proposed in the tentative Basin Plan Amendment for the back basins does not allow sufficient time to reasonably assess the effectiveness of implemented BMPs and propose additional management techniques to address any remaining issues. *Requested Action: For the back basins, the compliance dates for the 50 percent interim and the final targets be extended from 2016 to 2018 and from 2018 to 2021, respectively.*	the initial TMDL compliance date by two years in recognition of the projects already underway in the watershed and the additional structural BMPs that will need to be implemented in light of new monitoring data. There are no new projects required by the MS4 permit as implied by this comment. See also response to comment 02.6
03.5		The Bureau is committed to improving and protecting the local environment as evidenced by the leadership role the City has taken in implementing TMDLs, and in proactively implementing clean water projects. These investments in the future are done in partnership with your agency to achieve maximum return in local environmental programs and infrastructure.	Comment noted. Regional Board appreciates the early and ongoing participation by the City of Los Angeles in the development of this TMDL revision.
03.6		**Note: Full attachment to City of Los Angeles letter is included with the comment letter in the Board Agenda package. Only those concerns not raised above are summarized here. Attachment Comment #3: BPA, Monitoring, Pg. 16 Non-triad sediment monitoring requirements should be done every 2 years.	Yearly sediment monitoring is necessary to assess ongoing effects from TMDL implementation and to ensure sufficient data is collected to account for variation between data points. Additionally, should any anomalies occur during monitoring, sample collection every other year is insufficient to enable trend analysis in Marina del Rey Harbor sediments. In addition, annual sampling of sediment chemistry and toxicity is consistent with monitoring requirements in the revised Ballona Creek Estuary Toxic Pollutants TMDL adopted by the Regional

		The triad sampling events will provide sufficient data to evaluate trends in general sediment quality constituents and listed constituents relative to sediment quality targets. Furthermore, trends in general sediment quality constituents and listed constituents relative to sediment quality targets are not expected to change until planned implementation efforts (i.e., BMPs) are in place. As such, the following revisions are requested: Sediment chemistry and sediment toxicity samples shall be collected every 2 years annually (in addition to, and in between, the sediment triad sampling events as described above), to evaluate trends in general sediment quality constituents (total organic carbon, grain size) and listed constituents (copper, lead, zinc, chlordane, PCBs, total DDT, and p,p'-DDE) relative to	Board in December 2013.
03.7		Attachment Comment #4: BPA, Schedule, Pgs. 17 and 18 Language referencing additional TMDL re-considerations should be included As recognized in the 2006 Toxics TMDL and the BPA for the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxics Pollutants TMDLs (Harbor Toxics TMDLs), it may be necessary to make adjustments to the TMDL to be responsive to new State policies including, but not limited to, SQO Part II and the toxicity policy. Additionally, MdR stakeholders may conduct additional special studies, such as further investigation of the role of metals in toxicity in bed sediment, and the Responsible Parties to the Harbor Toxics TMDLs are currently conducting studies which may provide findings applicable to the MdR Toxics TMDL. A number of these efforts are expected to be completed within the next few	The TMDL can be reconsidered at any time. Setting a specific date for such a reconsideration is premature at this time as the appropriate timing of a potential revision is unknown at this time. Should a revision of the TMDL be necessary, scheduling will be determined by the Regional Board with the input of stakeholders. Should revisions to the TMDL be necessary to incorporate Part II of the EBE Plan, a reconsideration of the Marina del Rey Harbor Toxic Pollutants TMDL will logically follow or coincide with revision of the Harbors Toxics TMDL and the Ballona Creek Estuary Toxic Pollutants TMDL.

		years and this TMDL would benefit from the guidance that these studies and State policies will provide. As such, the following revisions to the Monitoring section are requested to incorporate a TMDL reopener prior to the final compliance date to reconsider the TMDL based on the findings of relevant State policies and scientific studies:	
03.8		Appendix Comment #5 BPA Schedule Pg. 19 Include reference to Coordinated Integrated Monitoring Program As the MS4 Permittees have joined together to develop a Coordinated Integrated Monitoring Program, please add the following language to the requirement to update the coordinated monitoring plan (CMP) by June 22, 2015 to allow for monitoring updates to be incorporated directly into the CIMP rather than a separate CMP. The MS4 and Caltrans storm water NPDES permittees shall submit a revised coordinated monitoring plan <u>or the MS4 Permit required Integrated Monitoring Program or Coordinated Integrated Monitoring Program</u>, reflecting the revised requirements of this TMDL, as amended by Resolution No. R13-XXX.	Regional Board agrees. Reference to the Coordinated Integrated Monitoring Program is added to the proposed TMDL.
03.9		Appendix Comment # 10 BPA, Pg. 10 Typing error Modify the sentence as follows: Compliance with the sediment WLAs for Cu, Pb, Zn, Chlordane, ~~total PCBs~~, p'p-DDE and total DDT may be demonstrated via any one of three different means:	Regional Board agrees. The typographical error is corrected.

04.1	City of Newport Beach, Chris Miller	The City of Newport Beach is under the impression that the Santa Ana Regional Water Quality Control Board is considering developing a copper Total Maximum Daily Load (TMDL) for Newport Bay. We anticipate that such a TMDL might include a load reduction implementation plan for reducing water column copper concentrations in Newport Bay. As such, the proposed Marina del Rey Toxics TMDL could set a precedent that will likely guide other TMDL development in the region. We also anticipate that, like Marina del Rey's Toxic TMDL, the Regional Board will include an implementation plan for copper reductions through the boat paint conversion of a significant number of vessels in the bay. We believe such an action will cause tremendous stress to the harbor community, and it is anticipated that the community will pressure the Regional Board to demonstrate the need for such a radical action as was the case recently in San Diego. Therefore, the City respectfully offers these comments to the Los Angeles RWQCB to define and illustrate the impacts of the Marina del Rey Toxic TMDL on the region and the boating community as a whole.	Comment noted
04.2		It is important to acknowledge that a significant amount of research has been conducted during the last 10 years to understand leachate rates from boat paint. We are concerned that the 85% copper load reduction proposed in this TMDL does not consider the most recent available science. Recent studies indicate the passive leachate rate and boat hull cleaning rates are significantly different than those provided in the steady-state model within the Marina del Rey Toxics TMDL Draft Staff Report (dated November 5, 2013). We recommend the RWQCB consider including the most recent studies, and revise the steady-state model assumptions to more accurately assess actual copper loading from passive leaching and hull cleaning activities. We believe this recent information will lead to more effective copper-reducing implementation	The TMDL is based on the most recent science available. The TMDL relies on peer-reviewed models, previously adopted TMDLs, local water quality and geographic data, and water quality criteria which have been promulgated both nationally as well as within the State of California. It is assumed that the recent studies referred to in this comment include the study conducted by the U. S. Navy on passive leaching rates (Earley, 2013). Publication of the Earley (2013) study occurred during the comment period for this TMDL. Results, including an investigation of how leach rates calculated in the study might alter the TMDL, were researched by Regional Board staff. A discussion of these findings, and the incorporation of Earley's data into the modeling completed for Marina del Rey

		actions and set more realistic expectations within the affected parties.	Harbor, have been added to the Staff Report. The utilization of leaching rates reported in Earley (2013) for paints cleaned with BMPs results in a 1% change to the required reduction in dissolved copper from antifouling paints promulgated by this TMDL. A 1% potential difference in load allocation for the copper water column impairment falls into the margin of safety included in this TMDL. No changes to the TMDL are necessitated as a result of this new work as the effort confirms the scientific findings of this TMDL.
04.3		Changing antifouling boat paint from well-known and effective copper-based products to lesser known and unproven copper-free alternatives will be difficult. The City and Orange County Coastkeeper had an active grant program to pay for a portion of the costs for boaters to switch to copper-free alternatives for approximately three years at a small, focused, City-owned marina (Balboa Yacht Basin), but the boaters were not interested in changing paints to unknown and possibly less effective alternatives. The City and Coastkeeper publicized this program through various community outreach mechanisms, but in the end, only a couple private vessels took advantage of the financial incentives to switch bottom paints. We believe it will be difficult for discharges to meet the necessary copper load reductions from boat paint by 2024.	The timeline in the proposed TMDL incorporates sufficient time to allow boaters to implement paint changes at a time when hull paint would need to be stripped during the course of regular boat maintenance. The timeline also accounts for the capacity of the boat yards in Marina del Rey Harbor to apply hull paints to all boats residing in Marina del Rey Harbor. Additionally, delay in implementing the proposed TMDL will result in continued detriment to the aquatic community residing in the harbor. The Los Angeles Regional Board also intends to help secure grant funding for paint conversions. Furthermore, enforceable regulatory mechanisms are available to ensure implementation of the TMDL. It is anticipated that the available funding combined with the regulatory tool will provide the incentive for boaters to switch bottom paints. Thus, the Regional Board finds the proposed timeline to be reasonable and achievable.
04.4		We understand that copper in the marine system can be toxic to sensitive life stages of many aquatic organisms, hence its effectiveness as the key ingredient in antifouling paints. However, the City believes the use of the California Toxics Rule (CTR) copper value of 3.1 µg/kg is overly conservative when site-specific water quality values may be considered. The USEPA's Newport Bay Toxics TMDL (cited as USEPA 2002b in the Los Angeles RWQCB Marina del Rey TMDL Draft Staff Report) recommended implementation actions for	The California Toxics Rule provides the applicable water quality criteria for copper in saltwater. The chronic copper salt water criterion of 3.1 µg/L is a national criterion and is based on species and sites that are reflective of sites throughout the nation, including Marina del Rey Harbor. A site-specific study has not been conducted in Marina del Rey Harbor that would enable evaluation of the appropriateness of a site-specific objective. Thus, it is not appropriate at this time to set a site-specific objective for copper in the water column of Marina del Rey

		addressing copper in Lower Newport Bay. Within those recommendations, additional information should be considered to better define the TMDL numeric targets. Specifically, a water effects ratio (WER) study may be considered to develop site-specific water quality criteria. A WER, and similarly the newer biotic ligand model (BLM), are technologies that allow for adjustments to the threshold concentrations for metals in aquatic systems to account for site-specific conditions such as dissolved organic carbon and total dissolved solids which can frequently reduce copper bioavailability The use of CTR values is believed to be overly conservative and does not appear to be linked to impacts in Southern California harbors. The use of a WER and BLM in the development of final copper targets will allow a more clear and definitive demonstration of appropriate numeric standards to our stakeholder group. The City advocates the use of strong science to demonstrate the linkage between copper-based antifouling boat paint and marine quality. Both the residents and the regulators will require it to support or negate the benefits of the proposed implementation actions (i.e., change in boat paint). The City recommends that the use of site-specific water quality criteria be considered as an option for defining the numeric target in the TMDL	Harbor. A Biotic Ligand Model (BLM) for copper in saltwater has not been approved by U.S. EPA for use as a water quality criteria. A date when a BLM for copper in saltwater may be approved by U.S. EPA is uncertain. The California Toxics Rule promulgated 3.1 µg/L as the Criterion Continuous Concentration (CCC) and 4.8 µg/L as the Criterion Maximum Concentration (CMC) for copper in saltwater. These criteria are the appropriate water quality objectives to protect aquatic life in Marina del Rey Harbor. Should U.S. EPA adopt a saltwater BLM as the recommended water quality criteria and a site-specific study in Marina del Rey Harbor indicates that alternative water quality objectives, which may be higher or lower than the current objectives, are appropriate, the TMDL can be reconsidered at any time to incorporate such findings. Results of preliminary site-specific modeling of Marina del Rey Harbor presented in a 2009 Department of Pesticide Regulation (DPR) report suggest a potential FCC (equivalent to CCC) ranging between 2.9 and 5.3 µg/L and a potential FAC (equivalent to CMC) of 1.5 – 8.2 µg/L. While this modeling has not been vetted by the Regional Board, the criteria promulgated in the California Toxics Rule (CCC: 3.1 µg/L, CMC: 4.8 µg/L) fall within the range suggested by the DPR study. California Toxics Rule criteria are designed to be protective and thus it is consistent that the 3.1 µg/L proposed as the TMDL numeric target and the corresponding CTR criterion falls toward the lower range of the FCC presented in the 2009 DPR report. The TMDL may be revised at any time to incorporate the results of new scientific study, including a site-specific objective if appropriate.

04.5		Lastly, the City believes any copper related TMDL should be approved on a state or county wide basis. In summary, the City of Newport Beach recommends the Los Angeles RWQCB carefully consider these comments and the impacts the Marina del Rey copper TMDL will have on the regional boating community.	Copper pollution in marinas from antifouling paints is acknowledged as a statewide and nationwide concern. When the original TMDL was adopted in 2005, it was anticipated that efforts to address pollution from antifouling paints would be addressed on a broader scale. These efforts have not come to fruition; therefore, the water column impairment in Marina del Rey Harbor must be addressed on a site-specific basis. Broader efforts, including actions resulting from AB 425, which directs DPR to estimate an acceptable copper leaching rate from copper-based paints, will serve to enhance the implementation efforts of this TMDL.
05.1	LACDPW	The County of Los Angeles appreciates the opportunity to comment on the changes proposed as part of the reconsideration of the Marina del Rey Harbor Toxic Pollutants Total Maximum Daily Load (TMDL). In March 2013, the Marina del Rey Harbor Watershed Group (consisting of the County of Los Angeles, City of Los Angeles, Culver City, and Caltrans) submitted a "White Paper" to the Regional Board recommending a number of changes to the original TMDL based on new information and data collected since the promulgation of the TMDL in 2006. Subsequent to the submission of the White Paper in March, additional concerns emerged in response to the expansion of the geographic area addressed by the TMDL, incorporation of dissolved copper from the paints used on boats moored in the marina, and incorporation of in-harbor sediment. These additional concerns were brought to the Regional Board staff's attention on various occasions. While some of the technical issues raised have been addressed by Regional Board staff with the current draft of the TMDL, major concerns remain that warrant serious consideration. Below is a summary of our key concerns and recommendations.	The Regional Board acknowledges the efforts of stakeholders in implementing the TMDL and meeting their allocations, which include the County's piloting of new storm water sediment capture devices. The Regional Board also appreciates the early and ongoing participation by the County in the TMDL reconsideration. As a result of the County's engagement, the proposed TMDL incorporates numerous suggestions from the County, including an extension to the implementation timeline. Under the existing TMDL, the County must meet waste load allocations by 2016. However, in recognition of the fact that the County will complete its parking lot retrofits by 2017 and the Oxford Basin project by 2015, the proposed TMDL revision includes an extension of the implementation schedule for the MS4 discharges to the back basins until 2018. The area draining to the back basins is 1.42 square miles. In contrast, the urbanized portion of the Los Angeles River is 467 square miles and the Los Angeles River Metals TMDL has an MS4 compliance deadline of 2028. The Marina del Rey Toxic Pollutants TMDL has been in effect since March 13, 2006. The County of Los Angeles has yet to complete implementation of the BMPs proposed in their implementation plan or any other BMPs specifically targeting toxic pollutants to address the impairments. The MS4 permit requires no new additional implementation projects in Marina del

		<u>Compliance dates for lead, zinc, PCBs, chlordane, and DDTs</u> Since the inception of the TMDL in 2006, responsible parties have been developing plans and implementing best management practices (BMPs) to address stormwater discharges to the back basins of the Marina. The continued implementation of originally planned BMPs, in conjunction with the implementation of new projects under the MS4 permit, has created a need for additional time to complete the projects and assess the resulting water quality improvements. The compliance schedule currently proposed in the tentative Basin Plan Amendment for the back basins does not allow sufficient time to reasonably assess the effectiveness of implemented BMPs and propose additional management techniques to address any remaining issues. In addition to addressing stormwater discharges into the back basins, the proposed TMDL has an expanded geographic coverage that includes the front basins of the Marina. Because the original TMDL was limited to the back basins, all plans developed for the TMDL so far have also been limited to addressing stormwater discharges to the back basins. Addressing the front basins would require similar planning processes that the responsible parties implemented to address the back basins. Therefore, sufficient time should be given to develop and implement plans to address the MS4 discharges into the front basins. In essence, it would be reasonable to treat the addition of the front basins as a "new" TMDL with an analogous compliance schedule. While we acknowledge and support the approach proposed by Regional Board staff of having different timelines for the back and front basins, the time provided is not sufficient to address either of them. For the back basins, we are requesting that the	Rey as implied by the comment. The portion of the County of Los Angeles that drains to the back basins is 108 acres, or 0.17 square miles, and the County's implementation plan for the back basins includes five parking lot retrofits, which will be completed by 2017. It is not apparent that any new projects are needed to comply with the TMDL. The timeline to achieve the TMDL in the back basins is therefore appropriate. See also responses to comments 02.6 and 03.4. The addition of the front basins has marginally increased the watershed size based on the additional waterbody surface and minor additional drainage within Basins G and H. An additional 95 acres of land drains to the front basins. The compliance schedule was revised to include separate timelines for the front and back basins to provide stakeholders more time for planning and additional flexibility. Under the proposed TMDL revision, MS4 dischargers to the front basins have until 2021 to meet waste load allocations.

		compliance dates for the 50 percent interim and the final targets (except for copper) be extended from 2016 to 2018 and from 2018 to 2021, respectively. For the front basins we are requesting that the compliance dates for the 50 percent interim and the final targets (except for copper) be extended from 2019 to 2021 and from 2021 to 2025, respectively.	
05.2	LACDPW	<u>Compliance dates for copper</u> Since the adoption of the original TMDL in 2006, Senate Bill 346 (SB 346), which requires a reduction in copper content in brake pads to five percent (by weight) by 2021 and to 0.5 percent by 2025, was signed into law in 2010. This law is expected to significantly reduce copper loading over time in California's urbanized watersheds and is considered to be a cost-effective way to reduce copper pollution in California waters and achieve copper targets in TMDLs across the State. Recent TMDLs adopted by the Regional Board, such as the Los Cerritos Channel and San Gabriel River Metals TMDLs, have recognized the importance of SB 346 in copper reduction and included a compliance schedule that aligns with the implementation timeline of SB 346. In the March 2013 White Paper submitted to the Regional Board, the County recommended a final compliance date of 2030 for copper. This timeline was proposed taking into consideration the assumption that it would reasonably take at least five years after the final phase out of copper in brake pads for the effect to be observed. It is unreasonable to require implementing expensive BMPs to treat copper while the state has an effective source control program in place, which would eventually address it. The County therefore requests that the final compliance date for copper for MS4 discharges be set to 2030.	Regional Board has determined that the deadline for MS4 and Caltrans storm water permittees to meet final copper WLAs is realistic. SB 346 prohibits the sale of vehicle brake pads containing more than 5% copper by weight by 2021 (and more than 0.5% copper by weight by 2025). Although MS4 and Caltrans storm water permittees must meet the WLAs one year after SB 346 prohibits the sale of vehicle brake pads containing more than 5% copper, it is possible that brake companies will go directly to low copper (i.e., 0.5% copper by weight) or copper-free brakes immediately, or achieve the 5% copper by weight requirement before 2021. According to the Brake Pad Partnership, although quantitative information about brake pad copper reductions is not yet available, strong industry attention to low-copper and copper-free brake pads and promotion of these pads by companies already offering them (such as Honeywell, FDP Brake, Williams, Fastmagna.com, Bendix, Phoenix, ALCO, Wilson, Crowe, Aftermarket News, Murphy) provides evidence that implementation is underway and is proceeding in accordance with the process and time frames anticipated by the Brake Pad Partnership. Furthermore, although brake pads may be a contributor of copper in the Marina del Rey Watershed, other sources of metals causing impairment of the watershed include vehicle wear, building materials, pesticides, erosion of paint, and deposition of air emissions from fuel combustion and industrial facilities. Thus,

		The following table summarizes proposed compliance schedule extensions for MS4 discharges. **[See comment letter for table]**	responsible parties may not be able to solely rely on the phase-out of copper in brake pads to attain their copper allocations. If responsible parties choose to conduct a special study in the Marina del Rey Watershed to determine the proportion of copper coming from brake pads and/or the contributions of the reduction in copper in brake pads to the reduction of copper in stormwater, the Regional Board can evaluate the impact of SB 346 on TMDL implementation and adjust the schedule if appropriate and necessary.
05.3	LACDPW	<u>The Waste Load Allocations for the Back Basins and Front Basins Should Be Separated</u> Due to the addition of the front basins to the TMDL, the Regional Board recalculated the loading capacity and waste load allocations (WLAs) to account for the additional drainage area. While the TMDL provides different compliance timelines for the front and back basins, it maintains a combined WLA for discharges to the front and back basins. Having a combined WLA would make the compliance determination impossible for MS4 dischargers. We request that the WLAs for the back basins and the front basins be separated consistent with the compliance timeline.	The Regional Board disagrees. While the Board acknowledges a degree of uncertainty regarding pollutant migration and loading between the front and back basins in dry and wet-weather, the Basin Plan amendment has provided sufficient flexibility for stakeholders to demonstrate compliance with the allocations in the front and back basins. Multiple compliance options, including a quantitative demonstration that control measures and BMPs are sufficient to achieve the WLAs (such as the "reasonable assurance analysis" approach used in the LA County MS4 Permit) are just some of the additional options included in the revised TMDL to provide stakeholders with greater flexibility in implementation and compliance determination. In addition, in incorporating the front basins into the Marina del Rey Harbor Toxic Pollutants TMDL at this time, it is the intent of the Regional Board that the watershed is addressed holistically. Single waste load allocations encompassing the entirety of the harbor align with this approach and will simplify incorporation of waste load allocations into permits. However, stakeholders may also conduct special studies and pilot projects to better inform their implementation planning and BMP optimization. Also, see response to comment 05.1.

05.4	LACDPW	E(WMP)-based Compliance Option Should be Added to The List of Compliance Alternatives Page 11 of the tentative Basin Plan Amendment (BPA) states: "If permittees provide quantitative demonstration as part of the watershed management program that control measures and BMPs will achieve WLAs consistent with the schedule in Table 7-18.2, then compliance with permit water quality based effluent limitations (WQBELs) may be demonstrated by implementation of those control measures and BMPs…" We recommend that a compliance alternative that reflects the above language be added to the list of compliance options provided in Table 7-18.2 of the tentative BPA. Specifically, we suggest adding the following to the list of compliance options on pages 20-23: *Control measures and BMPs as described in an approved Watershed Management Program (WMP) or Enhanced Watershed Management Program (EWMP) has been implemented.*	On the further request for compliance options, these sorts of conditions have been addressed in the MS4 permit for Los Angeles County. This approach allows for greater detail and consistency among other similar TMDLs within the region. In addition, the TMDL has been revised to state, "If permittees provide a quantitative demonstration as part of a watershed management program similar to the "reasonable assurance analysis" required by the recently adopted Los Angeles County MS4 Permit (Order No. R4-2012-0175) that control measures and BMPs will achieve WLAs consistent with the schedule in Table 7-18.2, then compliance with permit water quality based effluent limitations (WQBELs) may be demonstrated by implementation of those control measures and BMPs, subject to Executive Officer approval."
05.5	LACDPW	The Submission of the Coordinated Integrated Monitoring Plan Under The MS4 Permit Should Fulfill the Requirement to Submit a Revised Coordinated Monitoring Plan for the TMDL The tentative Basin Plan Amendment requires stormwater agencies to submit a revised coordinated monitoring plan (CMP) by June 2015. At the same time, the 2012 MS4 permit requires the submittal of an Integrated Monitoring Program (IMP) or Coordinated Integrated Monitoring Program (CIMP) by June 2014. The Marina del Rey Enhanced Watershed	The Regional Board agrees. The BPA will be revised to address this comment and for consistency with the recently revised Ballona Creek Metals TMDL and Ballona Creek Estuary Toxic Pollutants TMDL, adopted by the Regional Board in December 2013.

		Management Program group, which includes the County, Los Angeles County Flood Control District, and cities of Los Angeles and Culver City, is planning to submit a CIMP by June 2014. Given that a CIMP is intended to encompass all monitoring requirements in a watershed, the group may opt to include the revised CMP as part of its CIMP submittal. We would recommend that the TMDL be revised to allow permittees the option of submitting the revised CMP as part of the CIMP as follows: *The submission of a final Integrated Monitoring Plan or Coordinated Integrated Monitoring Plan as required in the 2012 MS4 permit may be used to satisfy the TMDL's requirement for submission of a revised coordinated monitoring plan.*	
05.6	LACDPW	The Load Allocation for Dissolved Copper Is Unrealistic and Should Be Removed The proposed Basin Plan Amendment includes a load allocation that would require an 85 percent reduction in dissolved copper and indicates that compliance with that requirement can be demonstrated by showing that 85 percent of the boats in the harbor are using non-copper hull paints. However, at this time, there is neither a viable alternative (non-copper) paint nor similar requirements imposed on other marinas/harbors in the region. Imposing mandatory hull paint replacement when there is no viable alternative paint, there is no similar requirement in other local marinas/harbors, there is no statewide requirement for non-copper paint, and there is no current State or Federal law that requires the sole production and use of copper-free boat hull paints, is an unreasonable and arbitrary action that would unnecessarily impair the efficient management of the Marina del Rey Harbor. Instead of	The dissolved copper impairment must be addressed to comply with the Federal Clean Water Act and implementing regulations. Based on the source analysis and linkage analysis, the major source of dissolved copper in the harbor is copper from boat paint; therefore, this load allocation must be assigned to achieve the TMDL. The Regional Board finds that the proposed revision is timely and does not agree that the process has been rushed. The original TMDL, effective March 22, 2006, included discussion of a potential copper water column impairment in the Staff Report and required monitoring and study to clarify the existence and extent of such an impairment. The results of this work, carried out over 6 years, require listing Marina del Rey Harbor as impaired by copper in the water column and the required revision of the TMDL is the appropriate time to implement a TMDL for copper in the water column. Regional Board Staff began meeting with interested parties to discuss potential revisions to the TMDL based on the

		prematurely including a load allocation for dissolved copper and an associated mandatory load reduction, a statewide effort to address the issue of copper-based anti-fouling boat hull paints should be pursued. The California Legislature has recently attempted to pass legislation to address copper in hull paints, and the State of Washington has successfully done so. The County is willing to work with the Regional Board and other stakeholders on a statewide effort, and if legislation is enacted, the TMDL could be reopened to incorporate reasonable allocations and timelines in light of any new statewide copper paint requirement.	results of the studies in 2012. Once an approach had been finalized with the input of various scientists, public agency representatives, NGOs, and municipal and County staff, the Regional Board began outreach efforts to the boating community, beginning with a meeting with dockmasters and lessees prior to releasing the TMDL for public comments, and following up with direct mailings to boat owners during the comment period. Alternative antifouling paint options are available and have been tested in Shelter Island Yacht Basin (SIYB). It is anticipated that additional paint options will become available during the implementation of this TMDL. The Port of San Diego has shared results of studies and made paint recommendations available to the public on their website: http://www.portofsandiego.org/environment/copper-reduction-program.html. Additional information to aid in selecting an alternative hull paint and on integrated pest management can be found through the University of California website: http://ucanr.org/sites/coast/. Additionally, see comment 04.5
05.7	LACDPW	The Loading Capacity of the Harbor for Dissolved Copper is Significantly Underestimated In calculating the loading capacity of the Marina del Rel Harbor for dissolved copper, staff assumed a water surface area of 1,200,000 m (or 296.5 acres). This area is much lower than the actual surface area of the Marina del Rey Harbor water as covered by the TMDL. By lowering the area, the loading capacity of the harbor for dissolved copper was grossly underestimated by about 20 percent. The area used in calculating the loading capacity should be consistent with the water surface area being addressed by the	The receiving water area utilized in the proposed TMDL revision relies on watershed areas reported in the Draft – Technical Memorandum: PLOAD Model for Marina del Rey Harbor. The reported value for receiving water area is the basis for the original TMDL and is appropriate for continued use in the TMDL. Potential changes in the definition of watershed area are beyond the scope of the current TMDL revision.

		TMDL, which is the entire Marina del Rey Harbor. Our estimate indicates that this area should be 403 acres. We request that the TMDL be revised to use the correct water surface area of 403 acres in calculating loading capacity; and the load allocation for dissolved copper should be revised accordingly.	
05.8	LACDPW	The Conversion of Boat Hull Paint From a Biocide-Based Paint to a Non-Biocide Based Paint May Create Unintended Environmental Consequences In recent years, invasive species increasingly have become a major threat to aquatic ecosystems including Santa Monica Bay and Marina del Rey Harbor. One common mechanism of transport of aquatic invasive species is through boat travel. Traditionally, copper-based hull paints have been used as a biocide to prevent the transport of invasive species from one waterbody to another. While the elimination of copper-based hull paints might improve water quality in the long run, such measures might create the unintended and undesirable consequence of increasing the spread of invasive species. In this regard, Regional Board's own draft Substitute Environmental Document prepared for the TMDL states (p. 75): "Increased growth of fouling organisms could occur as a result of boat owners switching from copper-based antifouling paints to alternative coatings, which may prove to be less effective. An increase in abundance and species diversity of fouling organisms on a boat previously moored in a different location could lead to the transport of invasive species into the Marina del Rey Harbor Waters. Certain invasive	The SED acknowledges that increased growth of fouling organisms and invasive species could result from the switch from copper based anti-fouling paint. The SED identifies mitigation measures to address that potential impact. The SED properly identifies hull cleaning practices as one potential mitigation measure for potential impacts related to invasive species. (See Chapter 6.2.2, pp. 61-76). In addition, the SED includes a statement of overriding considerations which states that in view of the entire record supporting the TMDL, the specific economic, legal, social, technological, and other benefits of the proposed TMDL outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.

		species have been known to cause disruptions in ecosystems…" Further, studies[1] have shown that biofilms that would grow on boats, which the copper paint is intended to prevent, could be a reservoir for bacteria. Given thousands of boats in the Marina, the replacement of biocide paint with non-biocide paint could aggravate the bacteria problem in the water. Such potential environmental harm would make this TMDL improperly in conflict with the Coastal Act's specific mandates to protect such environments. In light of these concerns, it would be premature to require the replacement of the hull paints at this time; such requirement should only be adopted after viable product alternatives are available that would address the competing environmental issues described above.	The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL has been effective since 2004. The bacteria TMDL addresses microbial sources of pollution to Marina del Rey Harbor. Additionally, the use of copper antifouling paints to control potential disease vectors is not an approved use of such products by the Department of Pesticide Regulations; nor is there evidence that this is an effective means of disease control.
05.9	LACDPW	The Dissolved Copper Targets are Overly Stringent and Not Substantiated by Science Dissolved copper can exist as a variety of inorganic and organic chemical species. Research shows that the bioavailability of copper as a toxicant in water is determined by the concentration of free inorganic species, and not the total dissolved copper or the organically complexed species. The presence of copper binding organic matter in water minimizes copper toxicity despite high concentrations of dissolved copper. For example, studies conducted for San Francisco Bay concluded that most of the dissolved copper in the bay exists in harmless form - bound to organic ligands, which effectively buffer their availability to organisms. The findings of the studies resulted in the development of site-specific dissolved copper criteria for the Bay by the San Francisco Regional	See response to comments 04.4 and 05.6 The California Toxics Rule criteria for copper in saltwater are based on dissolved copper concentrations. A site-specific study may be conducted in Marina del Rey Harbor to investigate the potential effects on toxicity of copper complexation by organic ligands. In the absence of such a study, CTR criteria are the appropriate water quality standards for dissolved copper in Marina del Rey Harbor.

		Board to provide a more appropriate and less stringent standard, which eventually led to the removal of copper from the 303(d) list. As a result, the copper criterion currently applicable to the San Francisco Bay is 6.9 µg/L. In contrast, the Marina del Rey Harbor TMDL proposes a copper criterion of 3.1 µg/L. We believe that this is overly protective and warrants the development of site-specific criteria for Marina del Rey Harbor using appropriate scientific tools, such as the Biotic Ligand Model (BLM). We urge the Regional Board to delay adoption of the proposed TMDL until a site-specific study can be completed, or otherwise include appropriate re-opener language in the TMDL to consider the result of a site-specific study.	
05.10	LACDPW	As currently proposed, the TMDL requires the conversion of boat hull paints to non-copper paints for 85% percent of boats in the Marina by 2024. With over 4,500 boats in Marina del Rey Harbor, this would require approximately 4,000 boats to adopt a non-copper based hull paint within the next 1 0 years to comply with the TMDL. In contrast, Shelter Island Yacht Basin, which holds approximately 2,200 boats and was used as a model to develop the Marina del Rey Harbor dissolved copper TMDL, provides a 17-year compliance schedule to achieve its 76% dissolved copper load reduction target. The 10-year timeline is literally impossible to meet. It requires repainting over 400 boats a year, which is unachievable for many reasons. First, it will take many years for boat owners to be educated about any new requirements and willing to convert their paints, especially given the significant questions remaining concerning the cost, durability, and maintenance of non-copper based paints. Behavioral changes needed in the boating community to embrace alternative paints take time. As	See response to comment 04.3. The Regional Board disagrees that the ten-year schedule is impossible to meet. Furthermore, it is not appropriate to multiply the Shelter Island Yacht Basin TMDL implementation schedule by two in order to determine an implementation schedule for Marina del Rey. First, boaters in Marina del Rey have known about the environmental effects of copper-based hull paints for years due to outreach efforts in Marina del Rey as well information about the TMDLs in Shelter Island and Newport Bay that has been shared throughout the boating community. Second, during development of the proposed TMDL revision, Regional Board staff met with the two boatyard owners in Marina del Rey who estimated that it would take about 10 years to convert *all* of the boats in the marina (i.e., 5300, not 4500 boats) to non-copper paint if both boatyards in the Marina were working at full capacity. Third, the proposed TMDL revision contains a schedule and a plan to develop an enforceable regulatory mechanism to implement the load allocations. In contrast, the Shelter Island TMDL implementation

		an example, it took more than 6 years (2007-2013) to convert fewer than 30 boats in Shelter Island Yacht Basin. Second, the boat yards at Marina del Rey have limited capacity and could not handle 400 boats a year even under ideal conditions where the boat yards' time is fully devoted solely to paint conversions. Of course, the boat yards cannot devote all of their time to new conversions, since much of that time will be spent with maintenance of the existing boats. For example, boats typically have to be repainted every 1-3 years, meaning that much of the boat yard's capacity would be devoted to the re-painting. Third, given the significant additional costs of conversion, financial incentives, such as State grants, need to be in place to encourage boat owners to convert their paints, and such a process would take many years before they are available to the boaters. For example, it took approximately 5 years to obtain a State grant for the Shelter Island Yacht Basin. Considering the fact that Marina del Rey Harbor holds more than twice as many boats as Shelter Island Yacht Basin and requires more copper reduction than is required for Shelter Island Yacht Basin, the timeline needed to implement a copper reduction program in Marina del Rey Harbor should be more than twice the timeline provided for Shelter Island Yacht Basin. This warrants a compliance timeline of 2050 for Marina del Rey Harbor. We request that the Regional Board take this into consideration and provide an appropriate timeline.	has been entirely voluntary. Thus, it is expected that implementation in Marina del Rey Harbor will occur more quickly than in Shelter Island. Finally, as is stated in the comment letter, boats using copper-based paint typically have to be painted every 1-3 years. Paint conversions to non-toxic paints, which often have a longer lifespan, can be aligned with regular boat re-paintings, to reduce costs and improve efficiency.

05.11	LACDPW	The economic costs of imposing the paint requirement on the individual boaters would be, in some cases, prohibitive, and could cause an economically devastating flight of boats from Marina del Rey to other local marinas, which would not have these costly requirements. Unlike conventional repainting, converting the boats to non-copper based paints generally requires that all of the old coating be stripped from the hull. The Marina del Rey boat yards have reported that the cost of stripping paint from the hull of a standard 35 foot boat is between $6,000 and $7,000. In addition, assuming that each boater is also required to obtain a discharge permit, as has been indicated by the Regional Board staff, the 2013-2014 Water Board Fee List states a minimum fee of an additional $1,094. This may well be prohibitive to many recreational boaters, which is in direct contravention of the policies of the California Coastal Commission's mandate to encourage lower cost recreational boater opportunities. *See, e.g*. Section 30213 of the Coastal Act. Since the proposed TMDL applies only to Marina del Rey and not to other local marinas, it puts Marina Del Rey at a significant disadvantage to other operational marinas throughout the region. Boaters will see a major financial incentive to avoid these new costly regulations by simply moving to another local marina. Given that Marina del Rey already has a vacancy rate in excess of 15%, Marina del Rey will be unable to easily replace those departing boaters, leading to significant economic losses to the County and the entire Marina del Rey community. This problem would be eliminated if such regulations were to be applied at the State level to all marinas.	See response to comments 02.9 and 04.5 The Regional Board is sensitive to the concerns of small boaters and/or lower income boaters in Marina del Rey Harbor. It is anticipated that grant funding, similar to that obtained to cover stripping costs for boaters in Shelter Island Yacht Basin, will be obtained to reduce the financial burden on Marina del Rey boaters as they convert to more environmentally friendly hull paints. The Regional Board supports efforts to design these grants such that a larger percentage of costs are covered for smaller boats, where the cost conversion may represent a larger percentage of the overall cost of owning and operating a boat in Marina del Rey Harbor. In addition, the timing of the implementation schedule for the TMDL is such that it is expected that stripping of hull paint will be required during the boat's normal course of operation and maintenance at some point prior to the compliance deadline required by the TMDL. By covering much of this cost through grant funding, boaters may in fact spend less to re-paint their boat with an alternative paint than had they re-painted with copper based paint. Depending on paint selection, more frequent hull cleaning may be required which would result in an increased cost to boaters. Los Angeles Waterkeeper (LAW) has been using a non-copper based hull paint on their boat in Marina del Rey Harbor since 2009. This boat is in frequent use, thus ideal for the type of copper free paint applied, and LAW has been able to terminate hull cleaning entirely.

05.12	LACDPW	Addressing Copper Contamination from Antifouling Paints Requires a Statewide Regulation, Not a Local Regulation Marina del Rey is neither the only harbor in California nor the only harbor with boats painted with copper hull paints. Boats move from one marina to another throughout the region and the State, indicating that the marinas are interlinked and boats from one marina will have an impact on other marinas when it comes to copper leaching from hull paints. Therefore, any effort to address copper paints should be dealt with holistically at the State level. It's unfair and ineffective to impose a regulation that would apply only to one or two marinas. The most effective way to address copper hull paints is to control the source, i.e., to prohibit the manufacturing, sale, and application of copper paints throughout the California similar to the prohibition enacted for vehicle brake pads. The State of Washington has followed a similar track and enacted laws that would address brake pads as well as hull paints. In California, the effort to address copper-based hull paints at the state-wide level is underway through the Department of Pesticide Regulation (DPR). In fact, newly passed State legislation (AB 425) requires the DPR to "*determine a leach rate for copper-based antifouling paint used on recreational vessels and to make recommendations for appropriate mitigation measures that may be implemented to protect aquatic environments from the effects of exposure to that paint if it is registered as a pesticide.*" We believe that the State is on the right track and any efforts to address copper paints should be directed towards supporting the DPR effort.	See comment 04.5 Low copper paints may aid in achieving the TMDL as an interim step. This approach will begin the process of reducing the discharge of copper into the harbor may be particularly useful as an interim step in progressing towards the use of non-copper hull paints. The Department of Pesticide Regulations is currently tasked with determining an acceptable leach rate of copper from antifouling paints that will not result in the exceedance of water quality standards (California law AB 425). Results of this effort may aid in meeting the TMDL.

05.13	LACDPW	The Treatment of the Boats in the Marina as Non-Point Sources Is Not Adequately Explained The TMDL treats the discharge of dissolved copper from boat hulls as a non-point source, assigning a load allocation to the boats. The TMDL provides no justification for treating the boats as non-point as opposed to point sources. *See* 33 U.S.C. § 1362(14).	Recreational vessels are not required to obtain NPDES permits and are therefore considered a non-point source and must be regulated through WDRs or conditional waivers of WDRs. Currently, except for ballast water discharges, NPDES permits are not required for any discharges incidental to normal operation of commercial fishing vessels and other non-recreational vessels less than 79 feet. However, unless Congress takes additional action, the moratorium from the requirement to obtain permit coverage for incidental discharges from these vessels expires December 18, 2014. In anticipation of the end of the moratorium, EPA published a draft small Vessel General Permit (sVGP) in 2013 to provide for permit coverage for these incidental discharges and intends to finalize the sVGP at a later date. The draft permit prohibits performing vessel hull maintenance within the first 90 days of application of antifoulant paint that releases biocides. In the interim, the proposed TMDL treats discharges of dissolved copper from passive leaching as a nonpoint source and assigns load allocations. Passive leaching of copper is a waste under California Water Code section 13050(d) and the Regional Board has the authority to implement the load allocations under section 13260.
05.14	LACDPW	The Compliance Date Should Be Extended A successful execution of a contaminated sediment management plan to attain the in-harbor sediment load allocation depends on such factors as availability of sediment disposal sites and logistics to relocate the boats currently residing in the harbor during sediment removal. Furthermore, external pollutant sources must be fully controlled before any remediation of contaminated sediment is initiated to avoid re-contamination of the harbor sediment.	The Regional Board disagrees. The original TMDL requires Cleanup and Abatement Orders to address toxicity hotspots within in-harbor contaminated sediments to be promptly issued as a result of data submitted pursuant to the TMDL. Responsible parties completed a Sediment Characterization Study in 2008 indicating that sediment impairments are not confined to hotspots but rather are pervasive throughout harbor sediments. To allow time for planning efforts and to ensure that sources of toxic pollutants to the harbor are controlled prior to remediation, The Regional Board has proposed replacing the requirement to issue Cleanup and

		Following the successful management of MS4 sources, the TMDL should provide sufficient time to analyze the sediment condition and develop an appropriate plan of action. In particular, potential attenuation of contaminants through natural degradation should be tested (see the comment below). Sediment removal, capping, or other costly means of remediation should be considered only after other more cost-effective alternatives (such as natural attenuation) have been exhausted. Specifically, after external sources have been addressed, a study should be conducted to assess the condition of the sediment over time. Based on the results of the study, a contaminated sediment management plan could then be prepared to determine the best approach to address any remaining issues in the sediment. Given the complex nature of Marina del Rey Harbor and the process that a project of this magnitude would require, the actual implementation of the sediment remediation would need to follow a phased approach which could take more than 10 years to complete after the sediment management plan is in place. Given this necessary sequence of actions, the final compliance schedule for in-harbor sediment should be set to 2038.	Abatement Orders with Load Allocations for in-harbor sediments and an implementation schedule to meet the Load Allocations. The Regional Board finds this approach reasonable and has based the implementation schedule on allowing approximately one year to dredge each basin in the Marina (this timeline was based on previous local dredging efforts). The timeline of 2029 presumes planning efforts will begin early in the implementation schedule of the TMDL and that the beginning phase of remediation may coincide with monitoring to ensure all sources are controlled. Based on early discussions with the County of Los Angeles, Department of Public Works during TMDL development language has been included in the proposed TMDL to allow flexibility: "The TMDL may be reconsidered to revise the implementation schedule in order to ensure that pollutant sources are controlled and a suitable location for contaminated sediment disposal is available prior to remediation of contaminated sediments if the County has made a good faith effort to plan, fund, and permit sediment remediation activities." Thus, there will be an opportunity to revise the sediment remediation schedule if warranted. See response to comment 05.15 regarding natural attenuation. Also see response to comment 05.1.
05.15	LACDPW	Natural Attenuation Should Be Given a Chance in Reducing Legacy Pollutants Contaminants in sediments are known to undergo degradation overtime through natural bio-chemical processes. Natural processes have proven to play a key role in remediating contaminated soil and sediments. In particular, this can be an	The rate and amount of attenuation occurring at the Palos Verdes (PV) Shelf is less than certain. U.S. EPA is currently in the process of conducting additional sediment and tissue sampling at the PV Shelf to further study the current conditions and potentially assess background degradation and sediment migration from the site due to the steep slope. In addition, deposition of clean sediment at the PV Shelf may have served to reduce the

		effective alternative once the external sources of the contamination have been addressed. An example where natural degradation is playing a vital role is the case of the superfund site at Palos Verdes Shelf, the largest DDT and PCBs deposit site in the nation. Recent surveys of the site have shown that both DDT and PCBs are disappearing at a faster rate than expected, and the EPA is currently reconsidering the implementation of a sediment remediation project, which would cost tens of millions of dollars. Most of the contaminants of concern in Marina del Rey Harbor, such as PCBs, DDT, and chlordane are legacy pollutants with no or little current contributions from the watersheds. In addition, existing sources of metals (copper, lead, and zinc) in the watershed will be addressed as required by the proposed TMDL in the next 8 years. Once these external sources have been addressed, sufficient time should be provided to assess the effectiveness of natural attenuation before upwards of hundreds of millions of tax dollars are spent on sediment removal or capping. Accordingly, we request the Regional Board provide the flexibility and needed time to test this cost-effective approach.	resuspension and limit the amount of bioavailable PCBs and DDT. It would premature to attribute lower levels of PCBs and DDTs at PV Shelf strictly to pollutant degradation and natural attenuation, especially when USEPA voiced uncertainty. As such, disregarding the unique conditions of the PV Shelf and application of that principle to Marina del Rey Harbor may not be valid. Marina del Rey Harbor shares limited similarities to a large and dynamic system like the PV Shelf, which experiences greater degrees of sediment erosion, transport, and migration due to its unique topographical features. The relatively shallow depth of Marina del Rey Harbor lends itself to greater disturbance and resulting resuspension given the proximity of bottom sediments to the surface as well as the high amount of disturbance associated with one of the largest private craft marinas in southern California. The Marina is a relatively enclosed and static system with flat sediment beds not lending itself to transport of bulk sediment out of the harbor, which is exacerbated by the fact that the wider harbor with the exception of the entrance channel is seldom if ever dredged.
05.16	LACDPW	Participation in the Bight Regional Monitoring Program Should Satisfy the SQO-Associated Monitoring Requirement for the TMDL The proposed Basin Plan Amendment requires performing sediment quality evaluation in accordance with the State's Sediment Quality Objective (SQO) plan for enclosed bays and estuaries (SQO Part 1). There is an existing regional monitoring program that could satisfy this requirement and would leverage the expenditure of public funds in a cost-	The Regional Board agrees that participation in the Bight Regional Monitoring program should aid in meeting TMDL monitoring requirements. The year 2008 was specified so that the Marina del Rey Harbor triad monitoring could be coordinated with the every-five-year Bight sampling efforts, which would provide cost savings to the Responsible Parties. As some of the Responsible Parties already participate in Bight, it is not necessary to have an approved revised monitoring plan to proceed with the triad monitoring.

		effective manner. As noted in the draft TMDL staff report dated November 2013, a regional sediment monitoring program in the Bight region of Southern California occurs every five years. This regional monitoring covers Marina del Rey Harbor and is being conducted in accordance with the SQO Part I. The County has been an active participant in the design and implementation of this regional monitoring program. As such, we propose that the Basin Plan Amendment be revised such that participation in the Bight program be the TMDL-required SQO-based sediment monitoring and evaluation.	The Regional Board is unable to predict how Bight efforts might change in the future and such decisions may not be based on monitoring requirements of the proposed TMDL. Given this uncertainty, it is not appropriate to include in the TMDL that Bight monitoring will meet TMDL monitoring requirements. Also see response to comment 05.4.
05.17	LACDPW	Inconsistence in Setting of Targets for Bioaccumulative Pollutants In setting fish tissue associated sediment targets for PCBs in Marina del Rey Harbor, the Regional Board relied heavily on a bioaccumulative study conducted in San Francisco Bal. Given the site-specific nature of this study, its applicability to Marina del Rey Harbor is questionable. The finding of this single study, from outside the Los Angeles region, should not be used to set TMDL targets unless corroborated by similar studies from Southern California. Similar to the dissolved copper target issue discussed above, the fish-based targets for bioaccumulative pollutants should also be established though a site-specific study conducted for Marina del Rey Harbor. Moreover, there should be consistency in setting targets for all bioaccumulatives pollutants of concern in the TMDL, including PCBs, DDT, and chlordane. While DDT and chlordane sediment targets are now set based on National Oceanic and Atmospheric Administration's effects-range-low (ERL) values, PCB targets are proposed based on the	The Regional Board disagrees. Use of the revised total PCB sediment target based on the food web bioaccumulation model is consistent with previously adopted toxic pollutant TMDLs in the region, including the Los Angeles and Long Beach Harbors Toxic and Metals TMDLs and the Ballona Creek Estuary Toxic Pollutants TMDL. If 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.

		biaoccumulative study as discussed above. The State Water Resources Control Board is currently working on SQO Part 2, which would establish fish tissue based sediment objectives. We recommend that ERL-based targets should be maintained for all pollutants until either the State adopts the SQO Part 2 or site-specific bioaccumulative study is completed for Marina del Rey Harbor.	
05.18	LACDPW	The County Should Not be Held Solely Responsible For Any Future Recontamination of the Sediment The proposed Basin Plan Amendment requires the County, as owner and operator of Marina del Rey Harbor, to bear the heavy burden of remediating the sediment in the Marina del Rey Harbor despite the fact that those contaminated sediments originated from the watershed, which drains lands that are under the jurisdiction of not only the County but also various cities. Once the sediment has been remediated, the County should not be responsible for future recontamination of the sediment in the harbor as result of upstream discharges. We request that the following language be added to the implementation section of the TMDL. *After remediation activities of the in-harbor sediment are complete, if the harbor is recontaminated as a result of continued discharge of contaminants from the surrounding watershed, additional remediation activities in the harbor shall be the responsibility of upstream dischargers.*	The Regional Board disagrees. Potential recontamination may be contributed from a County-owned area of the watershed. The proposed language would inappropriately remove responsibility from the County for such an impairment.
05.19	LACDPW	The Regional Board's draft Substitute Environmental Document for the proposed TMDL ("CEQA Report") is inadequate and does not support the adoption of the draft revised TMDL. The CEQA Report is required, among other	The comment is incorrect. The Regional Board shall not adopt or approve a project that would cause significant adverse impacts if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse

		things, to identify the reasonably foreseeable environmental impacts of the reasonably foreseeable methods of compliance (Pub. Res. Code §21159(a)(1)) and to identify reasonably foreseeable *feasible* mitigation measures (Pub. Res. Code §21159(a)(2)). The CEQA Report also must disclose why an agency approved a project if significant environmental impacts are involved. (Cal. Code Regs.,tit.14 §15002(a).) It is not sufficient to simply list potential mitigation measures, a decision making agency is prohibited from approving a project for which significant environmental effects have been identified unless it makes specific findings about alternatives and mitigation measures. (Pub. Res. Code§ 21081; *Mountain Lion Foundation v. Fish & Game Com*., 16 Cal. 4th 1 05, 134 (Cal. 1997); see also *Environmental Council v. Board of Supervisors* (1982) 135 Cal. App. 3d 428, 439.) The public agency bears the burden of affirmatively demonstrating that, notwithstanding a project's impact on the environment, the agency's approval of the proposed project followed meaningful consideration of alternatives and mitigation measures. Mountain Lion Foundation, supra (citing *City of Poway v. City of San Diego* (1984) 155 Cal. App. 3d 1037, 1046.) The CEQA Report does not adequately evaluate whether its proposed mitigation measures for either remediation of the harbor sediments or dissolved copper are feasible, and does not meaningfully evaluate alternatives. Instead of analysis, all the CEQA Report states on the subject of whether the proposed mitigation measures are feasible is, "foreseeable environmental impacts from methods of compliance are well known, as are feasible mitigation measures." (CEQA Report, p. 17, §4.2.) This is not substantive analysis.	impact that the project may have on the environment (23 CCR § 3780). The SED analyzes alternatives to the proposed project in Chapter 4, and concludes that Alternatives 2 and 3 are not feasible because they would allow toxic impairment of the waters in Marina Del Rey Harbor to continue, in contradiction of the project purpose. The SED addresses the feasibility of mitigation measures to lessen the environmental impacts of the project in Chapters 6.2 and 7. The feasibility of mitigation measures for various methods of compliance will also be analyzed at the project level through independent environmental review. The Staff Report also provides information about the costs of alternative means of compliance in Chapters 4.10 and 5. The SED addresses the feasibility of mitigation measures to lessen the environmental impacts of the project in Chapters 6.2 and 7. The feasibility of mitigation measures for various methods of compliance will also be analyzed at the project level through independent environmental review (Pub. Res. C. § 21159.2) which is beyond the scope of analysis that the Regional Board is required to take (Pub. Res. C. § 21159(d).). The Regional Board has analyzed the reasonably foreseeable environmental impacts of the TMDL as an overall program, and reasonably foreseeable environmental impacts of the foreseeable methods of complying with the TMDL. The SED properly identifies the use of alternatives to copper-based antifouling paints to avoid potentially significant impacts to plant life. The SED states, “At present, there are a number of available alternatives that have been demonstrated to be both nontoxic in nature and effective at reducing fouling growth. Examples include silicone hull coatings and hard smooth epoxy hull coatings, combined with more frequent underwater hull cleaning.” The reference and support for this statement is included

		The CEQA Report recognizes that there are severe potential environmental impacts to its implementation alternatives for both copper and sediment. The Report identifies more than 50 categories of potentially significant environmental impact (See CEQA Checklist, Report pp. 28-34.) The CEQA report fails to provide adequate analysis for any of these categories. For example, the CEQA report recognizes potentially significant impacts on native plant life caused by the replacement of copper-based antifouling paints: "Increased growth of fouling organisms could occur as a result of boat owners switching from copper-based antifouling paints to alternative coatings, *which may prove to be less effective*. An increase in abundance and species diversity of fouling organisms on a boat previously moored in a different location could lead to the transport of invasive species into the Marina del Rey Harbor Waters. Certain invasive species have been known to cause disruptions in ecosystems by a variety of mechanisms, such as through competition with native biota for food and resources. The natural community, if one exists in the Marina del Rey Harbor, could be negatively affected by the introduction and establishment of invasive species." *Id*., p. 61 (emphasis added.) Despite acknowledging that alternative coatings "may be less effective", and the harm that could bring, the Report nevertheless then states, without any reference or support, that, "At present, there are a number of available alternatives that have been demonstrated to be both nontoxic in nature and effective at reducing fouling growth." *Id*. This does not constitute the required meaningful evaluation of alternatives. This is further demonstrated in the same paragraph of the Report, when it states the hope that market will ultimately	in the TMDL staff report (see section 4.10.2 and 5), which is part of the SED. The SED also properly identifies hull cleaning practices as one potential mitigation measure for potential impacts related to invasive species. The quoted text in this comment does not reflect the entire analysis of the potential impacts and mitigation measures to existing fish or wildlife habitat from dredging or capping. The analysis under this impact also states "also see 'Plant.' 2 a, b, and c" and these sections of the SED contain much more extensive discussion. Potential impacts to animal life and associated mitigation measures are also discussed in the previous "animal life" sections of the SED. For example, mitigation measures that are identified in the SED to lessen impacts to plant and animal life due to dredging include proper project modeling, siting, and planning. These mitigation measures might include limiting the extent and duration of dredging; conducting dredging in portions and phases to allow species to reestablish, recover, and propagate; and using sediment curtains to reduce sediment migration to habitat adjacent to a current dredge site. Furthermore, the SED examined worst case impacts due to dredging, when in fact, the relatively shallow depths in Marina del Rey Harbor lend themselves to greater disturbance and resulting re-suspension given the proximity of bottom sediments to the surface and the high amount of disturbance associated with one of the largest private craft marinas in southern California. The Marina is a relatively enclosed and static system, with flat sediment beds, not lending itself to transport of sediment out of the harbor. This is exacerbated by the fact that the wider harbor with the exception of the entrance channel is seldom if ever dredged. Therefore, the impacts from dredging are likely to be limited and temporary.

		create more viable alternatives, "Additionally, the formal mandate for copper load reduction in this TMDL Basin Plan amendment will in and of itself increase the market demand for innovative solutions including nontoxic, effective hull coatings. This in turn will create greater market demand for the development of new products." This is hope, not evaluation of feasible alternatives. It is not based on any factual analysis. Another alternative stated in this same paragraph is that "underwater hull cleaning should be performed particularly on vessels prior to leaving an area known or suspected to support species that could become invasive if brought into the Marina del Rey Harbor Waters." No explanation is provided as to how such a requirement would be implemented or enforced, especially when the "area known or suspected to support species that could become invasive" is outside the jurisdiction of the County or the Regional Board. As another example, as to whether the remediation of the sediments through dredging would result in deterioration of existing fish or wildlife habitat, the CEQA Report states: "Dredging or capping would increase suspended sediment in the vicinity of dredging activity, increasing turbidity of the water. This would reduce water clarity in the Harbor, which would result in the deterioration of existing fish or wildlife habitat. The increased turbidity would affect survival of phytoplankton and zooplankton, which form the prey basis for many of the wildlife, fish, and bird species in the Harbor. Dredging processes would disrupt activities of wildlife in the Harbor, and the presence of the pipeline and barge, as well as tugboat and barge movements, would affect biological resources in the Harbor for the duration of the dredging. Noise, human disturbance, and mechanical barriers from	

		equipment and boats, all would affect wildlife, fish, and birds in the harbors. Some sediment in the Harbor contains toxic compounds that, when suspended, could affect water quality, which in turn could affect existing fish or wildlife habitat." (CEQA Report, p.75.) However, despite identifying these significant adverse impacts, the Report fails to provide any consideration of alternatives and mitigation measures, much less meaningful ones, as required.	
05.20	LACDPW	The TMDL should not include pollutant-water body combinations that are not in the 303(d) list. Page 8 of the TMDL Staff Report states "…*Regional Board staff recommends updating the Clean Water Act Section 303(d) listing for Marina del Rey Harbor during the next listing cycle to encompass toxic impairments throughout the harbor and addressing these impairments in this reconsideration of the Marina del Rey Harbor Toxic Pollutants TMDL.*" In other words, a TMDL is being developed prior to 303(d) listing. This has led to the incorporation of the Marina del Rey Front Basins sediment and dissolved copper in water column for the entire Marina. While we understand the need to address known impairments, the proper regulatory process should be followed in developing a TMDL to ensure that problems are prioritized. The Clean Water Act provisions associated with 303(d) listing and TMDLs implicitly require that a waterbody should first be incorporated into a 303(d) list prior to developing a TMDL. Regional Board's decision to develop a TMDL for waterbody-pollutant combination that is not in an approved 303(d) list undermines established regulatory process. Therefore, we request that TMDLs for the Front Basin and the dissolved copper be delayed until after these impairments go through proper 303(d) listing and approval process.	The number of exceedances of water quality standards of total DDT and p,p'-DDE as well as exceedances noted in the front basins of Marina del Rey Harbor meet listing requirements for inclusion of these impairments in Marina del Rey Harbor sediments on the Clean Water Act Section 303(d) list of impaired water bodies. Delay in addressing constituents until formally placed on the 303(d) list is not mandated and would undermine the goals of addressing all sources of toxic pollutants to Marina del Rey Harbor and of addressing the watershed holistically. Inclusion of DDT and p,p'-DDE as well as increasing the geographic extent of impairments in the proposed TMDL is warranted at this time.

05.21	LACDPW	Lead TMDL and Associated Requirements Should Be Removed from the Front Basins As acknowledged in the draft TMDL staff report (p. 10-11 and 21), the front basins of the Marina have not been found to be impaired due to lead. Existing data for the front basins show that there are zero exceedances of the lead criterion out of total 24 samples collected over the last decade. However, staff incorporated the numeric target for lead into the compliance requirements for the front basins, citing the need to holistically address the entire watershed. While separate efforts may not need to be implemented to reduce lead concentrations in the front basins of the Marina because the efforts that would be implemented for other pollutants would address lead as well, including waste load allocations in a TMDL for a non-impairment is inappropriate. The TMDL should be revised to remove the waste load allocation for lead associated with sediment in the front basins.	The proposed TMDL addresses all constituents on a watershed basis. To ensure continuity within the TMDL as well as to address the watershed holistically, it is appropriate to apply the numeric target for lead in sediment to the entirety of Marina del Rey Harbor.
05.22	LACDPW	Future re-opener dates should be added As the science and policy behind stormwater and sediment quality management evolve and new data is collected through the TMDL monitoring program, it is important to re-evaluate the TMDL periodically. For instance, the completion of the stressor identification study in December 2016 as required by the proposed Basin Plan Amendment is a milestone potentially worthy of a re-opener. While the proposed Basin Plan Amendment includes a discussion of a future reconsideration (p. 12), it does not include a specific date for when that reconsideration would take place. While reconsideration can take place any time, it is helpful to specify a date so that necessary information and	See response to comment 03.7

		data can be gathered toward that target. Given the complexity of this TMDL, more than one reopener is needed. We request that future TMDL re-opener dates of 2018 and 2024 be set in the TMDL schedule. Also, we recommend revising the reconsideration language on page 12 of the tentative Basin Plan Amendment as follows (with the underlines indicating additions and strikethroughs indicating deletions): The TMDL may be reconsidered to revise (a). the implementation schedule in order to ensure that pollutant sources are controlled and a suitable location for contaminated sediment disposal is available prior to remediation of contaminated sediments if the ~~county has~~ responsible parties have made a good faith effort to plan, fund, and permit sediment remediation activities; and (b) the waste load and load allocations and monitoring programs based on the findings of new studies and data.	
05.23	LACDPW	Reference to "jointly responsible" should be deleted as it is inconsistent with the Clean Water Act The tentative Basin Plan Amendment provides that the MS4 permittees are "jointly responsible" for meeting the mass-based waste load allocations assigned to the MS4 permittees (tentative BPA page 1 0). There is no basis under the Clean Water Act for making MS4 permittees "jointly responsible" and this reference should be deleted. A TMDL is a requirement imposed by the federal Clean Water Act and therefore it is limited to what is authorized by the Clean Water Act. The Clean Water Act limits a waste load allocation to one point source, not a combination of point sources. Title 40 C.F.R. § 130.2(h) defines "waste load	The Proposed Amendment does not modify the existing TMDL with regard to joint responsibility except by adding the Los Angeles County Flood Control District to the list of entities subject the MS4 permit. The MS4 responsible parties are subject to Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach, Order No. R4-2012-0175 (Los Angeles County MS4 permit). The Los Angeles County Flood Control District is being added to the TMDL because it is a permittee under the Los Angeles County MS4 Permit. The Los Angeles County MS4 Permit makes clear that individual co-permittees are not responsible for the operations of other co-permittees. MS4 permittees are responsible for implementing

		allocation (WLA)" to mean "The 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-based effluent limitation." This regulation does not define waste load allocations in terms of a set of point sources or "joint" discharges. Instead, under this definition, each point source has its own separate waste load allocation; that point source is responsible only for its own allocation. The fact that each point source is responsible only for its own allocation, and not the allocation given to others, derives from the provisions of the Clean Water Act itself. There is no provision for imposing joint responsibility under the Clean Water Act. Under the Act, a party is responsible only for its own discharges or those over which it has control. *Jones v. E.R. Snell Contractor, Inc*., 333 F.Supp.2d 1344, 1348 (N.D. Ga. 2004); *United States v. Sargent County Water Dist.*, 876 F.Supp. 1081, 1088 (D.N.D. 1992). See *also United States v. Michigan*, 781 F. Supp. 1230, 1234 (E.D. Mich. 1991) ("There is nothing in federal law that requires the Counties to accept responsibility for discharges that ... are appropriately within the province, jurisdiction and responsibility of local municipalities."). The Clean Water Act regulations applicable to MS4 permits specifically provide that co-permittees under an MS4 permit are only required to "comply with permit conditions relating to discharges from the municipal separate storm *sewers for which they are operators*." 40 C.F.R. § 122.26(a)(3)(vi) (emphasis supplied). Similarly, under the Porter-Cologne Act, Water Code § 13000 et seq., waste discharge requirements ("WDR") are issued to the person or entity that is "discharging." Water Code §	programs in their respective jurisdictions to meet the waste load allocations in the co-mingled system, unless the discharger demonstrates that its discharge did not cause or contribute to the exceedance. The TMDL is consistent with the Los Angeles County MS4 Permit and the Regional Board proposes no change to the Proposed Amendment.

		13260(a)(1) provides that "any person discharging waste, or proposing to discharge waste" shall file a report of waste discharge. After hearing, the Regional Board issues waste discharge requirements to "the **person** making or proposing the discharge." Water Code § 13263(f) (emphasis supplied). Enforcement is directed towards "any person who violates any cease and desist order, cleanup and abatement order…or…waste discharge requirement." Water Code § 13350(a). See also Water Code § 13300 (the regional board may require the **discharger** to submit for approval a detailed time schedule of specific actions)(emphasis supplied); Water Code § 13301 (cease and desist order directed at "those persons not complying with the requirements or discharge prohibitions"). Under the Porter-Cologne Act, a discharger is not responsible for discharges of pollutants over which it has no authority or control. Should the Regional Board decline to delete the reference to "jointly responsible," then the Regional Board should clarify that no one permittee is individually required to ensure that co-mingled stormwater meets the applicable WLAs. This can be accomplished by adding in the MS4 and Caltrans section on page 10 of the tentative Basin Plan Amendment the following sentence at the end of the first paragraph: No permittee shall be individually required to ensure that co-mingled stormwater meets the applicable MS4 WLAs unless such permittee is shown to be solely responsible for the exceedances.	

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06.1	Debbie Talbot, LA County Dept. of Beaches and Harbors	As Head of the Boating Section for the Los Angeles County Department of Beaches and Harbors I'm concerned about the tight deadline regarding the proposed TMDL regulations for Marina del Rey. I feel more time is necessary for boaters to read and comprehend what is proposed since the TMDL will directly affect them and their boats with an unnecessary financial burden wreaking havoc on the already fragile recreational boating community.	Comment noted. See response to comment 08.3
06.2		Being a Marina del Rey boat owner myself I am uncertain about what type of bottom paint to use since there are no viable non-biocide paints available for use. I would be happy to use my boat as a test case when there is an alternative bottom paint that is effective and doesn't have to be applied again after six months. I would like to see the BLM that is being tested used to support the scientific data about copper paint in salt water. I'm also concerned about invasive species that may be introduced to Marina del Rey waters which could make things worse.	See response to comments 05.6 and 04.4 Much research has been done and is ongoing regarding invasive species transport and the effects of antifouling paints on such transport. The Regional Board supports an integrated pest management approach as a means to reducing the risk of invasive species transport. Recent research indicates that some invasive species are copper-tolerant and thus copper paints may not be effective in reducing the transport of these organisms. In addition, a healthier biological community in Marina del Rey Harbor may improve resistance to invasive species invasions.
06.3		We are in the midst of many dock replacement projects in Marina del Rey with millions of dollars invested in the "new" Marina del Rey. The anchorage lessees will need vessels to fill up these new anchorages and the proposed TMDL regulations for Marina del Rey jeopardize recreational boating	See response to comments 02.9 and 05.11
07.1	Gerenew Amenu, LACFCD	Compliance With Waste Load Allocations Can Only be Assessed Upstream of Oxford Basin The LACFCD has no means to prevent sediment that originates upstream and enters Oxford Basin from making its way to the harbor and vice versa, given the very nature of the way the Oxford Basin is designed to function — to allow a tidal exchange of water between Oxford Basin and the harbor.	The Regional Board disagrees that LACFCD has no means to prevent sediment that originates upstream and enters Oxford Basin from making its way to the harbor. LACFCD specifically owns and operates Oxford Basin, which directly discharges to Marina del Rey Harbor. Oxford Basin acts as a sedimentation Basin prior to Marina del Rey Harbor. The sediments in Oxford Basin are a likely source of contamination to the harbor. As the owner and operator of Oxford Basin, LACFCD is responsible for routine

		In other words, sediment can enter Oxford Basin both from the upstream watershed and from the harbor itself. Therefore, in order to accomplish the requirements of the TMDL, contaminated sediment should not be allowed to be discharged to Oxford Basin from the watershed.	maintenance of this facility, including inspections, clean outs, and other activities. Moreover, LACFCD has the authority to install pollutant controls at the points of entry to and exit from its facilities, or within its facilities. These activities are feasible means of preventing pollutants from discharging to Marina del Rey Harbor. The Regional Board agrees that contaminated sediment should not be allowed to be discharged to Oxford Basin from the watershed and the waste load allocations assigned to MS4 dischargers upstream will ensure that this does not occur.
07.2		The Oxford Basin Monitoring Specified in the TMDL Must Necessarily Be Located Upstream of Oxford Basin In Order To Successfully Assess Compliance With the TMDL's Numeric Targets The proposed TMDL specifies that the LACFCD "shall monitor any discharges of sediment from Oxford Basin to the harbor" to determine attainment of numeric targets in the water that mixes with the water in Basin E. Although the TMDL does not specify the location of the required monitoring, only monitoring located upstream of Oxford Basin will be capable of accomplishing its purpose as stated in the TMDL. .	Regional Board staff worked with County staff on this issue prior to releasing the TMDL for public comment to include monitoring requirements for discharges from Oxford basin that account for the unique tidal mixing conditions. The language states, "Effectiveness monitoring developed as part of the Proposition 84 grant agreement for the Oxford Basin Enhancement Project may be used to meet this requirement; however, the monitoring shall continue beyond the term of the Proposition 84 grant." Monitoring is being conducted, as part of the approved coordinated monitoring plan, upstream of Oxford Basin as well.
07.3		As described above, Oxford Basin is designed to allow tidal exchange of water between Oxford Basin and Basin E during both dry weather and wet weather, except that in storm events, stormwater runoff originating from the upstream watershed passes through Oxford Basin into Basin E with little or no holding time and no tidal exchange	LACFCD, as the owner and operator of the Oxford Basin, is responsible for ensuring that water and sediment discharged from its facilities as a result of operation of those facilities, do not cause or contribute to exceedances of water quality standards. This includes water that is tidally exchanged between Oxford Basin and Basin E as well as during times when stormwater runoff

		As a result, during periods of tidal exchange, any monitoring located within Oxford Basin would be ineffective as it would measure contamination levels in sediment that may have entered Oxford Basin from the harbor as well as from upstream. There would be no way of determining whether the sediment in any given sample originated from upstream discharges or from the harbor. Only monitoring from an upstream location could accurately assess compliance with the TMDL's numeric limits. During storm events, runoff originating upstream enters and passes through Oxford Basin, exiting Oxford Basin into Basin E. At such times, any monitoring of sediment in Oxford Basin would serve no useful purpose, as it would be duplicative of upstream monitoring.	originating from the upstream watershed passes through Oxford Basin into Basin E. To the extent that the commenter is concerned about contributions from upstream sources or from the harbor itself, monitoring can be designed in such a way as to address the issues raised by the commenter
08.1	Small Craft Harbor Commission	The Marina del Rey Small Craft Harbor Commission (SCHC), an advisory body to the Los Angeles County Board of Supervisors, discussed at its December 11, 2013 regular public meeting, the portion of the proposed Marina del Rey Toxic Pollutants TMDL(TMDL) affecting copper discharges from hull paints used by boaters moored in Marina del Rey harbor (MdR). Based on its review of the meeting materials, consideration of the presentation by Regional Water Quality Control Board staff, subsequent discussion with Regional Board staff, and hearing public comment, the SCHC adopted the following resolutions: The SCHC is a proponent of improving water quality, however, it opposes the proposed TMDL as written regarding the required 85% reduction of boats using copper hull paints when the performance of alternative paints is currently not available to most recreational boat owners. Also, the alternative paints may be more costly for boaters to apply and maintain, and may require more frequent application. Further,	See response to comments 02.9, and 05.6. The legal sale of copper-based antifouling paints will not impact the implementation of an effective monitoring program. Options for determining what paints are utilized by boaters may include, but are not limited to, submission of a receipt for completed paint work and monitoring of water in the harbor. Vessels based in

		copper hull paints are legal to use and therefore, implementing an effective monitoring program while copper hull paint is legal to use is unrealistic	Marina del Rey and transient vessels can be required to demonstrate compliance via these mechanisms. The Regional Board will select an option considering the input from boaters and other affected parties and stakeholders.
08.2		The SCHC believes a statewide regulation on copper paints that includes a plan addressing reduction of copper hull paint use, fleet by fleet, must first be in place before targeting MdR with the proposed TMDL to severely reduce the number of boats moored in MdR that use copper hull paints.	See response to comment 04.5.
08.3		The SCHC requests an extended comment period sufficient to allow boaters and anchorage owners adequate time to review and comment on the complex and highly technical and scientific portions of the TMDL documents released for public comment. The SCHC believes the Regional Board should not be treating the individual boat and anchorage owners in the same manner as governmental agencies as the former generally will not have the resources and will require additional time to better understand the full impacts and consequences of the proposed TMDL.	The regulations implementing the California Environmental Quality Act prohibit the Board from acting upon a proposed basin plan amendment until 45 days after the Notice of Filing of the report accompanying the environmental checklist is made available. Typically, this 45 day period is the time during which the Regional Board accepts comments on the proposed TMDL. This proposed TMDL revision was released for public comment on November 5, 2013. In response to stakeholder requests, the 45-day public comment period was extended to 71 days. This extension of time for submittal of public comments is considerably longer than the 45 days usually allotted for TMDLs in this region. Copper pollution in marinas from antifouling paints is acknowledged as a statewide and nationwide concern and the Boating community in Marina del Rey has been aware of this issue for some time. There are two existing TMDLs addressing copper loading from antifouling paints in California: the Shelter Island Yacht Basin TMDL and the Newport Bay TMDL. There was also a discussion of the loading of copper from hull paint to the Marina del Rey Harbor in the original TMDL adopted in 2005. The Staff Report supporting the TMDL states, “There will be no load allocations assigned to boat discharges at this time, as contribution from water column concentrations to sediment

			loading cannot be quantified. Upon completion of a study designed to obtain such information, the TMDL will be revised as necessary." In addition. The Department of Pesticide Regulation conducted a statewide study of copper in marinas in 2009 and presented its results to the boating community in Marina del Rey.
08.4		The SCHC believes the TMDL is premature as the Regional Board has not demonstrated it has completed the necessary studies specific to MdR, rather, much of the information is extrapolated from partial data from the TMDL imposed on San Diego's shelter island yacht Basin. It is my duty as the Chair of the SCHC to convey to you the Commission's resolutions regarding the proposed revision to the proposed TMDL for Marina del Rey.	The proposed TMDL revision is based on the most recent science and extensive data collected in Marina del Rey Harbor. See response to comments 04.2, 04.4, and 05.6. In addition, toxicity Identification Evaluations (TIEs) were performed on water samples from the front and back basins of Marina del Rey Harbor. The results are presented in a 2009 publication by the Department of Pesticide Regulations (Singhasemanon 2009). In the publication, the study's authors conclude that copper is the likely cause of observed toxicity in the mussel, Mytilus galloprovincialis, a resident organism of Marina del Rey Harbor. Modeling was conducted to determine the amount of dissolved copper currently leaching from hull paint in Marina del Rey Harbor and the amount of dissolved copper that could be discharged from antifouling paints while enabling harbor waters to meet the TMDL numeric target. The modeling for this proposed revision to the Marina del Rey Toxics TMDL incorporated site-specific data for Marina del Rey Harbor into models that were utilized to determine the TMDL for Shelter Island Yacht Basin. The peer-reviewed models were designed to yield the specific information which was used to generate this TMDL. The refinement of these models for other harbors, including Marina del Rey Harbor, is an appropriate application of such models.

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09.1	Ted W. Lieu, Senator	As the Senator who represents Marina del Rey, a port to over 6,000 recreational boats that is considered the largest small-craft arbor in the world, many of my constituents have raised concerns about the impact of a proposed Total Maximum Daily Load (TMDL) rule on copper anti-fouling paint that the Board is considering next month. I believe that any rule-making process should be based on science, and the public should be given ample opportunity to review and provide commentary. As such, I urge the Board to address the following issues as they consider a proposed TMDL for copper anti-fouling paint.	The proposed TMDL revision is based on the most recent science and extensive data collected in Marina del Rey Harbor. See also response to comments 04.2, 04.4, 05.6, and 08.4.
09.2		I understand the public comment period on this proposed TMDL ends today, January 15, 2014. Public comment periods that take place during major holidays are not ideal since they provide an abbreviated period of opportunity for the many stakeholders and interested parties to become aware of this proposal, review the issue, and submit comments. I have heard numerous concerns regarding the procedures as well as substantive policy issues that the regional board may not have followed or addressed.	See response to comment 08.3
09.3		**It** is my understanding that the proposed TMDL has not gone through the normal review process required of TMDLs in the state of California . A technical document is required by the Clean Water Act. This technical document, as far as can be determined, was imported verbatim from a TMDL, rule for the Shelter Island Yacht Basin (SIYB) in San Diego. The document is not site-specific to the Marina del Rey Harbor, which has different hydrology factors than the Shelter	The Staff Report for this TMDL is original work of the Los Angeles Regional Water Quality Control Board. A portion of the Shelter Island Yacht Basin TMDL was included as an appendix to the TMDL Staff Report. Modeling was conducted to determine the amount of dissolved copper currently leaching from hull paint in Marina del Rey Harbor and the amount of dissolved copper that could be

		Island Yacht Basin in San Diego.	discharged from antifouling paints while enabling harbor waters to meet the TMDL numeric target. The modeling for this proposed revision to the Marina del Rey Toxics TMDL incorporated site-specific data for Marina del Rey Harbor into models that were utilized to determine the TMDL for Shelter Island Yacht Basin. The peer-reviewed models were designed to yield the specific information which was used to generate this TMDL. The refinement of these models for other harbors, including Marina del Rey Harbor, is an appropriate application of such models.
09.4		Another point of concern is that the proposed TMDL has not utilized the data from the leaching study for copper anti-fouling paint as required by AB 425 [Atkins, Chapter 587, Statutes of 2013]. This study, "Life Cycle Contributions of Copper from Vessel Painting and Maintenance Activities," [Earley, 2013] was ordered by the California Department of Pesticide Regulation [DPR]. I would like to ensure that this study and the policy recommendations are fully incorporated prior to adopting a TMDL for Marina del Rey.	See response to comment 04.2
09.5		**It** has also been brought to my attention that the copper loading portion of the TMDL contains numerous misstatements and references to erroneous SIYB and Port of San Diego studies that are utilized to justify proposed actions. The recreational boating community has communicated its request to the State Water Resources Control Board that the SIYB be de-listed due to a lack of demonstrable toxicity. For these reasons, I urge the Los Angeles Regional Water Quality Control Board to extend the public comment period. I also urge the Board to perform a thorough scientific review and incorporate the aforementioned Earley study prior to adopting a TMDL rule for copper that is site-specific for the Marina del Rey Harbor.	The statement that "the copper loading portion of the TMDL contains numerous misstatements and references to erroneous SIYB and Port of San Diego studies that are utilized to justify proposed actions" is unsubstantiated. The Regional Board considered the available evidence, including the 2013 Earley study, and concluded that the weight of that evidence supports the recommendations in the Staff Report and proposed TMDL.

10.1	John Tommy Rosas, Tongva Ancestral Territorial Tribal Nation	TATTN has TRIBAL WATER RIGHTS/vital cultural tribal interests, which are being illegally polluted by the COUNTY OF LOS ANGELES /ET AL in the MARINA DEL REY HARBOR areas. The LA COUNTY govt continues to illegally allow SEC 303 IMPAIRED WATERS to be worsened by their marinas and yacht club tenants.One issue is the zinc /copper / lead contamination and pollution from MDR harbor VESSELS/ BOATS that is negatively affecting our sacred sites at ballona wetlands and the Santa Monica bay, where we have indigenous rights adopted by UNDRIP / USA. The sec 303 impaired waters from MDR harbor VESSELS is polluting the wetlands thru the tide gate via ballona channel at most tides movements and thru the FIJI DITCH which goes to known recorded cultural resource SITES of our tribe .	Comment noted
10.2		As you know it is illegal under state and federal laws to pollute a sacred site area .I am also aware of the zinc pollution from all the boats in harbor. I am a USCG certified builder of documented vessels and have seen the increased zinc anode loss because of defective wiring/ bonding / grounding. This causes more zinc / lead to be discharged illegally from each vessel which is a point source.	The potential contribution of sacrificial anodes to the zinc impairment in Marina del Rey Harbor is discussed in section 4.8.2 of the Staff Report.
10.3		My direct expertise and authority under USCG will be helpful to discuss solutions and prevention to lessen the illegal discharges. Both as Licensed- USCG MERCHANT MARINER / USCG CERTIFIED BUILDER of documented/ INSPECTED vessels. I am also a certified marine coatings applicator by all major marine paint and coatings manufactures in which I have over 35 years experience. I have witnessed defective coatings applications by most	Comment noted

		MDR boat yards and they are a problem in this as they apply or prepare the hulls in a defective manner, which leads to more discharges of paint including copper. TATTN believes the LARWQCB resolution has to be adopted and enforced against the LA COUNTY / ITS TENANTS – MARINAS/ YACHT CLUBS / BOATYARDS who have abused those waters and have huge legal liabilities which we will enforce thru legal action in court if necessary. The MDR boating community has to take a responsible role in the operation and ownership of their vessels. They are liable for their boat pollution, and as boaters and users of those waters, they should be the first to stop polluting, regardless of the changes that have to be done so all can benefit from cleaner oceans and harbors.	
11.1	Douglas Fay	On Monday morning, January 12, 2013, the Channel 7 news covered the Argonaut story referenced below with live interviews from Samuel Unger and Greg Schem. Given the fact I was born in 1962, lived on Howard Street adjacent to the Marina Del Rey (MDR) Harbor for decades, my father the late Dr. Rimmon C. Fay was one of the first boat slip tenants and lifelong scientific expert on all California coastal development and policy concerns, and my brother Rimmon B. Fay had a boat bottom cleaning business in MDR Harbor for decades, I have these qualified comments, questions, and suggestions for the record. Mr. Samuel Unger, I commend you and your efforts to force the County of Los Angeles (County) to comply with the proposed 2024 and 2029 deadlines. I also suggest you take the issue of management responsibility a step further. The integrity of this process has been significantly compromised on many levels. It is paramount that you take control and hold	Comment noted. The proposed TMDL revision names the County of Los Angeles as a responsible party for the contaminated sediments and the discharge of copper from boat hulls. The Regional Board agrees that there are several means of attaining the TMDL requirements and that the responsible parties should chose an implementation alternative with minimum impacts to benthic habitat.

		the County accountable, not only for the intended neglect of the MDR Harbor into the future, for what they have done for the past 50 years. For 50 years the County has failed to maintain the harbor. For the divers, boaters, and marine life this is our aquarium of the Pacific. Aquariums are cleaned regularly. Dredging is not a good option for several reasons. It would be far more cost effective if the County was mandated to employ staff specifically to clean the MDR harbor, under the supervision of the Department of Beaches and Harbors. For example: A three person crew could vacuum the sediment off the bottom into a custom boat/barge, pump the sediment up into a County truck, and truck it to the appropriate landfill. This solution won't cost hundreds of millions of dollars as purported. Do the math: 10 pounds of sediment produced for each bottom cleaning x 12 months x 4000 boats x 50 years = 2.4 million pounds or 1200 tons of sediment. Even if you only removed 5 tons a day it would take 240 working days or 1 year including weekends and holidays. This approach to may take longer. Regardless, a slower habitat and community conscious sediment extraction process would be preferred over dredging. I have managed over 1,000 acres of upper watershed habitat in Northern California, and made vast improvements over a 10 year period at an investment of less than $200,000. Funding a maintenance crew described above may cost $1 million annually to fund after initial equipment purchases.	

11.2		I attended the January 7, 2014 County Board of Supervisors hearing and testified against Supervisor Knabe's motion to oppose the proposed revisions to TMDL standards for many valid reasons. The motion states the Harbor is a jewel with word class recreational amenities, and that the preservation of the Harbor's ecological integrity is a priority of this Board. What? The MDR Harbor is listed as an impaired waterbody. The ecological integrity is significantly compromised. The crabs I fished for as a child along the basin walls no longer inhabit the Harbor. The Santa Monica Bay does not have world class scuba diving or recreational fishing within the MDR Harbor area. I am a PADI MSDT Scuba Instructor with hundreds of logged dives. The dive boats in MDR Harbor seldom go out. They never run daily charters and cannot offer full time employment unlike other locations. The commercial fishing industry that once thrived in the Santa Monica Bay, and the multi billion dollar potential to restore and enhance this valuable economic and extremely suppressed resource is not even mentioned.	Comment noted.
11.3		The integrity of commenter [included in the Channel 7 News Story]: Greg Schem leases the boat yard from the County. He must say exactly what Gary Jones, acting director of the Dept. of Beaches and Harbors a.k.a. the County, wants him to or else. The same goes for MDR's Small Craft Harbor Commission (SCHC). After a recent Visioning meeting at Burton Chase Park, which I attended and commented at, a member of the	Comment noted

		Commission told me after the meeting that if they don't vote the way the County wants them to they'll be removed. The County representative hired to complete the Visioning process said they represent the 10 million other residents of the County, not the 10,000 that live in MDR. What? It was at this meeting that I discovered not a single person on this commission lives, works, or has a business in MDR, which is completely contrary to sound local governing principles and memorialized in the entrance to the Board of Supervisors chambers. (Ronald Reagan quotes)	
11.4		The irony here is the environmental groups that sued to get the TMDLs recognized, the County, and the Regional Water Quality Control Board all sit on the Santa Monica Bay Restoration Commission (SMBRC) and have for decades. They meet regularly at the Del Rey Yacht Club. What have they been doing for decades? The answer is simple: They have not been doing their job. A solution would be to remove all of the failed leadership from the SMBRC and appoint members that honestly care about what they should be doing.	Comment noted
11.5		Another solution would be to elect only residents, workers and business owners from MDR onto the SCHC. I made this recommendation during public comment at the Visioning meeting.	Comment noted
11.6		If they can ban copper in bottom paint in the State of Washington, they most certainly can do it in California. I work in the automotive industry as a Master Certified ASE Technician, Expert Certified Toyota Technician, and CA BAR Certified Smog Test & Repair Technician. From 1963 to present emissions reduction and pollution control technology	Comment noted.

		advancement has been phenomenal. Again, the County has neglected to fulfill their responsibilities for 50 years. Don't allow the County to defer their responsibilities, especially funding, to a future generation. If they won't fund maintaining the Harbor, it must be recognized in the County General Plan and why. The County plans on throwing a big 50th year anniversary party next year for Marina Del Rey. I would hope by then to see a crew working in the Harbor. If you need any help encouraging County leadership towards responsible stewardship of the Marina Del Rey Harbor please let me know.	
12.1	Patricia McPherson	Grassroots Coalition supports the comments and position stated by Mr. Douglas Fay. Per [these] comments, we urge the LARWQCB to continue with non- destructive and reasonable measures to ensure compliance by the County per the 2014 and 2029 deadlines.	Comment noted
13.1	Neal Blossom	Below are my comments and attached is one study referenced in my comments. A second lengthy study; "IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas" Culver et al, June 2012; will follow in a subsequent email immediately to follow. It can also be obtained at this website http://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=8147	Both attachments were reviewed during the process of revising the TMDL and are cited in the Staff Report entitled, "Reconsideration of the Total Maximum Daily Load for Toxic Pollutants in Marina del Rey Harbor."
13.2		The TMDL does not address the fact that if 85% of the vessels in Marina del Rey do not have copper based antifouling coatings on the hulls there will be other inputs into the marina water. The risk of those inputs must be addressed. Until a proper risk assessment is conducted the changes required in the TMDL should not be carried out and the TMDL	The existing TMDL addresses all upstream sources of copper. Based on an evaluation of additional data as part of the TMDL source analysis and linkage analysis, the proposed TMDL revision adds passive leaching from copper-based antifouling paints as a source of copper to the water column and assigns load allocations for this source.

		reconsideration should not be approved. The change to 85% of the vessels to biocide free coatings are likely to be more toxic to the water and sediment in Marina del Rey than the copper is now. As proof on page 21 the Study "IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas" Culver et al, June 2012 (attached in an email to directly follow this), the fouling biomass accumulation on different coatings, including copper based coatings, is measured. On average the hard epoxy and slick foul release coatings will contribute approximately 6.5 times as much organic matter into the water and sediment from hull cleaning than the copper based coatings will from hull cleaning. Assuming 6000 vessels are moored in Marina del Rey and 85% switch from copper to an alternative biocide free coating that will be 5100 vessels with additional organic matter entering the water and sediment.	The Regional Board disagrees that biocide-free coatings are likely to be more toxic than copper. The cited findings from the Culver et al. study were related to the effectiveness of hull cleaning practices on different types of coatings and the conclusions drawn in this comment were not the conclusions of the study. It is not clear where the number of 6.5 was obtained, as the information on page 21 is presented as a graph with 0.1 increments from 0 to 0.5 grams of biomass accumulated on different types of coatings. The purpose of the graph was to illustrate the effects of different type of hull cleaning practices on the growth of fouling organisms over a range of coatings.
13.3		The sediment monitoring study conducted for Marina del Rey in 2008, "Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY", Weston Solutions, April 2008; clearly reports the variable most closely related to sediment toxicity was the % clay in the sediment. There was not as direct a relationship to copper and zinc and these metals are very likely tied up in the clay and rendered nonbioavailable. The relationship of toxicity to clay% demonstrates that it is the stagnant water body conditions affecting the sediment quality. To add the additional burden of more organic matter into the sediment will only make the sediment more unhealthy for the benthic community. The sediment will be more anoxic and allow even less adequate pour water flushing.	The Regional Board disagrees with the conclusions drawn by the commentor on the sediment characterization study. Regardless, the proposed copper TMDL addressed exceedances of copper in the water column. The results of the sediment characterization study do not have significance for the establishment of load allocations for discharges of copper from boat hulls to the water column.
13.4		If this TMDL is going to lead to other biocide use then a complete model of Marina del Rey with the leach rate and coating area of those biocidal coatings should be conducted in	The Regional Board agrees that alternative biocides may result in new water quality impairments and such hull paints are therefore not supported by the Regional Board.

		a scientific risk assessment. Without such a risk assessment this TMDL may create a more toxic situation than currently exists. There is no study showing that the actions proposed in this TMDL lead to lower risk. Changing hull coatings doesn't lead to no risk, it leads to other risks. Until those are quantified and found to be lower than the current state the TMDL should not move forward.	
13.5		The "Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY" did not use a Toxicity Identification Evaluation (TIE) for measured sediment toxicity. Without it the TMDL may be addressing a toxicity issue regarding copper and zinc in the sediment that does not even exist. The report indicts the key factor most directly related to sediment toxicity is percent clay. Higher Percent clay relates to lower grain size and potentially to anoxic sediment conditions. The TMDL reconsideration is possibly making the sediment toxicity worse not better as discussed in item 1 above. A TIE should be conducted to determine if the proposed actions of this TMDL will lead to worse sediment conditions.	The purpose of the Sediment Characterization Study was to determine the areal extent of contamination in Marina del Rey Harbor sediments. A TIE was not necessary to attain this research goal and was therefore not included in the study. TIEs were performed in Marina del Rey Harbor during a study led by the Department of Pesticide Regulations. The results are presented in a 2009 publication by the Department of Pesticide Regulations (Singhasemanon 2009). In the publication, the study's authors conclude that copper is the likely cause of observed toxicity in the mussel, Mytilus galloprovincialis, a resident organism of Marina del Rey Harbor.
13.6		The TMDL and the TMDL reconsideration do not consider the actual beneficial uses of Marina del Rey. For example Marina del Rey clearly will not be used and was not designed for shell fishing. It's edges consists primarily of concrete walls not a sand shoreline. Sections of California's Porter Cologne Act are below. When one considers "past, present and probable future beneficiary uses of" the water (PORTER COLOGNE ACT, ARTICLE 3. REGIONAL WATER QUALITY CONTROL PLANS, Section 13241 (a)) it is clear that many beneficial uses regulated for in the TMDL have never existed in Marina del Rey. Marina del Rey is a man-made water body designed for one purpose – to moor vessels. Wasting resources in an effort to make it something it will never be is not good	In accordance with the federal Clean Water Act and the State Porter-Cologne Water Quality Control Act, Marina del Rey Harbor is designated as supporting the existing beneficial uses of commercial and sport fishing, shellfish harvesting, marine habitat, wildlife habitat, rare, threatened and endangered species habitat, and water contact recreation. The Clean Water Act explicitly states that, wherever attainable, water quality for the protection and propagation of fish, shellfish, and wildlife, and recreation shall be achieved. Designation of these beneficial uses can only be removed by conducting a site specific use attainability analysis that makes a determination that the use has not existed since November 28,

		for the environment. Its current and future use, to moor as many vessels as possible, is good for the environment. Rather than altering more California shore line, a limited space is fully utilized for this one purpose. That is the most environmentally sound method for mooring vessels. The TMDL should reflect the actual past, present and probable future beneficiary uses of this water. PORTER COLOGNE ACT ARTICLE 3. REGIONAL WATER QUALITY CONTROL PLANS § 13240. Regional water quality control plans 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. § 13241. Water quality objectives Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors	1975, does not currently exist and does not have the potential to exist. Fishing is a frequently observed beneficial use in Marina del Rey Harbor: http://www.visitmarinadelrey.com/harbor-guide/harbor-rules http://beaches.lacounty.gov/wps/portal/dbh/!ut/p/b0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOJdDQwM3P3dgo0s_IxNDTyNwtwsjD1NgWLm-lH6BXkmigCZKxxI/?1dmy&page=dept.lac.dbh.home.mdr.detail.hidden&urile=wcm%3apath%3a/dbh+content/dbh+site/home/marina+del+rey/parks/burton+w.+chace+park+-+mdr There are no fishing restrictions in Marina del Rey Harbor according to Title 19 of the Los Angeles County Code. Diving (i.e., shellfish harvesting) outside of beach areas is restricted and divers must obtain a written permit from the Harbor Master, but it is not prohibited. Regardless of any local restrictions, the existing uses of Marina del Rey Harbor must be protected under the Clean Water Act. The numeric targets for dissolved copper implemented in the proposed TMDL are based on the most protective applicable water quality objective. As such, numeric targets for dissolved copper in Marina del Rey Harbor are designed to protect aquatic life. De-designation of fishing and shellfish harvesting uses would not, therefore, affect these numeric targets. . TMDLs and their components are not water quality objectives, and thus their establishment does not implicate California Water Code section 13241. Rather, TMDLs are based on the water quality objectives in the Basin Plan, which, in turn, are based on the beneficial uses of the waterbody.

		to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following: (a) Past, present, and probable future beneficial uses of water. (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto. (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area. (d) Economic considerations. (e) The need for developing housing within the region. (f) The need to develop and use recycled water. § 13391. California Enclosed Bays and Estuaries Plan (a) The state board shall formulate a (b) d adopt a water quality control plan for enclosed bays and estuaries, which shall be known as the California Enclosed Bays and Estuaries Plan, in accordance with the procedures established by this division for adopting water quality control plans. (b) As part of its formulation and adoption of the California Enclosed Bays and Estuaries Plan, the state board shall review and update the Water Quality Control Policy for Enclosed Bays and Estuaries of California, as adopted in 1974 pursuant	Numerous stakeholders participated in the process leading to the development of this TMDL revision. Local and state agencies have been consulted at various stages. These efforts satisfied the requirements of section 13240 of the Water Code. The consultations resulted in the inclusion of compliance schedules and significant adjustments to the TMDL. This TMDL is consistent with the California Enclosed Bays and Estuaries Plan and utilizes the sediment quality objectives established by the State and included in Part 1 of the Enclosed Bays and Estuaries Plan.

		to Article 3 (commencing with Section 13140) of Chapter 3, and incorporate the results of that review and update in the California Enclosed Bays and Estuaries Plan. (c) State and regional offices, departments, boards and agencies shall fully implement the California Enclosed Bays and Estuaries Plan. Pending adoption of the California Enclosed Bays and Estuaries Plan by the state board, state and regional offices, departments, boards and agencies shall fully implement the Water Quality Control Policy for Enclosed Bays and Estuaries of California. (d) Each regional board shall review and, if necessary, revise waste discharge requirements that are inconsistent with those policies and principles. § 13393. Adoption of objectives (a) The state board shall adopt sediment quality objectives pursuant to the workplan submitted pursuant to Section 13392.6. (b) The state board shall adopt the sediment quality objectives pursuant to the procedures established by this division for adopting or amending water quality control plans. The sediment quality objectives shall be based on scientific information, including, but not limited to, chemical monitoring, bioassays, or established modeling procedures, and shall provide adequate protection for the most sensitive aquatic organisms. The state board shall base the sediment quality objectives on a health risk assessment if there is a potential for exposure of humans to pollutants through the food chain to edible fish, shellfish, or wildlife.	

13.7		The TMDL nor its reconsideration even mention the risk associated with having less effective biofouling control coatings on 5100 vessels and the increased likelihood of the transport and introduction of hull born invasive species. California's Marine Invasive Species Act of 2003 renewed and expanded the Ballast Water Management for Control of Nonindigenous Species Act of 1999, to address the threat of nonindigenous species (NIS) introductions. An example of one extension of that law is the California State Lands Commission (Commission) has been charged with oversight and administration of the state's program to prevent or minimize the release of NIS from vessels that are 300 gross registered tons and above. In their current draft of their "Biofouling Management Regulations for Vessels Operating in California Waters" is the statement "The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 4.8 of the California Code of Regulations is to move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into waters that may impact the waters of the state, based on the best available technology economically achievable." Copper based antifouling coatings are more effective than the biocide free coatings this TMDL is obviously requiring vessels to apply. Again I can site the added risk from "IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas" Culver et al, June 2012. From page 18 "both toxic and nontoxic coatings represent a risk for spreading invasive species. While this risk is higher for the nontoxic coatings…….". The additional risk of increased hull born invasive species transport and introduction should be addressed before this TMDL is adopted and if the risk is greater without effective copper based antifouling coatings the TMDL nor its reconsideration should be adopted.	Much research has been done and is ongoing regarding invasive species transport and the effects of antifouling paints on such transport. The Regional Board supports an integrated pest management approach as a means to reducing the risk of invasive species transport. Recent research indicates that some invasive species are copper-tolerant and thus copper paints may not be effective in reducing the transport of these organisms. In addition, a healthier biological community in Marina del Rey Harbor may improve resistance to invasive species invasions. The SED prepared for the proposed TMDL revisions acknowledges that increased growth of fouling organisms and invasive species could result from the switch from copper based anti-fouling paint. The SED identifies mitigation measures to address that potential impact. (See Chapter 6.2.2, pp. 61-76).

14.1	Gregory F. Schem, Harbor Real Estate Group	The proposed regulations are not based upon the best available, sound science. Since the copper biocide in bottom paint becomes dramatically less bio-available to organisms after leaching form the vessel and combining with other organic compounds found in Marina del Rey, how can a TMDL threshold be determined without taking these site-specific considerations into account? Since the adoption of methodologies such as the Biotic- Ligand model are likely to lead to more achievable target level TMDLs what is the purpose of rushing to an overly protective standard which will severely impact recreational uses?	The proposed TMDL revision is based on the most recent and best available science. See response to comment 04.4 and 05.9.
14.2		In order to achieve any target TMDL, viable alterative paints must be available or the efforts will be destined for failure. Currently, there are no viable, non-pesticide bottom paints available in Marina del Rey. The TMDL lessons learned at Shelter Island Harbor should be considered closely and recognized for the abject failure the program has been. After eight years the achievement of only a 10% decrease in copper can easily be explained by the recession and the reduced number of boats in the harbor being maintained. Marina del Rey is more than twice the size of Shelter Island Harbor yet the proposal is to achieve an even more stringent TMDL target in half the time while at the same time knowing that there are no acceptable altemative paints available. This is another recipe for disaster.	See response to comment 05.6 The first compliance deadline in the SIYB TMDL, requiring a 10% copper waste load reduction by 2012, was achieved. Implementation actions in SIYB, including extensive testing of antifouling paints, will enable boaters in Marina del Rey Harbor to achieve copper discharge reductions in a shorter time period than has been implemented in SIYB. "Under the leadership of the San Diego Unified Port District, the SIYB marinas, boat owners and hull cleaners have implemented a variety of copper reduction best management practices (BMPs) and implementation actions. To date, the most successful copper reduction strategy has been the conversion from copper-based anti-fouling hull coatings to "alternative" hull coatings containing little or no copper." – TMDL Progress Report, Shelter Island Yacht Basin Dissolved Copper TMDL. Additionally, the Shelter Island TMDL implementation has been entirely voluntary. Thus, for these reasons, it is expected that implementation in Marina del Rey Harbor will occur more quickly than in Shelter Island.

14.3		There are no known real world impacts to the environment in Marina del Rey from copper. Although it is clear that excessive copper in the water column and sediment can be toxic to fish and other marine organisms there have been no scientifically significant investigations into actual toxicity in fish tissue, benthic organisms, or any other reliable indicator species in Marina del Rey. In fact the only indicator species identified, mytilus edulis, has been discredited as a reliable organism for the determination of copper toxicity. Additional testing and research is needed.	See response to comments 04.4 and 08.4. In developing the CTR, EPA judged the criteria to be appropriate for all waters of the United States, and to all ecosystems, including those waters and ecosystems in California. In fact, several of the species used in calculating the CTR copper criteria are resident in California and in Marina del Rey. Note that the 2009 site specific toxicity study in Marina del Rey Harbor demonstrated toxicity to Mytilus galloprovincialis, not Mytilus edulis. The statement that mytilus edulis has been discredited as a reliable organism for the determination of copper toxicity has not been substantiated in this comment. Studies of the benthic community in Marina del Rey Harbor have been conducted as part of Bight '08 and will be conducted on an ongoing basis through the Coordinated Monitoring Program required by this TMDL. Results from sediment studies conducted in Marina del Rey Harbor through Bight '08 show that the benthic community is impaired. A full discussion of these findings is included in the Staff Report.
14.4		The environmental benefits of dredging the marina do not warrant the environmental impacts created by the process itself. The proposal to dredge the entire marina one foot deep would entail the removal of approximately 17.42 million cubic feet of sediment. Using a hydraulic dredge and assuming the effluent is 50% water (conservative estimate) that would require 143,407 truckloads to be removed from the site. Assuming 30 truckloads a day were utilized, 365 days per year, it would take 13.1 years to accomplish this task. Applying a disposal cost of $25 per cubic foot, the cost would be approximately $435 million and create a tremendous carbon footprint by the utilization of the diesel truck fleet	Chapter 5 of the Staff Report presents a detailed cost analysis of the proposed changes to this TMDL. The potential environmental impacts due to increased trucking were analyzed in the SED, including impacts to air and traffic. (See Chapter 6.2.2, p. 45-46, 77-78). It is not clear where the disposal cost of $25 per cubic foot was obtained. The cost estimate in the staff report is based on sediment disposal costs of $150 to $200 per cubic yard for inland disposal and about $15 per cubic yard for slip fill disposal. These costs include dredging, dewatering, and transport costs. The costs of

		required. A detailed cost-benefit analysis must be done in order to understand the larger impact(s) of such a proposal, including the socio-economic impacts to the local community.	complying with the TMDL were adequately analyzed. In addition, the SED includes a statement of overriding considerations which states that in view of the entire record supporting the TMDL, the specific economic, legal, social, technological, and other benefits of the proposed TMDL outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.
14.5		Removal of biocides from bottom paints will invite the unintended consequence of permitting the transport of invasive species from marina to marina. Over the past 5 decades, Marina del Rey has been spared the impact of invasive species to a large extent by the benefit of biocide containing paints. Although copper is not 100% effective in killing all invasive species it is extremely effective in preventing the recruitment of most organisms if properly maintained.	The SED acknowledges that increased growth of fouling organisms and invasive species could result from the switch from copper based anti-fouling paint. The SED identifies mitigation measures to address that potential impact. (See Chapter 6.2.2, pp. 61-76.) In addition, the SED includes a statement of overriding considerations which states that in view of the entire record supporting the TMDL, the specific economic, legal, social, technological, and other benefits of the proposed TMDL outweigh the unavoidable adverse environmental effects, and that such adverse environmental effects are acceptable under the circumstances.
14.6		Boat yards will continue to be permitted to sell and apply copper based bottom paints which have been proven to protect boat bottoms for many decades. Unless there are proven alternative paints backed by a reliable manufacturers, boat yards will not be able to recommend switching from copper without risking warranty claims should the new paints fail to perform.	See response to comment 05.6
14.7		Low copper bottom paints are affordable and available from major manufacturers such as the Petit Paint Company's Hydrocoat SR and Ultima SR, and Vivid paints. They can be applied without stripping the bottom and have been proven to work in real world testing done at Marina del Rey over the last	Low copper paints may aid in achieving the TMDL as an interim step. This approach will begin the process of reducing the discharge of copper into the harbor may be particularly useful as an interim step in progressing towards the use of non-copper hull paints. The Department of Pesticide Regulations is currently

		few years. Utilizing low copper paints can be effective in reducing copper without the implementation barriers resulting from non- biocide paints. Eliminating stripping costs and related environmental impacts will result in a more feasible implementation and adoption by the boating community.	tasked with determining an acceptable leach rate of copper from antifouling paints that will not result in the exceedance of water quality standards (California law AB 425). Results of this effort may aid in meeting the TMDL.
14.8		If adopted, the proposed TMDL goals will be very difficult to enforce. Requiring boaters to purchase a $1,097.23 waste discharge permit will do nothing to reduce copper. Boaters will continue to use paints which most effectively protect their investments until cost-effective alternatives are available. There will be no way to determine whether any specific boat bottom paint contains a biocide without expensive periodic testing of all vessels in the Marina. In addition, there is no way to ban transient vessels or to regulate what boat yards apply.	The Regional Board has a variety of implementation options available to ensure compliance with the TMDL. While issuing individual waste discharge requirements (WDRs) to boaters is one of these options, it is highly unlikely that the Regional Board would choose to implement the TMDL in this manner as it would be both costly to boaters and inefficient for the Regional Board. A more likely implementation mechanism is a conditional waiver, similar to that used by the Regional Board to regulate farmers through the Irrigated Lands Program**,** or another regulatory mechanism, such as a cleanup and abatement order, that has minimal costs to the discharger in terms of fees. Options for determining what paints are utilized by boaters may include, but are not limited to, submission of a receipt for completed paint work and monitoring of water in the harbor. Vessels based in Marina del Rey and transient vessels can be required to demonstrate compliance via these mechanisms. The Regional Board will select an option considering the input from boaters and other affected parties and stakeholders.
14.9		Three out of the five beneficial uses cited in the Water board staff report for protection are not even legally permitted in Marina del Rey. These include swimming, sportfishing, and shellfish harvesting. Marina del Rey was created 50 years ago by dredging a wetland for the purpose of creating a small craft harbor. No attention at the time was given to the effects of limiting the natural flushing which had been provided by the Los Angeles River prior to being diverted to the Ballona Creek. If the river is re-designed to its original course, natural	The comment is incorrect. Swimming, sportfishing, and shellfish harvesting are permitted in Marina del Rey. Swimming is permitted in designated areas in Marina del Rey Harbor and is an ongoing and frequent use of Mother's (Marina) Beach. Swimming outside of beach areas is restricted and swimmers must obtain a written permit from the Harbor Master, but the activity is not prohibited. There are no fishing restrictions in Marina del Rey Harbor

		flushing would be returned even though more serious constituents may be added as a result of citywide runoff. It is not fair to burden the Marina del Rey boating community for a harbor improperly designed to meet current TMDL standards originating from external sources. Studies should be conducted into the possibility of improving the natural flushing of the marina as well as into the feasibility of attaining natural water quality conditions in a man-made harbor.	according to Title 19 of the Los Angeles County Code. Fishing is allowed on berthed vessels and designated fishing piers in Marina del Rey Harbor. http://www.visitmarinadelrey.com/harbor-guide/harbor-rules http://beaches.lacounty.gov/wps/portal/dbh/!ut/p/b0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOJdDQwM3P3dgo0s_IxNDTyNwtwsjD1NgWLm-lH6BXkmigCZKxxI/?1dmy&page=dept.lac.dbh.home.mdr.detail.hidden&urile=wcm%3apath%3a/dbh+content/dbh+site/home/marina+del+rey/parks/burton+w.+chace+park+-+mdr Diving (and the associated activity of shellfish harvesting) outside of beach areas is restricted and divers must obtain a written permit from the Harbor Master, but it is not prohibited. See also response to comment 13.6. It is both fair and legal to assign responsibility for reducing copper in Marina del Rey Harbor to boat owners. Based on the source analysis and linkage analysis, the major source of dissolved copper in the harbor is copper from boat paint; therefore, this load allocation must be assigned to achieve the TMDL. Furthermore, the copper discharged from antifouling paints is a "waste" pursuant to California Water Code section 13050(d). According to CWC section 13263(g), "All discharges of waste into the waters of the State are privileges, not rights." For a full discussion of the legal authority to regulate discharges of copper from hull paints, see Section III of the Technical Report for the TMDL for Dissolved Copper in Shelter Island Yacht Basin included as a reference to the Marina del Rey Toxics TMDL Staff Report. The comments made pertaining to the original courses of the Los Angeles River and Ballona Creek are not accurate. The possibility of improving the natural flushing of the marina is a potential implementation alternative.

15.1	Karen Holman, Port of San Diego	For several years, the District has been at the forefront of this copper issue and has made significant progress in working to develop a core understanding of the concerns and the challenges of complying with water quality regulations that stem from the use of a legally available product, such as copper antifouling paint. The District has taken a leadership role by developing model programs for hull paint research, as well as implementing policy-based efforts to address the impacts from in-water hull cleaning. In that regard, the District noted that many of the technical references and findings identified in the proposed Marina del Rey TMDL Amendment are based largely upon the methodology and modeling used in the Shelter Island TMDL and the District's work implementing actions under that TMDL. On that note, the District respectfully submits the following comments on the Marina del Rey TMDL Amendment:	Comment noted. The Regional Board acknowledges the strong leadership role the District has taken in implementing the Shelter Island Yacht Basin TMDL.
15.1b		Modeling and Methodology There has been a long-standing concern over the load allocations identified in the Shelter Island TMDL, namely the loading estimates allocated to passive leaching and hull cleaning. Appendix A of the proposed Marina del Rey TMDL Amendment identifies the average dissolved copper emission rate from hull cleaning to be 8.5 µg/cm2/event, the same rate used in the Shelter Island TMDL's loading calculations. Additionally, the proposed Marina del Rey TMDL Amendment (specifically pages 33-34 of the technical report) notes that other studies also were evaluated, including a more-recent study by AMEC (2006) in which a hull cleaning rate of 10 µg/cm2/event was calculated. Furthermore, on those same pages, you also acknowledge that the U.S. Navy is currently conducting a study on the contribution of copper from antifouling paint, and further, that the study may aid in future refinement of the loading calculations.	The Regional Boards agrees that the most current and best available science should be utilized in the TMDL and, in particular, that the new information in Earley 2013 should be utilized. See comment 04.2 regarding Earley 2013 Leaching Data. The Regional Board also agrees that the Shelter Island box model is an appropriate tool for determining load allocations, as long as the data used to populate the model reflects the most up-to-date science. To that end, the model has been populated with the most recent science and site-specific data for Marina del Rey Harbor. Additionally, the TMDL can be revised at any time to incorporate new scientific findings.

		The aforementioned U.S Navy study was recently published, entitled, Life Cycle Contributions of Copper from Vessel Painting and maintenance activities (SPAWAR, November 2013). It examines copper paint emissions over a paint's three-year life cycle. This report was a part of the Department of Pesticide Regulation's (DPR) paint re-evaluation process. Of importance, the report identifies different hull cleaning emission rates from those used in the Shelter Island TMDL and identified in the AMEC 2006 study. The District supports the use of sound science and advancements in scientific technologies. New information that has been scientifically validated should be taken into account and used when calculating or considering water quality regulations. Your staff is commended for taking the 2006 AMEC study information and comparing it against the Shelter Island TMDL's loading calculations for boat hull cleaning inputs. As you noted, the differences in the emission rates (8.5 µg/cm2/event predicted in previous work compared to 10 µg/cm2/event in AMEC study) resulted in a less that 1% change in the modeling output. Now the most recent U.S. Navy study suggests an even a greater contribution may be attributable to boat cleaning and boat movement. Prior to the adoption of the TMDL, we recommend that the same analysis be conducted to determine how this new information may change the modeling output and the findings of this analysis should be included in your technical report. Our experience has taught us that working through the TMDL adoption process and having success in implementing pollutant reducing activities requires support from the regulated community. Assertions have been made by stakeholders that the Shelter Island TMDL's hull cleaning	

		emission rates and consequent loading allocations are incorrect, thus leading to questions about the scientific validity of the TMDL itself. The resulting uncertainty behind the supporting science creates implementation challenges because the general public (i.e. boating community) hears mixed messages about what needs to occur to remedy the situation. To that end, the District would strongly encourage your staff do its due diligence to evaluate the emission rates from the multiple studies. While the Shelter Island box model may be appropriate tool for determining load allocations, the data used to populate the model should reflect the most up-to-date science. It is also suggested that the technical report clearly identify and discuss each study and how each one was evaluated and used in the TMDL amendment process. Additionally, as new studies continue to increase our understanding of how chemicals behave in the environment, we recommend including appropriate language in the TMDL resolution to enable this scientifically relevant information be easily incorporated, once data is collected without another re-opener process.	
15.2		State Legislation (AB425) In October 2013, Governor Brown signed into law Assembly Bill 425 (Atkins) relating to copper-based antifouling paint. The legislation requires that, by February 1, 2014, the DPR "shall determine a leach rate for copper based antifouling paint used on recreational vessels and make recommendations for appropriates mitigation measures that may be implemented to address the protection of aquatic environments from the effects of exposure to that paint if it is registered as a pesticide". Thus, the DPR's copper antifouling paint re-evaluation process will consider management practices and other approaches to mitigate elevated copper concentrations in	The Regional Board agrees that the results of any efforts to address copper discharge from antifouling paints at the state-wide level should be considered in this TMDL and that AB 425 may positively benefit the Shelter Island Yacht Basin TMDL as well as the proposed revision to the Marina del Rey Harbor Toxic Pollutants TMDL. Potential antifouling paints with lower leaching rates of copper resulting from DPR's effort legislated by AB 425 may aid responsible parties in achieving the proposed TMDL. It is not foreseeable that information gained through AB 425 will alter the numeric targets or waste load allocations in the proposed TMDL; consequently, adoption of the TMDL should not be delayed while awaiting results of this effort.

		marinas. It is our understanding that the DPR's paint re-evaluation process as part of this legislation is on schedule. The District sponsored AB425 because the legislation's outcome could have positive benefits on the implementation strategy for the Shelter Island TMDL, and possibly reduce or eliminate the need for further copper-related TMDLs in San Diego Bay. Since the DPR's report and its findings may have relevance to the load allocations and/or implementation of the proposed Marina del Rey TMDL Amendment, it is recommended that the report's findings be included into your TMDL amendment. As such, there could be a benefit to reviewing and/or considering the DPR report prior to the adoption of the Marina del Rey TMDL Amendment to avoid any potential inconsistencies in regulatory approaches throughout the state.	See response to comment 05.12
15.3		Consider Site-specific Water Quality Objectives The District recognizes the importance of considering site-specific factors when developing TMDLs. The Shelter Island TMDL did not use site-specific objectives in the technical methodology; however, there is an increasing body of evidence suggesting that the current water quality objective of 3.1 µg/L may be overly protective of the beneficial uses in the Shelter Island Yacht Basin. For the District and other stakeholders subject to the Shelter Island TMDL, re-opening the TMDL for Shelter Island to consider site-specific water quality objectives will be a lengthy and expensive process for both the regulated parties and the Regional Board. As one of the parties implementing various copper reducing activities to meet the 3.1 µg/L water quality objective in the Shelter Island TMDL, the District would encourage the use of site-specific water quality objectives at the onset of the TMDL	See response to comment 04.4 The TMDL may be revised at any time to incorporate the results of new scientific study, including a site-specific objective if appropriate. The potential water column impairment due to copper in the water column was discussed in the Staff Report for the original Marina del Rey Harbor Toxic Pollutants TMDL. As no special studies have been conducted investigating a potential site-specific objective since the original TMDL became effective in 2006, water quality objectives promulgated by the California Toxics Rule are the appropriate water quality criteria for copper in the water column of Marina del Rey Harbor.

		process. Because the Marina del Rey TMDL Amendment has not yet been adopted, it may be beneficial to 1) consider extending the amendment hearing until a site-specific study can be completed, or 2) include appropriate language in the TMDL resolution to enable site-specific objectives to be easily incorporated, once data is collected without another re-opener process.	
15.4		Timeline for Compliance Based on District staff's experience, the proposed 11-year timeframe for complying with an 85% reduction in copper loading may be challenging. The District has been actively encouraging the use of alternative paints for over six years. While we recognize that much of the groundwork for evaluating paints has been expedited by some of our research and paint testing efforts, we have learned that informing the local boating public about alternative hull paints, securing grant funds, and encouraging a behavior change takes time. Additionally, the cost to convert boats to non-copper alternatives still remains significantly higher than the cost of using copper antifouling paint. Our local San Diego Bay boatyards have had years of experience applying alternative paints, yet some have only recently included the application process into their normal course of business. Our experience has taught us that the fundamental behavioral shifts needed to embrace alternative paints both at the boatyard and throughout the local boating community take time, regardless of the work that has been done elsewhere.	See response to comments 02.9 and 04.3
15.5		Statewide Consistency The District believes that reducing copper in marinas is a concern statewide. To that end, we continue to encourage a permanent resolution to hull paint-related pollutant loading	The Regional Board is supportive of and looks forward to collaborating in broader efforts to address water quality impairments resulting from antifouling paints. Such efforts will include regional collaboration with the San Diego Regional Board,

		and are therefore committed to supporting and encouraging that regulations be consistent at a state or federal level. The District believes that it is critical that the regions work together. Reducing copper levels in marinas is a statewide issue that requires consistency as new regulations are developed. As more TMDLs are adopted, they will drive local solutions that may not be the most appropriate approach for addressing an issue that is common throughout the state. We continue to encourage statewide solutions that do not place local businesses at an economic disadvantage. As your Regional Board embarks on the copper reduction requirements proposed in the Marina del Rey TMDL Amendment, we encourage you to work with our San Diego Regional board as well as with the DPR to fully understand the complexities and impacts that TMDLs may have locally, regionally, and across the state.	Santa Ana Regional Board, DPR and the Port of San Diego and statewide efforts including collaboration with DPR.
15.6		The District remains firm to its commitment to conduct operations and manage resources in an environmentally sensitive and responsible manner; however, we also strive to ensure that regulations are effective in balancing the economic feasibility of implementing pollution control measures with protecting the health of our waters. Our interest in the proposed Marina del Rey TMDL Amendment stems from the need for developing and using consistent methods to develop the regulations that impact impairments that are common throughout California. As we in San Diego move through our own TMDL process, we appreciate the openness of your staff to work together and ensure that regulations being presented in Marina del Rey are created consistently and with the most updated information available.	The Regional Board appreciates the Port of San Diego contributing comments based on experience gained through implementing the Shelter Island Yacht Basin TMDL and looks forward to collaborating on efforts to reduce copper discharge from antifouling paints.

16.1	RBOC, Jack Michael	It is our belief that the TMDL proposed has not gone through the normal process required of TMDLs in the state of California. A technical document is required by the Clean Water Act. This technical document, as far as can be determined, was imported verbatim and is flawed because it is calculated for another harbor with different hydrology. The TMDL is directly dependent upon the volume of Marina del Rey yet the volume of Shelter Island Yacht Basin [SIYB] [60% of its size] is used in the calculation.	The TMDL has followed all procedures required by state and federal law and implementing regulations. The Staff Report for this TMDL is original work of the Los Angeles Regional Water Quality Control Board. The volume of Marina del Rey, 6,400,800 m^3, was used as the marina volume for this TMDL. The volume of the harbor was calculated by multiplying the surface area of the harbor, 1,200,000 m, by the average depth, 17.5 ft (5.334 m). See response to comment 09.3
16.2		It is surprising that the TMDL does not appear to have undergone a third party review - a process which would catch these types of errors.	All quantification methods employed in this TMDL have been peer-reviewed. The TMDL has been reviewed by multiple scientists at the Regional Board and has undergone a public comment period. See also response to 05.6.
16.3		The short amount of time allowed for public comment over the holidays does not allow for our organization to perform as thorough a review of the document as we would have liked. Despite the short time afforded, we have several concerns.	See response to comment 08.3
16.4		There are significant breaches of applicable federal and state laws, and regulations: 1. It is essential that any TMDL be based upon facts and science. Quoting from The Clean Water Act Section 101(a)(2): These criteria must reflect the latest scientific knowledge… And: has made specific procedures available to States to derive site-specific criteria	See response to comment 04.4
16.5		2. No financial analysis is included in the TMDL. The California Water Code (Section 13241) specifically requires that several criteria, including economic cost be considered by a regional board in establishing water quality objectives.	Neither TMDLs nor their targets or other components are water quality objectives, and thus their establishment does not implicate California Water Code section 13241. Nonetheless, economic factors were considered when developing the TMDL. The staff report takes into account a reasonable range of economic factors in

			estimating potential costs associated with TMDL compliance. The regional board has no discretion not to establish the TMDL at a level that will implement the CTR. Consideration of economics in establishing the TMDL could not result in a different total maximum daily load; however, the economics are considered in establishing a lengthy and flexible implementation schedule.
16.6		3. Recent germane science is overlooked. It is essential that proper consideration be given to such strong findings early in the TMDL process. Ample evidence has demonstrated the lack of toxicity from similar ambient concentrations of copper in the water column. • Neira, (2009), Spatial distribution of copper in relation to recreational boating in a California shallow-water basin demonstrated clearly that copper was sequester as a non-bioavailable complex and toxicity was absent to this natural process: SIYB is a likely self-detoxifying system despite continued releases of copper from hulls as copper is quickly complexed by natural ligands. • SPAWARs reached the same conclusion in 2010: Lack of ambient toxicity and verified protection by BLM suggest that SIYB is not impaired due to copper. • And most recently the DPR Study, Early [2013], showed that toxicity did not result from copper leaching from copper antifouling paints, and the process responsible was the same as the previously cited studies, non-bioavailability.	See response to comments 08.4, 05.9, and 04.4
16.7		• Recognizing the importance of bio-availability, RESOLUTION R2-2007-0042, amended the Water Quality Control Plan for the San Francisco Bay Region to Adopt Site-Specific Objectives for Copper. From the Final Report on the San Francisco Bay TMDL: Impairment Assessment Report for Copper and Nickel in Lower South San Francisco Bay [Tetra Tech Inc., 2000]. The results of the impairment assessment for	The cited paper is the result of a site-specific study conducted in the San Francisco Bay. A similar site-specific study has not been conducted for Marina del Rey Harbor. See response to comment 08.4

		copper support the following finding: Impairment to the Beneficial Uses of Lower South San Francisco Bay due to ambient copper concentrations is unlikely.	
16.8		Another key point of concern is that the proposed TMDL has not utilized the data from the leaching study required by AB 425 [Atkins, Chapter 587, Statutes of 2013]. This study, Life Cycle Contributions of Copper from vessel painting and maintenance activities, [Earley, 2013] was ordered by the California Department of Pesticide Regulation [DPR] and utterly undermines the loading assumptions in the MDR TMDL. Our analysis of the study is attached.	See response to comment 04.2
16.9		RBOC is also concerned that the copper loading portion of the TMDL contains numerous misstatements and references to erroneous SIYB and Port of San Diego studies that are utilized to justify proposed actions. The recreational boating community has communicated its request to the State Water Resources Control Board that the SIYB be de-listed due to a lack of demonstrable toxicity, and that such an initiative be pursued based on the SPAWARS study [Casey Capolupo, et. al., (2011) Copper Bioavailability and Toxicity to Mytilus galloprovincialis in Shelter Island Yacht Basin and the leaching study (Earley 2013)].	Requests to de-list Shelter Island Yacht Basin for a copper impairment in the water column are handled by the San Diego Regional Water Quality Control Board and the State Board. The Los Angeles Regional Water Quality Board is not involved in this request.
16.10		In Marina Del Rey copper loading from hull paint is considerably less than the 3600 kg per year cited in the document according to this study. In the TMDL it is claimed that the benthic community is harmed by the copper present in the water column. Yet there is no direct evidence of this. There is ample data from both San Francisco and San Diego that there is no impairment due to copper. Earley's evaluation of toxicity found that passive leaching of copper antifouling paint created no toxicity, a finding consistent with several previous studies.	See response to comments 08.4 and 04.4

16.11		For this reason it is essential that such data be developed for Marina Del Rey before a TMDL goes forward. Predictions by the Biotic Ligand Model [BLM] that is under review by the United States Environmental Protection Agency [USEPA] will facilitate the development of a site-specific water quality standard	See response to comment 04.4
16.12		No consideration has been given to the fact that copper anti-fouling paint has been used in Marina Del Rey since it was created. Therefore the removal of that product from the waterway should merit a California Environmental Quality Act [CEQA] analysis to determine what negative effects might ensue.	Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). The Regional Board staff has prepared "substitute environmental documents" for this project that contain the required environmental documentation under the State Water Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The SED was posted on the Regional Board website on November 5, 2013.
16.13		For example, a reduction in the levels of copper will encourage algal growth in the basin. RHMP [Weston, 2008]. The waters in enclosed harbors and bays do not meet the water quality standard for dissolved oxygen [DO] which can impact fish populations. In-water cleaning of boat hulls creates an additional demand for oxygen. That demand will increase three or four fold with cleaning of non-toxic coatings, possibly leading to oxygen depletion and fish die-off like that in King Harbor in 2011. The consequential release has not been considered as a permitted release.	The Regional Board disagrees that the removal of copper paints merits a CEQA analysis with respect to potentially increased algal growth. Antifouling paints are intended to protect boat hulls. Such paints are not designed for or intended to control algal growth within the larger marina. Should an algal impairment be documented in Marina del Rey Harbor, the causes of this impairment will be assessed by the Regional Board and appropriate management actions identified. Increases in hull cleaning are not anticipated to create an additional demand for oxygen. Evidence has not been presented to support this claim or provide a mechanism by which the dissolved oxygen levels in the harbor would decrease as a result of increased hull cleaning.

16.14		Several studies indicate that the marine biofilms, the growth of which copper is intended to inhibit, can be a reservoir for human pathogens such as E. coli and V. cholera [Shikuma & Hatfield, (2010), Marine biofilms on submerged surfaces are a reservoir for Escherichia coli and Vibrio cholera].	The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL has been effective since 2004. The bacteria TMDL addresses microbial sources of pollution to Marina del Rey Harbor. Additionally, the use of copper antifouling paints to control potential disease vectors is not an approved use of such products by the Department of Pesticide Regulations; nor is there evidence that this is an effective means of disease control.
16.15		It is important that any TMDL acknowledge, incorporate and utilize current updates to science. Otherwise, Los Angeles Regional Water Control Board will continue to perpetuate an underlying problem: a zero tolerance for copper supported by the unreasonable 3.1 ppb water quality standard. For these reasons, RBOC urges the Los Angeles Regional Water Quality Control Board to address all of these critical issues prior to adoption of a total maximum daily load [TMDL] for copper in Marina del Rey Harbor.	See response to comment 04.4
17.1	Form Letter A: Lavelle, Stern, Phelps, Cunningham-Rathner, Huff, Berger, Thomas, Feldman, Holman, Martindale, McCollough, Pezzner,Tabesh, Weinberg, Snelson, Sedghi, Carlson, Sheehan, Brantley, Johns	As a boater, I have been attracted to boating in Marina del Rey because our community offers recreational boating opportunities not available elsewhere in the County of Los Angeles. The Marina del Rey Harbor affords boaters easy access to the ocean.	Comment noted

17.2		The Regional Water Quality Control Board proposes a complex set of regulations for boaters and anchorages to comply with the reduction of copper-based paints on boats. These regulations are onerous and will create great financial hardship for small boaters, forcing most of us to leave the Marina.	See response to comment 05.11
17.3		Boaters are sensitive to the environment and the need to maintain and enhance water quality. Nevertheless, boaters believe that regulations should be realistic and achievable so as to not displace a vital recreational opportunity. The proposed water regulations need to be evaluated in a serious review by experts familiar with the effect of various pollutants on our water basins.	The Regional Board acknowledges and appreciates the desire of boaters to protect and improve water quality and look forward to working together towards this goal in Marina del Rey Harbor. The Regional Board believes that the actions proposed in the TMDL are both realistic and achievable. See also response to comment 04.2 and 04.4.
17.4		The Water Board has adopted an unrealistic timetable for public review and comment on the regulations. I strongly urge a continuation of the public comment period for 6 months.	See response to comment 08.3
17.5		Please allow our boating community sufficient time to address the issues of the proposed TMDL. Many boaters are still unaware of these proposed regulations as there has been insufficient outreach to our community.	See response to comments 02.9 and 05.6
18.1	Form Letter B-Canzoneri, Golfierie, Hathaway, Cercado, Mira, Tallichet, Zaldua, Gardner, Kunz, Smith, Warner	The Regional Water Quality Control Board issued a proposed amendment to the TMDL for toxic pollutants in the Marina del Rey Harbor last month, with an original comment period deadline to occur only days before the holidays. Even the proposed extension to January 15th is insufficient for a number of reasons. Unlike many environmental documents routinely reviewed by government agencies during a relatively short timeframe, the proposed TMDL for Marina del Rey Harbor is a complex set of documents and reports that require significant review by individuals and private parties, as well as experts, for a much longer period of time. The proposed TMDL requires scientific	See response to comments 08.3 and 05.6

		analysis and careful scrutiny of regulations that will be extremely onerous if not impossible to achieve. Our anchorages and thousands of boaters are seriously impacted by these proposed regulations. The current review period is inadequate to the task. I respectfully request that the Regional Water Quality Control Board extend the comment and review period for at least 6 months. Thank you for considering an extension of the comment period so that the businesses and users most directly affected by the proposed TMDL may engage in proper evaluation of the regulations.	
19.1	Form Letter C: Licht, Wells, Brockman, Natkar, Warner, Rohde, Sorenson, Ach, Mueller, Folkert	The Regional Water Quality Control Board issued a proposed amendment to the TMDL for toxic pollutants in the Marina del Rey Harbor that presents significant challenges to our boating community and anchorages to implement. Our local businesses, even those not engaged in boating activities, depend upon the vitality of Marina del Rey as a destination for individual boaters and those seeking to enjoy the recreational amenities that are afforded by easy access to the water. The Marina is a destination for visitors who wish to enjoy our community by staying in our hotels and dining at local restaurants, many of which have water views.	Comment noted
19.2		The proposed regulations are broad and sweeping in nature, threatening to undermine our water-oriented community and its recreational opportunities. As a result, local businesses are likely to suffer economic losses if severe restrictions are placed upon the boating community, causing boaters and visitors to go elsewhere. This will have a tremendous impact on the tourism industry in Marina del Rey and could generate negative publicity for the area	The Regional Board disagrees that the proposed TMDL revisions constitute severe restrictions on the boating community. Economic factors have been evaluated during development of the proposed TMDL revisions. While increased costs may result from the proposed action, grant funding and timing of hull paint changes with normal maintenance activities will help to minimize expense to boaters. It is not anticipated that the cost of complying with the proposed TMDL will result in a flight of boaters from

			Marina del Rey Harbor with a coinciding economic loss to local businesses. See also response to comment 05.11.
19.3		Local businesses believe that achieving water quality is a laudable goal, but the effort must be reasonable and achievable. We strongly urge that the Regional Water Quality Control Board extend the public comment period on a complicated set of documents for at least 6 months so that experts may fully analyze the proposed TMDL.	See response to comments 08.3 and 05.6.
20.1	Form Letter D: Dager, Sprout, Sponsler, Barnett, Mulally	As fisherman and sportsman, we too care about the environment. However this proposal for Marina Del Rey is not offering anywhere near a good bang for the buck, environmentally speaking. It is certain however, to cost a fortune which will be passed on to private boaters and marina operators to a degree that will push many to give up on boating. When they give up on boating, they may also cease to care about the Marina or the ocean. What is not good for the boaters will not be good for the marine environment. It is not enough benefit for for the fish & marine life given the high cost and unproven outcome.	The Regional Board acknowledges and appreciates the desire of fisherman and sportsmen to protect and improve water quality and looks forward to working together with the community towards this goal in Marina del Rey Harbor. The Regional Board disagrees that the costs of implementing the TMDL will push people to give up on boating. See also response to comment 05.11.
20.2		Also we just learned about the proposal. Obviously it needs to be vetted more in the public. This is too big a project to be rushed through. Any such proposed expensive and labor intensive proposal is worthy of more public input and possibly some compromises	See response to comments 02.9, 08.3, and 05.6
20.3		Please do not implement the Copper bottom paint ban. There really is no effective alternative anti fouling options for the many boats in Marina Del Rey, and the options are cost prohibitive to most boaters.	See response to comments 05.6 and 05.11
21.1	Form Letter E: Leshner, Rotondi, Staub, Eve	The science on which the toxic levels were determined is not agreed upon by major regulatory agencies	See response to comments 04.4 and 08.4

21.2		There are no proven alternatives to copper-based hull paints	See response to comment 05.6
21.3		The environmental impact of stripped paint disposal has not been acknowledged or addressed	The comment is incorrect. The potential impacts to the environmental as a result of paint stripping are thoroughly discussed in the SED. (See Chapter 6.2.2, pp. 45 & 55) The SED was posted on the Regional Board website on November 5, 2013.
21.4		Limited outreach to the public, with highly technical information to absorb and respond to in a small time period	See response to comments 02.9 and 08.3
21.5		There was no specific site model for Marina del Rey	See response to comments 04.4, 09.3, and 08.4
21.6		Studies do not address the potential for invasive species when copper based paints are not used	See response to comment 13.7
21.7		The only other area with a similar regulation (Shelter Island) is nowhere near their copper reduction goal	See response to comment 14.2
21.8		Boaters would simply take their boats to other marinas without restrictions, and there would be a major loss of revenue in the area. We need to address these issues before voting on a change in law to apply. I am a long time Marina Del Rey boat owner. Cost factors to lease a slip in this marina have increased measurably over the years. I would move my boat out of Marina Del Rey if this new rule is imposed	See response to comment 19.2
21.9		Because of these reasons, and the small amount of time to inform the public of this new proposal, there should be additional time to study the most effective way to reduce the copper levels in our harbor, and a consensus on what that target level should be. Natural harbors which have more circulation have less copper because it is flushed out to the ocean. We are being held to a higher standard because our harbor is man-made and more protected. This major difference should be taken into account. We also should be working with boat paint companies to develop more effective and affordable alternatives to copper-based bottom paints. We	See response to comments 08.3 and 02.9 Marina del Rey Harbor is not being held to a higher standard, but rather to the water quality criteria promulgated in the California Toxics Rule and appropriate for use throughout the State of California. See response to comment 04.4. The Regional Board is supportive of efforts to work with paint companies to improve choices and increase affordability of alternative hull paints. Also, see comment 05.6.

		can also work with state, regional, and local organizations to educate boaters and businesses on better practices to reduce the copper leaching in our harbor. There are many things we can do proactively that allow our community to make important changes, and this proposed amendment is not the solution	
22.1	Form Letter F: Harding, Brsan, Palmer, Oefinger, Ispas, Swing	As a boater and native Californian (who has been boating in Marina del Rey and The Santa Monica Bay since the first slips were place at Mothers Beach) there have been recreational boating opportunities available here that are not available elsewhere in the county of Los Angeles. I find the new complex set of regulations for boaters and anchorages to comply with the reduction of copper-based paint to be onerous and will create great financial hardship for all boaters. I would hate to see this great Marina become another disaster caused by over regulation. We all are sensitive to the environmental needs of the Marina and Santa Monica Bay to maintain and enhance the water quality. Nevertheless, boaters believe that the regulations should be realistic and achievable, not to displace a vital recreational opportunity. The proposed water regulations need to be evaluated and reviewed by experts familiar with the effect of the various pollutants on our water basins. I request a continuation of the public comment for six (6) months to allow the boating community sufficient time to address the issues of the proposed TMDL. Thank you for considering an extension.	See response to comments 05.11 and 19.2 regarding financial impacts of the proposed TMDL, comment 16.2 and 05.6 regarding scientific review, and comment 08.3 regarding the length of the comment period.
23.1	Tom Ross	I have been a Westside boater since 1995 and enjoyed its access to the ocean as a recreational boat owner. I strongly believe that the recent regulations you are proposing for copper restrictions is not a remedy for our harbor and ocean clean waterways. I am surprised and dismayed that such a harsh and controversial issue is going on with so many of us boaters not even being aware of the restrictions you are	See response to comment 02.9 regarding outreach, comment 04.4 regarding the water quality criteria for copper, comments 09.1, 16.2 and 5.6 regarding scientific review, comments 19.2 and 05.11 regarding the economic impacts, and comment 08.3 regarding the length of the comment period.

		suggesting. There clearly needs to be further study providing us with a clear study that this is the solution and what are the proven data that prove this is the correct path. My biggest objection is that so many of my fellow boaters are not even aware that this is about to be implemented and what a tremendous and devastating impact to our future recreational boating activity. I believe it will unfairly force us out of this Marina and basically leave us with no alternative nearby to enjoy our oceans. From what I have been able to discern, there is no surity that this will solve our cleaner and safer water ways, but it will force the many supported of MDR out of the area. Certainly more research and education to the users should be provided by the Board and we should be given a more public forum to discuss its impact. Please delay this unfair proposition! Thomas Ross, owner of Likebutta and proud boater.	
24.1	Charles Hentges	I've had various boats and managed a non profit sailing school in Marina Del Rey for 20 years. I support most of the regulations because I see the value. But Marina del Rey Harbor is unique among Harbors because it's the largest Man Made Marina in the country. Was it built to regulate boaters to the point where they can't afford to stay here? The proposed regulations in this economic environment, not only will hurt the local economy, but will drive small Not for Profits like mine to other Marinas. Other Marinas love to have programs like ours that benefit those who can't afford to learn how to sail on their income, but can tap into our organization for a life time of self growth.	See response to comments 05.11 and 19.2 regarding the financial implications of the TMDL.
24.2		The least you should do is to make sure this additional regulation will have a significant Material effect on the suspected problem. How much will the problem be reduced if the current boat paint used eliminated? Will alternatives be better? How will it be inforced? What will it cost to inforce	If current paint use is eliminated entirely, waters in Marina del Rey Harbor will meet water quality criteria- only an 85% reduction in dissolved copper discharge from antifouling paints is required to achieve the TMDL.

		it? Will boaters just choose not to comply by having their boats painted elsewhere? Are visiting cruisers who need service done to their boats be turned away because we can't offer them the service? What happens with the local businesses who will loose the business? Will you require local marine services who currently clean bottoms to report violations? Now's not the time to impose more rules and regulations. Save some of our tax dollars and put them to better use somewhere else. This is an uniformed regulation that won't help the problem, but will hurt the local boaters and the economy.	Alternative paints will improve water quality in Marina del Rey Harbor. See response to comment 05.6. Boaters leaving the marina to avoid compliance is not anticipated, see response to comments 19.2 and 05.11. See response to comment 19.2 regarding economic impacts of the proposed TMDL and 14.8 regarding implementation and enforcement of the TMDL.
24.3		I've observed more wild life in the marina now than ever in the last 20 years. What health issue are we dealing with here?	The levels of copper in Marina del Rey Harbor exceed water quality criteria and are toxic to aquatic life. Many organisms, including the larvae of fish and invertebrates are harmed by high levels of copper. This negatively affects ocean ecosystems. Life stages particularly sensitive to high copper concentrations include invertebrates such as the mussel, *Mytilus galloprovincialis*, a species resident to Marina del Rey Harbor. See also response to 14.3
25.1	Dean Westcott	As a 53-year Los Angeles resident and long-term boater, I request that you do not pass this measure. Non-copper anti-foul paint is not yet effective, and the cost to boaters will be extremely high. Studies appear to be inconsistent on adverse effects of copper, and I believe this issue requires more study.	See response to comment 05.6 regarding alternative hull paints, comments 02.9 and 05.11 regarding costs of implementation, and comments 04.4, 08.4, 09.1, and 16.2 regarding the scientific basis for the proposed TMDL.
26.1	J. Simon	Because of the following reasons, and the small amount of time to inform the public of this new proposal, there should be additional time to study the most effective way to reduce the copper levels in our harbor, and a consensus on what that target level should be.	See response to comment 04.4 regarding the numeric target in the proposed TMDL and comments 08.3 and 02.9 regarding outreach.

26.2		Natural harbors which have more circulation have less copper because it is flushed out to the ocean. We are being held to a higher standard because our harbor is man-made and more protected. This major difference should be taken into account.	See response to comment 21.9
26.3		We also should be working with boat paint companies to develop more effective and affordable alternatives to copper-based bottom paints. We can also work with state, regional, and local organizations to educate boaters and businesses on better practices to reduce the copper leaching in our harbor.	See response to comment 21.9 and 02.9.
26.4		The science on which the toxic levels were determined is not agreed upon by major regulatory agencies.	See response to comments 04.4 and 08.4
26.5		There are no proven alternatives to copper-based hull paints	See response to comment 05.6
26.6		The environmental impact of stripped paint disposal has not been acknowledged or addressed	The comment is incorrect. The potential impacts to the environmental as a result of paint stripping are thoroughly discussed in the SED. (See Chapter 6.2.2, pp. 45 & 55) The SED was posted on the Regional Board website on November 5, 2013.
26.7		Limited outreach to the public, with highly technical information to absorb and respond to in a small time period	See response to comments 02.9 and 08.3
26.8		There was no specific site model for Marina del Rey	See response to comments 04.4, 08.4, 09.3, and 15.3
26.9		Studies do not address the potential for invasive species when copper based paints are not used	See response to comment 13.7
26.10		The only other area with a similar regulation (Shelter Island) is nowhere near their copper reduction goal	See response to comment 14.2
26.11		Boaters would simply take their boats to other marinas without restrictions, and there would be a major loss of revenue in the area	See response to comment 19.2
26.12		There are many things we can do proactively that allow our community to make important changes, and this proposed amendment is not the solution	See response to comment 02.9

27.1	Don Davis	If this legislation is adopted, it will destroy the ability of most boater to make use of Marina Del Rey as an anchorage or a spot to visit. I will personally move my three boats moored there out of the Marina, as well as my business, and never come back. Many boaters will do the same. We will leave LA County for good, and the County will lose tax revenues, not only on the boats, but on all the boater services which are currently provided there, West Marine, the Ship Yards, the Charter businesses, and so on. Such businesses will dwindle and close for lack of business.	See response to comment 05.11 and 19.2
28.1	Bert Tietje	I am member of one of the boating clubs in the Marina. Sailing can be a very satisfying and socially engaging pastime. Typically sailors and boat owners find themselves in a very challenging and demanding relationship with the water their boats float on. I believe this relationship comes with a peculiar responsibility. Just like hikers and nature lovers like to protect the hills and mountains they are enjoying. Therefore I believe we boaters need to do what we can to not destroy what we like most: the water and its ecosystem in the Marina Del Rey Reading the reports of the study on coatings that are provided on your website, it seems there are viable alternatives to further releasing copper from boat coatings into the water. I firmly believe copper should not be used anymore at all!	Comment noted

29.1	Jack Rackliffe	As a boater in Marina Del Rey, I am strongly against the Copper Ban Proposal, at-this-time. Why not at-this-time, is because I do not think that enough research into the actual source of the copper has yet been completed. Certainly, some copper from copper bottom paint could be part of the problem, but I think that other sources may be dominant and the boaters are being blamed as an easy target.	All sources of copper to Marina del Rey Harbor have been considered in developing the proposed TMDL. The original TMDL adopted in 2005 addresses upstream sources of copper. Based on an evaluation of additional data as part of the TMDL source analysis and linkage analysis, the proposed TMDL revision adds passive leaching from copper-based antifouling paints as a source of copper to the water column and assigns load allocations for this source.
29.2		Much investigation has been done on the impact copper from automobile brake pads have had on the environment. One study estimates that San Francisco Bay gets 190,000 lbs per year of copper runoff due to brake pad dust. After significant research and debate Gov. Schwarzenegger approved Senate Bill (SB) 346 in September 2010. This will significantly reduce the copper content in brake pads in the future. The copper content is to be reduced to 5% by 2021 and 0.5% by 2025. Ballona Creek dumps into the ocean at the entrance of Marina del Rey. The Ballona Creek Watershed covers an area of 130 square miles and is bounded to the north by the Santa Monica mountains, to the east by the I-110 Harbor Freeway, and to the south by Baldwin Hills. This is quite a large area to be dumping into our waterways. On an incoming tide, when it is raining, the runoff and suspended copper, from those 130 square miles of watershed, will be pushed directly into the Marina del Rey basin.	See response to 05.2. There is an existing copper TMDL for Ballona Creek and discharges of copper to Ballona Creek are regulated by that TMDL. Thus, any potential discharges from Ballona Creek to Marina del Rey must meet water quality standards. Furthermore, based on Corps of Engineers' hydrodynamic numerical modeling (RMA4 model) results, the contaminant influence from Ballona Creek does not travel to nor affect the back basins (USACE 1999). Therefore, the back basins of Marina del Rey Harbor are assumed to be outside any significant influence from Ballona Creek.
29.3		Not having found any studies that show measurements of the amount of copper load per year caused by runoff verses antifouling bottom paint in Marina del Rey, it seems hasty to assume that the residual copper found at the bottom of the basin is predominantly caused by the bottom paint. This is	The original TMDL adopted in 2005 quantifies the contribution of the copper load in runoff from the watershed. The copper load in stormwater runoff is primarily bound to particulate matter. This copper settles to the bottom of the harbor in the sediment. Thus, the source of the copper in the sediment at the bottom of the basin

		especially true when the runoff has not even been considered in Marina del Rey. We do not know if the 190,000 lbs per year is a realistic number for San Francisco Bay or what the equivalent number would be for the Ballona Creek Watershed, but certainly it is not zero. Not all the copper found in the bottom samples is from the boats, therefore, we really do not know what is from the boats and what is not. Literature shows that other areas have implemented the cooper paint ban and the results have been significantly lower than anticipated. Why should we make the same mistake?	is due to runoff, not copper-based hull paint as asserted by this comment. Rather, the proposed TMDL revision addresses a new impairment confirmed since the adoption of the original TMDL in 2005, which is copper dissolved in the water column. The proposed TMDL revision finds that copper-based hull paints are the primary source of this dissolved copper. See response to comment 14.2 regarding the TMDL in Shelter Island Yacht Basin.
29.4		As I said at the beginning, I do not think there has been enough research to verify exactly what the cause of the problem is. Sure it is easy to say boats have copper in their bottom paints so eliminating that will eliminate the problem. It has not worked elsewhere and there is no reason to believe it will work here. We could be spending a lot of money for nothing.	See response to comments 04.2, 29.1, and 14.2.
29.5		I suggest we monitor the copper content of the bottom, maybe once a year, and look at the trend over time. Also, I think there should be test samples up the Ballona Creek and outside the harbor. See what happens after 2025 when SB346 is in full force and see what happens to the other areas that have not initially been successful. When it can be proven that the boats are the problem, boaters may be more willing to go along.	Monitoring requirements are a component of the proposed TMDL. Monitoring has been ongoing for several years. The TMDLs in place for Ballona Creek and Ballona Creek Estuary include monitoring programs in Ballona Creek watershed; there is not a need to duplicate those monitoring efforts in the proposed TMDL revision for Marina del Rey. The effects of copper brake pad legislation, SB 346, are being monitored. Effectiveness of this legislation will not alter the necessity of addressing copper from antifouling hull paints.
30.1	Matt Humphreys	As a boater, I have had a boat in Marina del Rey for many years. As an advocate for the oceans, I understand the importance of mitigating our impacts on sensitive environments such as the	Comment noted

		marina basin. I have reviewed the proposed changes and am supportive. While I know many local interest groups are requesting an extension for further consideration of the limits and requirements, I believe this is simply a delay tactic among those that risk financial loss as a result of the changes. As an individual boater, I recognize the proposed changes may result in additional costs for compliance that I may need to cover which I am willing to do so. Thank you for registering my support and denying any requests for extensions.	
31.1	Ilona Fellows	I am Commodore of Del Rey Yacht Club and a concerned owner of a power boat currently located in a slip in Marina del Rey. As a boat owner I *object* very strongly to the proposed implementation for reducing copper in the Marina del Rey waters by forcing boat owners to remove copper-bearing bottom paint from their vessels and replacing it with as yet unmanufactured replacement bottom paint what will not contain copper.	Comment noted. See comment 05.6 regarding alternative antifouling paints.
31.2		The evidence for copper pollution from such a source is meager, inadequate and/or not published. It is clear that the CWQCB has failed to consider other sources and that further studies of copper contamination are needed. Furthermore there are few data to support the notion that such an action will in fact reduce copper concentrations in the water. The CWQCB has not offered evidence that this draconian measure will have the intended result. I would be very surprised if presented for litigation that the Courts would support their edict based on available data.	The Regional Board disagrees. Modeling completed during development of the proposed TMDL and included in the Staff Report shows that antifouling hull paints are the primary source of dissolved copper to Marina del Rey Harbor and that, following an 85% reduction in this discharge, Marina del Rey Harbor water will achieve the numeric target in the TMDL. Also, see response to comment 16.2 and 29.1.

		I and other boat owners would like the CWQCB to halt immediately the planned implementation of this proposal, and instead submit it to appropriate study.	
32.1	John Hopewell, American Coatings	The introduction of this revised TMDL is inappropriate at this time. Assembly Bill No. 425 was just signed into law on October 15, 2013 which directs the California Department of Pesticide Regulation (DPR) to develop mitigation measures regarding copper-based antifouling coatings to protect aquatic environments. They are required to take action by February 1, 2014. This TMDL ignores the intended purpose of the law and gets ahead of the scientific evaluation by DPR – the mitigation strategies should be given time to take effect. We believe The Los Angeles Regional Water Quality Control Board (LARWQCB) is acting without the complete scientific picture	Results of AB 425 may aid responsible parties in achieving the TMDL; however, this legislation does not have a bearing on the necessity of the TMDL, the assigned numeric targets, or the assigned waste load allocations. See response to comments 04.5, 05.12 and 15.2
32.2		Until a proper risk assessment is conducted the changes required in the TMDL should not be adopted and the TMDL reconsideration should be denied. The recommendation for 85% of the vessels mooring in the marina to switch exclusively to biocide free coatings will just create a different input into Marina del Rey. As an example, page 21 the Study "IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas" Culver et al, June 2012 the fouling biomass accumulation on different coatings, including copper based coatings, is measured. On average, the biocide free hard epoxy and slick foul release coatings contributed significantly more organic matter into the environment when the hulls were cleaned than did the copper based coatings from the same activity. The sediment monitoring study conducted for Marina del Rey in 2008, "Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY", Weston	See response to comments 13.2 and 13.3

		Solutions, April 2008; clearly reports that the variable most closely related to sediment toxicity was the percent (%) clay in the sediment. There was not as direct a relationship to copper and zinc and these metals are very likely tied up in the clay and rendered nonbioavailable. The relationship of toxicity to clay % indicates that it is the stagnant water body conditions affecting the sediment quality. To add the additional burden of more organic matter into the sediment and water column could make this environment unhealthier. Until this input is quantified the actions proposed by this TMDL should not be implemented	
32.3		The "Final Report: MARINA DEL REY HARBOR SEDIMENT CHARACTERIZATION STUDY" did not use a Toxicity Identification Evaluation (TIE) for measured sediment toxicity. Without it the TMDL may be addressing a toxicity issue regarding copper and zinc in the sediment that does not even exist. The report indicts the key factor most directly related to sediment toxicity is percent clay. Higher Percent clay relates to lower grain size and potentially to anoxic sediment conditions. The TMDL reconsideration is possibly making the sediment toxicity worse not better as discussed in item 2 above. A TIE should be conducted to determine if the proposed actions of this TMDL will lead to worse sediment conditions.	See response to comment 13.5
32.4		The TMDL does not consider bioavailability of dissolved copper in the water column. The LARWQCB fact sheet regarding this TMDL states "Two marinas in Southern California already have similar TMDLs in place to reduce copper in the water: Shelter Island Yacht Basin in San Diego and Newport Bay in Orange County." That is true and studies on both of those marinas have shown there is no or very limited toxicity in the water column due to copper. The peer reviewer of the Shelter Island Yacht Basin TMDL stated	See response to comments 04.4, 05.9, 08.4, and 15.3

		numerous times in Appendix 7 of that document that this was a serious flaw in the TMDL. The peer reviewer; Professor Kenneth W. Bruland, with the Ocean Sciences Department at University of California, Santa Cruz; wrote that instead of trying to reduce the copper load by such a drastic amount "A cost effective and reasonable alternative would be to carry out studies to access the WER (Water Effects Ratio) for this basin" and "With this knowledge you would be in a position to arrive at a reasonable and justifiable numeric target concentration of dissolved Cu." Later in Appendix 7 he added the margin of safety in the TMDL is "unreasonable" because it did not consider bioavailability. It is not prudent to institute the revised Marina del Rey TMDL when it doesn't consider the primary flaw clearly identified in a nearly identical TMDL in California. Also, the US EPA has made completion of the marine Biotic Ligand Model (BLM) a priority in 2014. The BLM is a much less expensive method to develop a site-specific Cu standard for Marina del Rey than a Water Effects Ratio. The data to implement a BLM derived site-specific objective in Marina del Rey may already exist.	
32.5		The TMDL does not even mention the risk associated with the increased likelihood of the transport and introduction of hull born invasive species. California's Marine Invasive Species Act of 2003 renewed and expanded the Ballast Water Management for Control of Nonindigenous Species Act of 1999, to address the threat of nonindigenous species (NIS) introductions. An example of one extension of that law is the California State Lands Commission (Commission) has been charged with oversight and administration of the state's program to prevent or minimize the release of NIS from vessels that are 300 gross registered tons and above. In their current draft of their "*Biofouling Management Regulations for*	See response to comment 13.7

		Vessels Operating in California Waters" is the statement "*The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 4.8 of the California Code of Regulations is to move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into waters that may impact the waters of the state, based on the best available technology economically achievable*." Copper based antifouling coatings are more effective in some operating scenarios than the biocide free coatings this TMDL is forcing vessels to apply. From "IPM for Boats: Integrated Pest Management for Hull Fouling in Southern California Coastal Marinas" Culver et al, June 2012p. 18, the authors conclude that the risk of spreading invasive species can be higher for coatings not containing active ingredients as demonstrated under the conditions in this study. The risk of increased hull born invasive species transport and introduction should be addressed before this TMDL is adopted and if the risk is greater without effective copper based antifouling coatings the revised TMDL should not be adopted.	
32.6		The current TMDL and the TMDL reconsideration do not consider the actual beneficial uses of Marina del Rey. For example, Marina del Rey clearly will not be used and was not designed for shell fishing. It's edges consists primarily of concrete walls not a natural shoreline. Considering California's Porter Cologne Act "past, present and probable future beneficiary uses of" the water (PORTER COLOGNE ACT, ARTICLE 3. REGIONAL WATER QUALITY CONTROL PLANS, Section 13241 (a)) – it is clear that many beneficial uses regulated in TMDL have never existed in Marina del Rey in the first place. Marina del Rey is a man-made water body designed for one purpose – to moor vessels. The TMDL should reflect the actual past, present and probable future beneficiary uses of this water.	See response to comment 13.6

		**Note: the following sections of Porter Cologne were listed in the comment letter: § 13240. Regional water quality control plans § 13241. Water quality objectives § 13391. California Enclosed Bays and Estuaries Plan § 13393. Adoption of objectives § 13391. California Enclosed Bays and Estuaries Plan § 13393. Adoption of objectives	
33.1	Ronnie in California	Almost every boat has a lead keel. Lead is more toxic than copper. Why just ban copper when lead is more dangerous. This ban on lead would leave marina del rey with only a handful of small 15 foot boats. Every marina will got out of business. Lead is more toxic than copper. why ban copper is you don't ban lead also???? why are taxpayers dollars being wasted on these meaningless committees?	The TMDL does not ban copper, it requires an 85% reduction in discharge of dissolved copper from antifouling paint. Addressing potential impairments from lead keels will not result in attainment of the TMDL for copper in the water column. Date show no lead impairment in the water column of Marina del Rey Harbor.
34.1	Jack Monger, Industrial Environmental Association	The IEA joins other regional stakeholders such as the San Diego Unified Port District and the San Diego Port Tenants Association that are faced with corrective actions for dissolved copper quality impairments similar to those proposed for Marina del Rey. There has been long-standing concern over the load allocations identified in the Shelter Island TMDL, specifically the loading estimates allocated to passive leaching and hull cleaning. New information from recent studies completed by the U.S. Navy challenges the conclusions that led to the TMDL applied to the Shelter Island Yacht Basin and	See response to comment 04.2

		adopted by the San Diego Regional Water Quality Board in 2005. The published Navy study, entitled, *Life Cycle Contributions of Copper from Vessel Painting and Maintenance Activities (SPAWAR, November 2013)* examined copper paint emissions over three-year life cycle. This report was a component of the Department of Pesticide Regulation's (DPR) paint re-evaluation process and identifies hull cleaning emission rates that are vastly different from those used in the Shelter Island TMDL	
34.2		In light of more up-to-date scientific results on the issue of copper loading, IEA joins other San Diego stakeholders to encourage the use of site-specific water quality objectives at the onset of the TMDL process, including a cost-effective method, the Biotic Ligand Model (BLM), when developing TMDLs. The BLM is a tool used in determining aquatic toxicity that examines the bioavailability of metals in the aquatic environment and the affinity of these metals to impact organisms. The BLM depends on the site-specific water quality, including such parameters as pH, hardness, and dissolved organic carbon. Because the Marina del Rey TMDL Amendment has not been adopted, it would be appropriate to consider extending the amendment hearing until a site-specific study can be completed.	See response to comments 04.4 and 15.3
34.3		Finally, IEA suggests that that regulatory consistency at the state and federal level would benefit all concerned.	See response to comment 04.5
35.1	Dennis Smith	Finally you have solved the pollution and crowding problem in Marina del Rey! As the regulation changes and boat owners flee to other Marinas, as I have been considering recently, the empty slips will not cause any pollution, bravo! The amount of money this will cost the lower end boat owner	See response to comments 05.11 and 19.2

		is obsurd. Again another side benefit, get rid of those that can barely afford a boat to begin with. After all we don't want the wrong sort of people with there children, that enjoy boating, in Marina del Rey, do we? Those are the ones you will hurt the most and this is DISCRIMINATORY.	
36.1	Alan Weiss	I have been a boater in marina del Rey for over 15 years. The ability to protect the bottom of our boats would be radically affected by using a more reduced paint. Their is no proof of creating a better "water" by this method.	See response to comment 05.6 regarding the availability of alternative hull paints.
36.2		Why not deal with the "dumping" issues first ? If you really want to clean up our marina, that would be a mandatory first place to start. Instead of throwing another cost on us.	The “dumping issues” mentioned are not specified. The TMDL addresses all sources of toxic pollutants to Marina del Rey Harbor.
36.3		I will just be forced to move my boat. Costing jobs to the dock staff and the bottom divers, washed down crews. Think of the people whose jobs you will destroy.	See response to comments 02.9, 05.11 and 19.2
37.1	Rob Grycan	I am a retired person on a pension who has worked a good part of my life to get to a stage where I could own a modest boat. The regulations requiring us to do extensive work to our boats would mean many of us would have to sell, probably at a loss. Many of the businesses which depend on the Marina including the Marinas, are already impacted by the economic situation. The local economy depends on the Marina for it's fiscal viability. I believe this would mean another downturn for this part of the city. While I certainly don't want to contribute to a toxic environment, I think the goal can be accomplished without retroactively requiring an unfair burden. I just painted the bottom of my boat at a cost of several thousand dollars. To require me to strip this paint and repaint would be more than I	See response to comments 02.9, 05.11 and 19.2

		can afford. Please, do not require these unfair, retroactive regulations to be passed by your Board.	
38.1	Richard Schaefer	The estimates of 200 million to clean up the mud/sludge on the bottom of MDR are obviously low. I suspect the actual cost will approach 500 million. So, now we are worried about copper in, what is essentially, a parking lot for boats? Do the greens worry about 4 inches of bubbling asphalt that is pumped over the earth to build millions of acres of parking lots all over the country? No, not a thought about that destroyed "ecosystem". But, a parking lot for boats, built on land that was once covered with seeping pools of oil for thousands of years needs to be treated like a Natural Aquatic Wonder-World. On no! Not copper! You mean the same stuff that all of our millions of feet of copper drinking water pipe is made out of, and the same stuff that the brake lining of millions of cars are made from... and jewelery? Note, 97% of copper in the sea comes in natural runoff from streams and rivers. Surely no price is too great to pay to insure the mud worms of Marina del Rey will thrive.	The cost analysis discussed in the Staff Report is based on expenses incurred during other sediment remediation projects. Marina del Rey is a water of the state and the U.S. and protected by the Clean Water Act and the Porter-Cologne Water Quality Control Act. The Marina del Rey watershed, which once functioned as one of the largest natural estuaries in southern California, has lost over ninety percent of its area due to development. Even with these drastic modifications, Marina del Rey still provides a viable habitat for larval, juvenile and adult inshore fish species. The copper levels in Marina del Rey were the highest of all harbors in a recent State study. Many organisms living in the bottom sediments and the water, including the larvae of fish and invertebrates are harmed by high levels of copper and other pollutants. This negatively affects ocean ecosystems.
38.2		Say, what about the "Impaired Waterway" of Ballona Creek? Copper brake lining dust and the residue of millions of feet of copper drinking water pipe saturates that water way as we well. Of course, the County of Los Angeles storm drains empty more copper into the sea than a 100 Marina del Rey.... But boaters are a small voting block and as such, easy to ignore.	Two TMDLs are in place to address copper in Ballona Creek: the Ballona Creek Estuary Toxic Pollutants TMDL and the Ballona Creek Metals TMDL. See also response to comments 29.1, and 29.2 Copper entering Marina del Rey Harbor through storm water is primarily bound to TSS and not entering the harbor as a dissolved constituent. Copper in storm water is assigned a waste load allocation to address the copper impairment in the sediment.

39.1	Horacio Vieytes	I, Horacio Vieytes, as owner of a 25' Cal sail boat moored in the Marina del Rey Harbor, will be financially affected by toxics TMDL regulation proposed. Particularly my boat is from 1973 and if I have to paint the hull after stripping it to paint with no copper paint, that cost is going to be 3 times the current value of the boat and I think is not worth it, even when I know all paints keep copper to achieve expected performance. Instead County has to start thinking to open a water recirculation way to avoid undesirable copper concentration levels.	See comments 02.9 and 05.11 regarding anticipated costs of the TMDL. See comment 05.6 regarding alternative hull paints. Increasing circulation in Marina del Rey Harbor may help in achieving the dissolved copper numeric target in the proposed TMDL.
40.1	Scott Smith	I have lived in the Marina since 1981 and as a live aboard since 1987. The Marina is my home. I received some information that troubles me and wish to state my objections to some of your proposed regulations. It has been stated that you intend to name each boater with a vessel moored in Marina del Rey as a responsible party and as a responsible party I may be required to obtain a permit costing $1094.00. I find this to be unreasonable and difficult to understand.	See response to comment 14.8
40.2		It has been pointed out to me that the purpose of this endeavor is to remove copper from the water in Marina del Rey. On the surface that is an admirable idea. Unfortunately at this stage in the game, there are no proven alternatives that can replace the cost and quality of copper. If other methods, not using copper are used, estimates are as high $8,000 per boat to make the switch to another paint and the effectiveness even as promoted by their manufacturers is not acceptable. Longer haul outs, stripping the old paint and repainting could be a very expensive proposition and create further environmental issues should this mandate go through.	See response to comment 05.6 and 05.11.

40.3		Another concern that the removal of all copper paint could cause an unintended environmental impact. As Ray Tsuneyoshi former director of the department of boating and waterways said. "Before you rush to get rid of all biocide control without finding an alternative I would strongly urge that you first find the same kind of covering that has the same kind of qualities that zinc has but not the toxicity. I challenge you to do that because it's almost an impossibility." Greg Shem, owner of The Boatyard points out, "The report states that copper and other pollutants affect the beneficial use of Marina del Rey for: water contact recreation, marine habitat, wildlife habitat, commercial and sport fishing, and shellfish harvesting. Notwithstanding the fact that swimming, fishing, and shellfish harvesting are prohibited in Marina del Rey, the impact on these uses is still considered a problem because we are told they 'could be' potential uses". "Consideration should be given to the fact that some marinas due to their unique man-made origins are not naturally flushed, and for that matter are not even natural," He stated. "Somehow the idea that the waterway is impaired especially when its use is restricted as a small craft harbor with fishing, swimming, and shell-fishing banned, seems over-protective".	The comment does not specify how removal of copper paint would cause an unintended environmental impact. It appears as though the comment refers to replacement paints that are also toxic. The SED analyzes the potential impacts from replacement of copper-based antifouling paints with non-toxic coatings; zinc and organic biocides were not analyzed because they are not non-toxic. The quoted statements from Greg Shem that swimming, fishing, and shellfish harvesting are prohibited in Marina del Rey are not correct.

41.1	Robert Neches	I strongly urge the Board to reject the draft findings of the November 5, 2013 report of the Los Angeles Region California Regional Water Quality Control Board, concerning Copper Load Allocation to Boats. My objections are tied to my standing as a local citizen, a scientist/engineer, and a long-time boater. The report and proposed actions consider only data bearing on aquatic life, rather than balancing protection of all beneficial uses – specifically, recreational boating. The negative impact on that recognized beneficial use is severe according to even the report's own estimates. Those estimates are, furthermore, understated and inaccurate (see Scientific/Engineering Considerations, and Boaters' Issues, below). Draft resolution R14-xxx, states in its own words that the goal is, "is to protect the aquatic life, wildlife, recreational and fishing beneficial uses of Marina del Rey Harbor, and to achieve water quality ... to protect these beneficial uses" (paragraph 6, page 1, emphases added to original). Historically, Marina del Rey Harbor is a human-made rather than natural harbor, expressly created to support recreational use and provide revenue for citizens of the County of Los Angeles. Long recognized as one of the world's largest man-made small boat harbors, the primary recreational use of Marina del Rey is and always has been boating. No evidence has been provided that copper reduction is necessary for recreational benefits, despite that being by far the primary use. Even if the report's own estimate of $6000.00 cost per individual boat owner were accurate, this is a significant amount that will discourage boat ownership and use. Thus, enforcement of the proposed Copper Load Allocation to Boats would degrade rather than protect recreational beneficial usage.	The TMDL is designed to protect all beneficial uses, and implements numeric targets that protect the most sensitive beneficial use, which is aquatic life. The Regional Board considered the economic impacts in developing the proposed TMDL revisions. See section 5 of the Staff Report. See response to comments 02.9 and 05.11 regarding the economic impact of the TMDL.

41.2		The report's conclusions regarding boating contributions to copper loads are derived from technically questionable methodologies and assumptions. In particular, they are entirely dependent on extrapolations using models developed for Shelter Island in San Diego. The quality of those models cannot yet be declared settled by scientific standards. And, even if they were, the report fails to provide a sound technical basis for its assumption that those Shelter Island models are necessarily applicable to regions elsewhere. Having recently served in the Pentagon as the Director of Advanced Engineering Initiatives in the Office of the Deputy Assistant Secretary of Defense for Systems Engineering, I have personally participated in efforts to avoid huge wastes of taxpayer money based on insufficiently vetted technical studies. From that position, as well as from years of experience as a program manager and office director of large Federal research agencies, I believe I have standing to raise technical concerns. The Shelter Island studies upon which this report relies have been published only by a single research group. To have scientific and technical credibility, especially when being relied upon to make expensive practical decisions, these studies would need to be replicated by separate independent researchers. Furthermore, it's technically inappropriate to assume that the studies apply to other locales if they have not been replicated across a range of conditions. Factors that could easily skew the applicability anywhere else for a model developed and tested only at one specific location include – but are not limited to -- water temperature, harbor floor geography and sediment composition, current flows, and even local preferences in choices of bottom painting products or application techniques. For a simple example, see Boaters' Issues, below.	See response to comments 08.4 and 09.3.

41.3		The report is inaccurate both as to estimates of cost impacts on boaters and effectiveness of the proposed measures. It's a widely known fact among boaters that there are significant regional differences in the effectiveness and longevity of bottom treatments. This brings into question the report's assumptions that the rate at which copper leaches from Marina del Rey boats is known and understood, as well as its assumptions about the likely effectiveness of mitigating alternatives. Further, as a practical matter, the $6000 estimated conversion cost fails to recognize that many boat owners will have to apply an epoxy water penetration barrier coat prior to repainting – an additional expense of several thousand dollars.	Cost estimates included in the TMDL are based on the best available information and are intended as estimates. Meeting the load allocation in the proposed TMDL will effectively enable the waters of Marina del Rey Harbor to meet the numeric target in the proposed TMDL. Regarding the effectiveness of alternative hull paints. See response to comment 05.6. See comment 04.2 regarding the scientific basis of the TMDL.
42.1	Bruce Glimpse	How can you consider a toxic tax on an area that was at one time was an oil field! Because of that fact the only good use for that area was to dig it up for use as a marina. Though most marinas have a way to flush the tidal basin, an inlet and an outlet so it can flush with the changing tide. The powers that were in charge missed that altogether when they designed MDR. If this proposal passes I will move and or sell my boat since the tax is ridiculous. It will be a very empty marina if this happens. To change from a copper based hull paint to "save the waters in MDR" is a bit like closing the barn door after the horse is gone. You will drive the boating community away from MDR for sure.	Marina del Rey Harbor was wetland habitat prior to the building of the harbor. See also comment 38.1. The proposed TMDL has no bearing on taxes. See comment 39.1 regarding circulation. See also comment 19.2.
43.1	Mitchell Morris, MD	As a scientist, naturalist, and boater, I am very concerned by the impact of my passion (sailing) on our obligations to the environment. There is no scientific evidence that mildly	Copper levels in Marina del Rey Harbor exceed water quality standards. See response to comments 04.4, 08.4, 14.3, and 24.3.

		elevated copper levels from anti-fouling paint leads to impaired water quality or to damage to our ecosystem and wildlife. Certainly in Marina del Rey, we have abundant mollusks, fish, sea lions, and sea birds that appear healthy. Data from marinas that have gone "copper-less" does not seem to be available. I am opposed to banning copper-based anti-fouling paint in Marina del Rey. It will have a negative economic impact with a highly questionable benefit. More study should be completed to provide evidence of a benefit to a ban prior to considering this drastic step.	See comments 02.9 and 05.11 regarding anticipated costs of the TMDL.
44.1	Alex Balian	I had the displeasure of hearing the briefing in this FUBAR Project at our Smallcraft Harbor Commission Meeting this month and last month.(in Marina del Rey). You should read the recorded transcript and see how the Public reacted to this stupid and wasteful effort, which tries to identify a problem and offers NO SOLUTION. Your people giving the brief are not listening to the Public that testified and made their inputs. They also are uninformed and can only speak inadequately when posed with a question. They lack experience and cannot offer a solution.	Comment noted
44.2		The problem is that THERE IS NO REPLACEMENT PAINT AVAILABLE Several years ago this effort was tried with a water based paint that failed, came off the boats and upset all boaters involved. You avoid that issue and do not even mention it. WHY NOT ??	See response to comment 05.6

		There is no way that this program can work without a replacement paint that is adequate and cost-effective. Jamming this program down our throats is a dis-service to we taxpayers that pay you to be professional and do your job properly. Clearly you are not doing that. Should I be ordered to replace my bottom paint, knowing that there is none available that is adequate, I will refuse, and take this matter to Court for proper resolution..	
44.3		Finally, I see no evidence that bottom paint with a percentage of copper in it, is causing any problems to the environment or any biological life. In fact, we have never had so much progress in sustaining biological life that our seas are abundant with fish, whales, sea Lions, Dolphins and tidal life, like never before. Even species previously near extinction are coming back with vigor, and in numbers previously unheard of. You have not proven your case and you offer no solution. You can't just wrongfully order things to happen without a solution. That is what you are doing. I have 67 years at sea and I know what I am talking about. Get your act together and do the following: 1. Prove that there REALLY is a problem. You have not done that. 2. Do not go forward until item 1 above is resolved. 3. If so, take action to provide a replacement paint that is EFFECTIVE, ADEQUATE, AND COST EFFECTIVE. 4. Do complete Staff Work. Don't just throw a Program, that will not work, at us	Dissolved copper concentrations in Marina del Rey Harbor are exceeding water quality standards. See also response to comments 08.4, 14.3, 24.3, and 04.4.

45.1	Anthony Sharki	By creating all these things youre doing most of us will not comply with this law we cannot afford it,boaters will not spend the money they dont have .	See response to comments 02.9 and 05.11
46.1	Jonathan Schwartz	As a Marina del Rey boater I ask that the comment period for the new regulation be extended for at least six months, to give us all a chance to present information on this important proposed regulation. I am not sure the Board is aware of some of the profound effects of the proposal. For example, I live with my wife on a 46 foot powerboat. If it became necessary to change over to a new antifouling paint, we would have to pay to have the existing paint removed. This would cost between $6000 to $8000, without considering the cost of the new paint. At the very least, an extension of time will be appropriate	See response to comments 08.3 and 05.11
47.1	Harris Gabel	I am opposed to the idea of naming owners of boats in MDR as "responsible parties." It is a totally unreasonable approach to require boaters to Purchase a WDR permit to continue to berth a boat with copper-based hull paint in MDR.	See response to comment 14.8
47.2		I disagree with the idea that copper based paints should be banned in MDR. I believe that the current level of copper in MDR is consistent with good water quality and no action should be taken to reduce it.	Dissolved copper concentrations in Marina del Rey Harbor are exceeding water quality standards. See response to comments 08.4 and 04.4.
47.3		The owners of small boats would face huge additional expenses if this regulation were to be implemented. The costs to the boat owners would be totally out of proportion to any benefits to water quality that might be achieved.	See response to comment 05.11
48.1	William H. Johnston, MD	I am strongly opposed to the proposed Marina Del Rey Harbor Toxics Total Maximum Daily Load (TMDL) Regulation for the following reasons: 1. TMDL would be a severe financial burden that will drive many small boat owners from Marina del Rey (MDR), including myself. I will sell or give my boat to a charitable organization if the TMDLR is put into force.	See response to comment 05.11

48.2		2. Loss of small boat owners will in turn cause significant financial stress to the MDR business community that depends on small boat owners to survive financially.	See response to comment 19.2
48.3		3. MDR was created from wetlands to serve as a small boat harbor for recreational boating, not as a nature preserve. Onerous, boater hostile rules about the use of copper bottom paint is against the very purpose of Marina del Rey.	See response to comment 38.1
48.4		4. No clearly effective replacements exist for copper bottom paint exist and would require increased bottom cleaning and haulouts for more frequent bottom painting, further adding to the financial burden for small boat owners.	See response to comments 05.6, 05.11, and 02.9
48.5		It is not clear which organisms the Regional Board claims are being harmed by the copper from bottom paint. Where is the science behind this draconian proposal? Boaters who use MDR regularly or live with a view of the marina can see that wildlife is thriving in MDR, including birds, fish, seals, and sea lions. I cannot keep my depth sounder on until I get out of the marina because schools of fish cause frequent, numerous false alarms. From my high rise condominium, I enjoy seeing the flocks of birds that use the marina waters on a daily basis. Please find a more reasonable, boater-friendly approach after you have proven scientifically beyond a reasonable doubt that increased copper levels in MDR actually cause significant harm to wildlife.	See response to comments 09.1, 14.3, and 24.3
49.1	Joel Young	I am an active boater in Marina del Rey. My yearly contributions to the local economy start with property tax on the boat $5,000.00, slip fee $15,000.00, mechanical service on the boat $1,200.00, rigger $3,000.00, boat washer $4,600.00, yacht club $6,000.00, various local businesses (restaurants and retail grocers) $15,000.00, incidental boat repairs $3000.00,	The Regional Board is uncertain to what dredging plans the commenter is referring. The main channel entrance to the harbor was recently dredged by the Army Corps of Engineers for navigational purposes. The Regional Board disagrees with the estimated costs of

		local boat yards an average of $15,000.00 per year in the last 5 years and local fuel stations $2,500.00 per year. This adds up to a staggering $70,300.00 annually for one boaters contribution to the local economy. If you multiply this even by 4000 boats it becomes $281,200,000.00 dollars contributed to the local economy. I pay my share willingly and do my part ecologically to maintain the balance of the water quality at the Marina del Rey Harbor. Refinishing the bottom of my boat would cost an estimated $40,000.00 and increase the cost of yearly maintenance to the bottom by about $4,000.00. If this was a truly necessary and a long-term solution I would be all for it. As it is the sea life in our harbor thrives at an astonishing rate, including the micro-organism I suspect you are worried about. Seal feces is approximately 10 pounds per day per animal and the fish they feed on are boiling in the basins. The fowl population is enormous and the fecal matter they produce from eating these fish is an ever-increasing problem to the water and local flora. The county has a plan to dredge the harbor on their agenda. Do you think this might change your figures or would a cleansing escape built for the virtually standing water in our marina provide a solution so that these problems could leech out naturally? I encourage you to proceed slowly and with extreme caution on your recommendations to the state and federal commissions as you not only have the balance of a minute organism at stake but the existence of the total economy in our community.	repainting with non-copper paints. See the TMDL staff report and response to comment 5.11. See response to comments 09.1 regarding the scientific basis of the TMDL. See response to comment 39.1 regarding circulation.
50.1	Dirk van Schoonhoven	I am against the proposal of not allowing copper based paint to be used as bottom paint in Marina del Rey. Boat owners take great pride in not damaging the environment as well as clearly taking the best care of there boats as possible. The cost of dredging the harbor if necessary should be owned by the city since they currently dredge the harbor entrance when it	The proposed TMDL names the County of Los Angeles as the responsible party for sediment remediation.

		becomes unsafe. The toxic copper that is in the harbor is 50 years of boating and the city should clean the area at there cost if it is a hazard	
51.1	Adam Faura	If you guys want to solve issue why dont you proposed thew same regulation on the large vessel, as in freighter, industry. Didn't i read recently all sorts of restrictions re bottom paint were placed on recreational boats, but not the freighters? So let me see if i understand this: the biggest offenders, with the largest hulls and greatest polution potential are exempt from regulations.....yeah, that'll, fix the problem	The proposed TMDL will apply to all boats in Marina del Rey Harbor, not just recreational boats.
52.1	Deborah Pennell SIMLG	The performance of alternative paints and the simplicity of conversion from current paint options is overstated. The frequency of boatyard-based maintenance is far less frequent than stated. Hull stripping does not occur every ten years, and with many paints need never happen. The alternative paints have performed poorly with the result that many hulls have been repainted with the original paints after costly experiments with alternatives. Boatyards are leery of standing behind the current alternatives. We have also seen that decision to repaint have been deferred and many boats have paints that are more than three years old.	See response to comment 05.6 regarding alternative hull paints. Estimates of hull painting frequency are based on conversations with boaters and reported values. Some boats in Marina del Rey Harbor may have paint stripped less frequently than this estimate. The statement that "alternative paints have performed poorly with the result that many hulls have been repainted with the original paints after costly experiments with alternatives" is unsubstantiated. The Regional Board is aware that some boaters in Shelter Island Yacht Basin participated in a project designed to test a variety of paints and that some of those boaters chose to return to copper-based paint rather than painting with one of the alternatives found to be more effective through the testing. Grant funds are currently available to minimize costs to boaters using alternative hull paints in Shelter Island Yacht Basin. One boater has documented plans with the Port of San Diego to return to copper hull paint after receiving 319h funds for converting their bottom paint. Terms of receiving funds from the 319h grant for hull paint conversions require notification to the Port of San Diego if the boat will be repainted with copper hull paint.

52.2		The implementation depends on copper load reductions that are incorrect. The U.S. Navy thoroughly evaluated the contribution of copper from antifouling paint. The published Navy study, entitled, Life Cycle Contributions of Copper from vessel Paining and Maintenance Activities (SPAWAR, November 2013) a component of the Department of Pesticide Regulation's (DPR) paint re-evaluation process and identified hull-cleaning emission rates that are vastly different from those used in the Shelter Island TMDL. We have had a long-standing concern over the load allocations identified in the Shelter Island TMDL.	See response to comment 04.2
52.3		The SIMLG encourages the use of site-specific water quality objectives at the onset of the TMDL process: good tools exist and the Biotic Ligand Model (BLM) is an attractive approach. Revisiting a TMDL to adopt site-specific objectives with the limited resources available at this time; is not surprisingly a difficult hurdle. A successful alternative as employed in San Francisco Bay for copper is an early adoption of the objective prior to basin amendment. We suggest that a TMDL incorporating current thinking on bioavailability is far easier to implement than one that requires amendment.	See response to comment 04.4
52.4		An increasing body of evidence suggests that the current water quality objective of 3.1ug/L may be overly protective of the beneficial uses in Shelter Island Yacht Basin. The waters of Shelter Island have been found to be unimpaired by several studies: Copper Bioavailability and Toxicity to Mytilus Galloprovincialis in Shelter Island Yacht Basin (Capalupo, 2011) and Distribution of Copper in relation to recreational boating in a California shallow-water basin, (Neira, 2009) both found that the ambient water is generally not toxic to mussel embryos.	The cited studies (Capalupo 2011 and Neira 2009) have not been broadly accepted as indication that waters in Shelter Island Yacht Basin are not impaired by copper. This impairment remains on the Clean Water Act 303 (d) list and is being addressed by a TMDL.

52.5		We urge you to allot more time to implement the Marina del Rey TMDL. The proposed 11-year timeframe for complying with an 85% reduction in copper loading may be challenging	See response to comment 04.3
52.6		Boaters are risk sensitive and reluctant to convert hulls based on effectiveness and costs associated with maintenance. Educating boaters, monitoring vessel hulls, and confidence building has taken years to implement. Awareness has improved, conversions have improved; yet for the most part many boaters are reluctant and cannot afford the substantial increased financial investment.	See response to comments 04.3, 05.6, 05.11 and 02.9
52.7		The Port District has assisted with some of the costs associated with converting hulls and we are just beginning to see a response. In Newport Beach a similar program was not successful in converting more than a couple vessel hulls in three years of effort.	Comment noted. Currently both the Shelter Island Yacht Basin and Newport Bay TMDLs are being implemented through voluntary programs. See comment 14.8 regarding implementation of the TMDL. Development of a conditional waiver or other implementation mechanism will create additional incentive for Marina del Rey Harbor boaters to implement the proposed TMDL.
52.8		Few options available and the market has not brought forth more than a small handful of viable and commercially acceptable products.	See response to comment 05.6
53.1	Daniel Ginzburg	As a yacht charter company operating in Marina del Rey, we share the Board's desire and emphasis on clean and safe water in Marina del Rey and Santa Monica Bay. However, the proposed TMDL regulation calling for copper free hull paint is unlikely to result in measurably lower copper levels as the major source of copper in Marina del Rey is the storm water run-off from the City of Los Angeles which directly and regularly enters the marina via Ballona Creek and the Oxford Basin.	See response to comments 29.1, and 29.2
53.2		The proposed regulations are complex and hugely expensive to implement and significantly burden the boating community of Marina del Rey without a corresponding improvement in	See response to comment 31.2, 2.9, and 05.6.

		water quality. Furthermore, as of now, there really is no viable proven copper free hull paint alternative. Thus additional hull cleaning and repainting would be required adding further costs and burdens to the boating community.	
53.3		Further study of the sources of Marina del Rey copper pollutants is required as well as additional time for the marine paint industry to develop viable, proven and warranted alternative hull paint. We strongly urge the Regional Water Quality Board to extend the public comment period for at least 6 months so that experts may fully analyze the proposed TMDLs. As it stands today, the TMDL offers the certainty of greater costs and burdens without any certainty of water quality benefit.	See response to comments 05.6 and 08.3
54.1	John Adriany	As an environmental chemist intimately involved with the TMDL in Shelter Island, I feel that the effort rested too heavily on an application of the numerical water quality standard and too lightly on the real world marine chemistry of the fate and transport of copper. A more thorough evaluation of recent science would provide added assurance that beneficial uses with little real world impact would continue and unintended impacts to water quality would be avoided. The fact is that no boat harbor currently exists without antifouling paint controlling growth on hulls: we simply do not know what the consequence of large populations of boats in moorage residing in enclosed harbors might be.	See response to comments 04.4, 05.9 and 08.4 A CEQA analysis was completed for this TMDL, in which potential impacts to the environmental as a result of implementation of the TMDL are thoroughly discussed in the SED. The SED was posted on the Regional Board website on November 5, 2013.
54.3		There is good reason today to believe that copper impacts in marine basins are far less harmful than suggested by the current aquatic life water quality standard and parenthetically scientific processes are available for making exactly this determination. In the Shelter Island TMDL, the natural behavior of copper in the environment, its speciation and bioavailability, was not evaluated in setting both a reasonable water quality standard and developing an accurate conceptual	See response to comments 04.4, 05.9, and 08.4

		model of fate and transport of copper in a marine environment	
54.4		Life Cycle Contributions of Copper from vessel Paining and Maintenance Activities, Earley, 2013 showed that toxic levels of copper in seawater are not generated from surfaces freshly painted with copper antifouling paint. The evaluation concluded the natural ligands were responsible for the non-bioavailable copper.	See response to comments 04.2 and 05.9
54.5		The Shelter Island TMDL third party reviewer, Dr. Ken Bruland commented "A cost effective and reasonable alternative would be to carry out studies to access the WER (Water Effects ratio) for this basin" and "With this knowledge you would be in a position to arrive at a reasonable and justifiable numeric target concentration of dissolved Cu."	See response to comments 04.4 and 15.3
54.6		While the current antifouling approach has recognizable impacts, the recommended alternative and corrective solution, a shift to nontoxic paints, has yet to be evaluated for attendant risks to water quality and human health. There is reasonable concern that these impacts could be substantial. Substantial organic loading accompanies non-toxic coatings and dissolved oxygen levels are currently depressed in boat basins. The additional demands on oxygen from this loading are unknown. The presence of human pathogens in high abundances on hulls in marine harbors was documented in Marine biofilms on submerged surfaces are a reservoir for Escherichia coli and Vibrio cholerae "(Shikuma, 2010).	A CEQA analysis was completed for this TMDL in the SED, in which potential impacts to the environment as a result of implementation of the TMDL are thoroughly discussed. The SED was posted on the Regional Board website on November 5, 2013. Potential impacts to water quality and human health as a result of shifting to non-toxic paints are evaluated. The statements that organic loading accompanies non-toxic coatings and dissolved oxygen levels are currently depressed in boat basins are not substantiated. Marina del Rey is not impaired due to low dissolved oxygen. The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL has been effective since 2004. The bacteria TMDL addresses microbial sources of pollution to Marina del Rey Harbor. Additionally, the use of copper antifouling paints to control potential disease vectors is not an approved use of such products by the Department of Pesticide Regulations; nor is there evidence that this is an effective means of disease control.

54.7		In summary, the risk from current practices may have been overstated and the risk from potential alternatives has not yet been evaluated. The fact is that no boat harbor currently exists without antifouling controlling growth on hulls and the consequence of large populations of boats in moorage is without experience. I believe to assure that unintended impacts to water quality are avoided; it would be prudent to engage in a more thorough evaluation. I thank the Regional Board for an opportunity to contribute comments on the Marina Del Rey TMDL.	Comment noted
55.1	Richard F. Hamlin	Others have commented on the flaws in the process of adopting the proposed TMDL, and resulting errors. As a recreational kayaker and rower, I ask you to consider as well some of the unintended consequences of the proposed TMDL. These consequences offset any possible gains and will occur without copper-based biocides. Vessels will need more frequent bottom-cleaning Vessels will need to be hauled out for bottom-cleaning, resulting in: o Increased trips to and from boat yards o Increased engine exhaust contaminants on the trips Increased use of hoists and resulting increase in use of electricity or fuel to power the hoists	Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) (Public Resources Code, § 21000 et seq.) requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). The Regional Board staff has prepared "substitute environmental documents" for this project that contain the required environmental documentation under the State Water Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The SED was posted on the Regional Board website on November 5, 2013. The SED examined the impacts due to more frequent hull cleaning. However, it is anticipated that hull cleaning will continue being conducted in-water. Increased use of hoists and trips to boat yards can be minimized by coinciding paint conversions with regular maintenance activities.
55.2		There will be increased growth of oxygen-depleting organisms, perhaps resulting in fish and mammal die-offs The thriving aquatic life in Marina del Rey is likely to be	Improvements in water quality anticipated as a result of TMDL implementation efforts are anticipated to improve water quality and support a healthy community of fish in the harbor.

		disrupted from the resulting changes at the lower end of the food chain	Marina del Rey Harbor is not listed as impaired for low dissolved oxygen, nor is the Regional Board aware of data supporting such a listing. Implementation actions resulting from this TMDL are not anticipated to alter dissolved oxygen levels in Marina del Rey Harbor.
55.3		Economic resources will be removed from the community and used to clean boat bottoms	See response to comment 19.2
56.1	Jeff Pielet	I am opposed to the Marina del Rey Harbor Toxics TMDL revisions that are being proposed. These proposals will essentially "kill" the boating industry as well as the surrounding business community in Marina del Rey by putting Marina del Rey at a competitive disadvantage to other marinas in the region. Boat owners will be forced to move their boats to other marinas in other cities or put their boats up for sale because they cannot pay for the proposed excessive WDR permit and costly repairs that would need to be done to comply. This, essentially, would create another economic disaster similar to the recent housing foreclosure situation that has taken place. Marina del Rey is the jewel of Los Angeles County but efforts to restore or enhance this valuable environmental resource must be based on a balanced approach and sound science, not the targeting of boaters to bare the excessive costs.	See response to comments 02.9, 05.11, and 19.2 regarding cost analyses. See response to comment 09.1 regarding the scientific basis of the TMDL
57.1	Bruce Schaffer	As a sailboat owner in Marina del Rey, I am compassionately concerned about the wildlife that live in the water & around our marina. I appreciate the smallest little fishes in around my boat berth that give rise to our bird populations that provide the best free show imaginable while diving & battling with other birds for each catch while the dolphins & sea lions	See response to comments 5.11 and 19.2

		provide endless amusement. I love them all. I understand the Los Angeles Regional Water Quality Control Board's call for action on the issue of reducing copper & other metals & pollutant levels in marina waters & sediments. What I sincerely hope thought is that you all have the wisdom to solve one problem without causing another problem. Namely, destroying an already fragile situation among boaters in Marina del Rey. It would be counterproductive to drive away the already meager income sources that marina businesses rely on to survive in today's economy. No one wants to see commerce & enjoyment wane for peoples ability to pay for them. I'm also acutely aware of the abject financial circumstances the boating industry has had to endure, not only in recent years but since the late eighties, when a government imposed luxury tax all but wiped out the boat building industry in North America, a bit of idiotic legislation, the boating industry has yet to recover from. If this Amendment passes in it's current written form, the resulting regulation's fees imposed will likely drive the final nail in the coffin of boating in Marina del Rey, as we know it... a foolish turn of events, no one desires.	
57.2		Since the Amendment calls for reaching certain TMDL reduction levels for toxics by year 2024 and most boat owners repaint their hulls every 5 to 7 years, that means that by year 2024 most all the boats currently berthed in Marina del Rey will have had their hulls renewed (stripped) &/or repainted, in the normal course of boat maintenance. The key here is to make sure that all those hull repaintings are done with copper-free paints. Their is but one way to ensure this. Copper-based	See response to comments 04.5 and 14.8

		ablative paints must be banned in California. By doing so, paint producing companies will bear some of the burden to reduce the copper loading in our waters. When copper-containing paints are outright banned in California, paint companies will finally have the incentive to formulate new chemistries for ablative hull coatings for boats, which it is very near to producing already. I for one, don't mind using a hull paint coating that's not as effective as copper but that will help restore our marina waters to acceptable levels, over time. Most boaters are willing (but not always able) to accept their share of increased expenses for the greater good, as long as it doesn't come in the form of a lump $1000 demand for a permit payment or making mandatory boat hull strippings, also not a wise strategy, unless you want to initiate a mass exodus of boaters from Marina del Rey that is. I sincerely hope you see the wisdom of solving our problem by shifting the modus operandi from monetary demands on boaters to passing the right kind of laws that produce the desired results we all want, without singling out one (vital) constituent.	
58.1	Richard S. Griffin	In reference to the proposed revisions to the Marina Del Rey's Total Maximum Daily Load (TMDL), I am firmly against these revisions. As a live aboard boat owner, these proposed revisions will put an unfair cost burden on those who are not the cause of the poor water quality. In the proposal copper boat paint was mentioned as a contaminant to be addressed. I do not use copper boat paint on my boat and should not have to bear the cost for those that do. Boat owners can only use the products that are available for them to use. If the copper is the problem then the	See response to comments 02.9, 05.11 and 19.2

		manufactures of the paint should be held responsible for the clean-up of their toxic product, not the boat owner. The Marina is already an expensive place to live. If the proposed revisions are adopted, there will be a devastating economic impact to the Marina Del Rey residents and business owners. Please delay implementation of the proposed revisions to the Marina Del Rey's Total Maximum Daily Load (TMDL) until proper funding is determined	
59.1	B Daniel Binafard	please accept this e mail as an opposition to banning bottom paint having copper for the boat this is going to have a drastic effect on the cost of maintaining the boats	See response to comment 2.9
60.1	Bruce C Stone	I am a physician in Bakersfield and I own a sailboat docked at the Marina City Club in Marina del Rey since 1999. I also have a M.S. degree in Zoology with a background in sub-tidal research at the University of Washington. I am well-aware of the toxic nature of Copper to marine invertebrates, in fact, that Is the purpose of bottom painting boats with copper-based paints. It really works at keeping destructive inhabitants off the hulls. Bottom cleaning is still required (an industry of its own) to keep hardy critters and vegetative growth off the hulls. If not attended to, this bottom growth will slow the speed of a vessel and require more fuel for travel, etc. Therefore, the threat to totally abandon a known methodology in favor of some future, unproven plan, is very disturbing. At least, we need more time to study the problem before jumping in on environmental mandates that are not proven, but may just seem good!	Alternative hull paints are available. See response to comment 05.6
60.2		As you well know, Marina del Rey is world famous as the largest man-made marina in the world and is an artificial environment. The tidal waters do not circulate in a natural fashion and the dilution of toxins is not dispersed as well as in other facilities. So no one expects a hardy marine habitat in	See response to comments 13.6, 14.9, and 38.1

		this marina! Further, you may destroy one of the best recreational facilities in the whole Southern California area.	
60.3		In Bakersfield, there is a famous event that took place several years ago when a Fish and Game helicopter landed in a farmers field and shut down his production and impounded his tractor because he was plowing a field where there might be an endangered kangaroo rat (that could not be identified by morphology, that is visual characteristics). An example of an environmental law gone astray with heavy-handed bureaucratic clamp-down without a fair evaluation. I liken that experience to the threat to boating in our area. Do you not think people will move their boating to elsewhere and again, destroy the industry of boating in this area? How many owners of condominiums in the area, hotel occupants, etc., want to look out on a half-empty marina?	See response to comment 19.2
60.4		I am only getting started, but will end with the plea to stop what you are pushing on us and do some decent scientific studies before you do more harm than our copper-bottom paint is capable of!	See comments 09.1 and 16.2 regarding the scientific basis of the proposed TMDL.
61.1	Burt Bochner	I just learned about this issue today so I really wasn't prepared to write anything. But I feel compelled to say something regarding this issue. I thing is a non issue. I have Sean so much marine life in the marina it's hard to belive that this is even being broposed. I will do anything i can to stop this ridicules wast of our taxpayers money...	Comment noted
62.1	Peter Glick	I am requesting that the California Regional Water Quality Control Board delay action on amending the amendment to the *Water Quality Control Plan – Los Angeles* (Basin Plan) to revise the Total Maximum Daily Load (TMDL) for Marina del Rey Harbor Toxic Pollutants until a site specific study can be completed. Based on information available to me, I am concerned that this planned amendment is really only a costly solution seeking a non-existent problem and which solution	See response to comments 04.4, 08.4, and 13.4

		has no evidence it would even resolve the problem and further has environmental risks. As a boat owner and leader of boating organizations, I am deeply concerned about the quality of water that we use. Further, if a problem exists and a solution exists to resolve that problem, then I want a public policy and enforcement of that solution. I believe the best example of this was the discontinuance of use by boaters of effective anti-fouling paints, developed in the 1960s, that contained organotin tributyltin (TBT), which has been proven to cause deformations in oysters and sex changes in whelks. I understand that the solution to this discontinuance was the development, as environmentally safe bottom hull paints containing copper.	
62.2		The representatives of the California Water Quality Control Board who discussed the proposed amendment with the Marina del Rey community explained that the ostensible reason for the amendment to the TMDL, was to facilitate swimming, fishing and mussel gathering in the Marina. These uses are presently illegal or are not what the Marina was designed to be. Further, in light of the Marina housing a fish hatchery, it is unclear how copper presents a risk. Nor is it clear how removal of copper would change swimming.	See response to comments 08.4, 14.3, 14.9, and 13.6
62.3		We are informed that tests have determined that the copper load in the water is in excess of a level of toxicity identified by the EPAas causing distress in sea life. (I understand that the tested sea life are not present in Marina del Rey.) I further understand that utility companies with outflow into South San Francisco Bay found in site specific studies that the EPA level was not in fact toxic. Further we understand that the Scientific Committee on Health and Environmental Risks of the Health and Consumer Protection Directorate of the European Union	See response to comment 08.4 regarding toxicity testing in Marina del Rey Harbor and comment 04.4 and 14.3 regarding the applicability of CTR criteria. See response to comment 16.7 regarding the site-specific objective in San Francisco Bay.

		finding concerning any risk arising from the use of copper-based antifouling paints used in leisure boating concluded that the Dutch risk assessment has not provided sufficient sound scientific evidence to show that the use of copper-based antifouling products presents significant environmental risks to support the envisaged measure. See, SCHER,*Opinion on risk arising from the use of copperbased antifouling paints used in leisure boatinq, Dutch notification 2003/0201/NL,* 30 January 2007. As a consequence the Dutch government has withdrawn it plan to end copper bottom paints.	
62.4		I am informed that there is no base line to determine what is the inherent level of copper. So there is no apparent level to determine what is "natural" for Marina del Rey, other than speculation.	The California Toxics Rule contains the appropriate water quality objectives for copper in the water column of Marina del Rey Harbor. See also response to comments 04.4 and 14.3.
62.5		I am further informed that there are no positive studies demonstrating the source of copper in Marina del Rey. We have been informed that two sources were copper in automobile brake linings that have washed into the Marina. I am informed that this source has ended with legislation outlawing copper in brake pads. I understand that it has only demonstrated deductive reasoning that the source of copper is recreational boat bottom paint: that is, bottom paint contains copper, as boats are cleaned the bottom paint is worn off and goes into the water, therefore by deduction the source of copper is bottom paint. The deduction does not identify the quantity or other sources besides brake pads, to wit, copper piping in residential and marine use and copper cooling piping in marine engines.	See response to comments 29.1 and 29.2
62.6		I have been informed that the solution proposed by the California Water Quality Board is to "reduce boats with copper bottom paint by 85%." I understand there is no evidence that "reducing" the number of boats with copper bottom paint will result in a reduction of the copper load in the	The required 85% reduction in dissolved copper discharge is based on quantitative models and is not set arbitrarily. See response to comments 14.2, 16.9, 29.1, 29.2, and 31.2

		water. The Board has cited the example of reduction found in San Diego. I am informed that Water Quality Board is presently re-examining the result of this experiment. The Los Angeles studies indicate that the load in Marina del Rey is 85% higher than the EPA level, therefore has arbitrarily proposed to set the level of bottoms at 85% without any further study of effectiveness or consideration of the effect of changes due to copper brake pads. There is no imperial evidence that other sources of copper will not maintain the present load level.	
62.7		There is a further risk to the present proposed amendment. I realize that the California Water Quality Board will and cannot recommend a solution to antifouling paint in the absence of copper. However it must recognize that there is no technologically environmentally safe bottom paint on the commercial market. In the absence of being able to identify such a solution, the proposed amendment runs the risk of three unintended consequences.	See response to comment 05.6
62.8		First, boat owners and the marine industry may develop and use materials that will be environmentally destructive. The best example is the use of paints containing copper in response to the ban on use of bottom paints containing organotin tributyltin.	See response to comment 13.4 regarding alternative biocides.
62.9		Next, without a bottom paint that is effective as an anti-fouling, Marina del Rey runs the risk of invasive species. It has been my experience that recreational boats moored in Marina del Rey travel throughout the world. If those boats do not have effective anti-fouling paints, Marina del Rey runs a very real risk that they will return with invasive species on their bottom.	See response to comment 13.7
62.10		The third unintended consequence will be the change in usage of Marina del Rey. The harbor was created for small recreational boat owners. Boats are movable. I further	See response to comments 19.2, 14.2, and 04.3

		understand that economic viability of a solution is not in the purview of the California Water Quality Board, but the fact will be if a boater must remove and maintain boats with different bottom paint at a higher cost than at other Southern California Marinas, then rather than incurring those cost they will leave Marina del Rey. This has been demonstrated in Shelter Island in San Diego, where empty slips have been counted as copper free bottoms. In discussions with the marine industry services, I understand that to prepare a boat will be require at least 7 to 10 working days. I understand that the California Water Quality Board wishes to phase in the amendment over an 11 year period (and this is without justification as to why we can wait 11 years to remove such a toxic material). With 4000 plus boats moored in the Marina, it will not be physically realistic to treat all the boats.	
62.11		There is a misconception about boaters that they are affluent. Marina del Rey is one of the few Marinas designed and run for the benefit of the poor and middle class people who enjoy the water. The unintended consequence of the amendment will be to force these people out of boating or to other marinas. Rather than expanding the use of Marina del Rey as the ostensible reason expressed for the proposed amendment it would end, not expand, the use of the Marina.	See response to comment 05.11
62.12		Based on a lack of demonstrable evidence and not guess work of how other studies of water environment apply to Marina del Rey, I am requesting that the California Water Quality Board postpone the amendment until a site specific study can be produced demonstrating the toxic effect of the copper level on Marina del Rey and the effectiveness of copper free bottoms on that toxic effect, if it exists. I am asking for a postponement until a study can be completed. I requesting that you include in the amendment a condition that the amendment would be re-	See response to comments 04.4, 08.4, 09.3, and 15.3

		visited in the event such a study was produced demonstrating the ineffectiveness of copper free bottom paint. It would be unfair the boat owners who will the costs of $8,000 for a solution that may not be necessary for a problem that may not exist.	
63.1	Carolene R. Bookman	As an active and well informed member with The Marina Del Rey Anglers, and long time resident of Marina Del Rey, I wish to voice my opinion about the my local environment's needs and oppose these unnecessary community expenses. This proposal for Marina Del Rey is outrageously costly! Haven't you dredged enough here, already? We have speakers come to our monthly meetings addressing all kinds of environmental topics and none of your proposals seem to make economic or recreational sense! Plus, your proposal is not good for all the boaters	Comment noted The main channel entrance to the harbor was recently dredged by the Army Corps of Engineers for navigational purposes; however, the basins or Marina del Rey harbor are not dredged on a regular basis.
63.2		It has been proven recently, as early as this week and reported in the local news that the contamination to the fish in Santa Monica Bay is negligible and fit enough to eat. Scientifically it has been proven NOW that there has been NO radiation reported from Japan. This copper scare is just as much of a non issue as the radiation from Japan.	Marina del Rey Harbor falls in the area designated by OEHHA as the red zone, between Santa Monica Beach south of Santa Monica Pier to Seal Beach (OEHHA 2009). Pollutant concentrations of fish in the red zone have resulted in reduced consumption or "do not eat" recommendations from OEHHA.
63.3		You are proposing to upset the fish in our harbor and ask us to pay for it sometime, somewhere, somehow down the line. Not acceptable! Marina Del Rey Anglers works to raise fish in Marina Del Rey and they flourish. Please review the very aquaculture work going on with Hubbs-Sea World where over a million fish have been released by the cooperative efforts of fishermen like us. Our very successful fish rearing pens in Marina Del Rey have accounted for approximately 100,000 of that million fish. Matter of fact these pens have the lowest die off rates of all the	Improvements in water quality anticipated as a result of TMDL implementation efforts are anticipated to improve water quality and support a healthy community of fish in the harbor. Marina del Rey Harbor is not listed as impaired for low dissolved oxygen, nor is the Regional Board aware of data supporting such a listing. Implementation actions resulting from this TMDL are not anticipated to alter dissolved oxygen levels in Marina del Rey Harbor.

		fish rearing pens in Southern California. Out mortality rate is low because the water in Marina Del Rey's main channel is healthy and has a good oxygen content. See http://www.mdranglers.com/sea_bass.html	
63.4		This proposal obviously needs to be vetted more in the public. This is too big a project to be rushed through. And the proposed expense and labor intensive proposal is worthy of more public input and possibly some compromises.	See response to comment 05.6
63.5		Please do not implement the Copper bottom paint ban. Especially with no alternative anti fouling options for the many boats in Marina Del Rey.	The proposed TMDL does not include a ban on copper bottom paint. See response to comment 05.6.
63.6		We pay the license fees to hunt or fish. We fund ecologically sound management of our natural environments. Yet this project is not a sound one for financial and recreation reasons. If the dredging goes forward it will devastate the Marina Del Rey Fish Rearing project.	There are several means of attaining the TMDL requirements and the County of Los Angeles, in complying with their load allocation, should choose an implementation alternative with minimum impacts to habitat.
64.1	Christine V. Davis, LAX Coastal Chamber of Commerce	The Chamber is concerned with the negative economic impact this TMDL will inevitably have on the Marina, a small craft harbor that primarily caters to smaller companies and individuals. With increased regulation onto boat owners, this harbor will become a far less viable option for owners who will have no choice but to select a more affordable harbor. The impact of this harbor flight will be not only to the detriment of the boating community, but also Marina del Rey at large, whose budget relies heavily on the marine industry.	See response to comment 19.2
64.2		Secondly, the "beneficial use" of Marina del Rey is of utmost importance to the Chamber community for purposes including marine and wildlife habitat, commercial fishing and sport fishing, as well as shell fish harvesting. It has long been thought by environmentalists that copper based anti-fouling paint was the safest product to use, however this is now in the beginning stages of reconsideration. The plan to reduce copper discharge from boats by 85% over the next 11 years is great in	The 2009 DPR study reports the values of 6.0 and 9.4 µg/L as site-specific objectives (CCC and CMC) developed for San Francisco Bay; however these values are not stated as representative over other water bodies and there is no scientific basis to presume that SSOs for another water body would be applicable to Marina del Rey Harbor.

		theory, yet its arbitrary limits set on copper, lead, zinc, PCBs, DDT among other substances have little factual basis. Copper specifically should not exceed 3.1 micrograms as it currently stands in Marina del Rey, however in 2009 the California Department of Pesticide Regulation suggested a level between 6.0-9.4 micrograms may be more a more appropriate standard, a discrepancy indicative of the need for further research.	
64.3		Alternatives proposed by the Los Angeles Regional Water Quality Control Board are limited in scope. Slip liners for instance only work well on small vessels, and release chlorine and other biocides upon the re-launch of the vessel. Likewise, requiring the adoption of less-abrasive bottom cleaning techniques (through training and licensing) in conjunction with nontoxic antifouling agents is not a feasible solution, simply because no viable nontoxic bottom paint is currently available for Marina del Rey. The closest alternatives last only eight to twelve months and cannot be applied over copper-based paints. Most notable among consequences of this alternative is the roughly $8,000.00 cost onto the owner for stripping the paint and then applying a new coat of less effective antifouling agent.	See response to comment 05.6
64.4		We believe in a more environmentally friendly harbor with reasonable and factually calculated regulations set in place to ensure long term usability of this harbor. We also believe in maintaining fair rules for owners that do not put the Marina in an economically vulnerable position. We do not believe in rushing this process with ill-crafted research that in large part is not applicable to the Marina's unique environment. We urge you to reconsider support for the Draft Marina del Rey Toxic Pollutants TMDL.	Comment noted
65.1	Maureen Gorsen, Alston & Bird	The TMDL Amendment pushes too far, too fast. Not only is the Amendment unrealistic and overprotective, but the revised standards will chill the vibrant Marina del Rey Harbor local	See response to comment 19.2

		economy by driving boaters, visitors, and local businesses elsewhere.	
65.2		There are many reasons why the Los Angeles Regional Water Quality Control Board ("RWQCB") should not proceed with the TMDL Amendment, but chief among those reasons is that the proposed standard for dissolved copper is not based on site- specific conditions and data. As the below comments show, the RWQCB has developed an arbitrary standard that should be reconsidered and revised once it collects and analyzes these conditions and data.	See response to comments 04.4 and 15.3
65.3		The TMDL Amendment will have serious socio-economic impacts throughout the Marina, affecting boaters, local businesses, and recreational opportunities for the public. Local boaters bear the brunt of the TMDL Amendments for two reasons. First, under the Amendment, 85% of the boats moored in the Marina, approximately 4,000 boats, will need to be stripped and painted with non-copper hull paints by 2024. The average cost to strip a 35 foot boat is $6,000 to $8,000, and the alternative paints not only cost up to $900 per gallon but may also require more frequent in-water cleaning and repainting. The excessive costs on boaters will result in many boaters leaving the Marina and choosing to dock at other harbors since there is no statewide regulation prohibiting use of copper hull paints, and in fact they are explicitly authorized for use as a duly registered pesticide in California.	See response to comments 05.11 and 19.2
65.4		Second, the TMDL Amendment will name each boater with a vessel moored in the Marina as a "responsible party." In accordance with the Nonpoint Source Implementation and Enforcement Policy, each responsible party may have to obtain a Waste Discharge Requirement ("WDR") permit to comply with the TMDL Amendment. The cost of a WDR permit is $1,097. 23 Cal. Code Regs. § 2200. Such an	The State Water Board's Nonpoint Source policy does not require the Regional Board to issue waste discharge requirements to address nonpoint source pollution. The TMDL's implementation plan specifies the Regional Board's regulatory options in may use to achieve the goals of the TMDL. These include issuing waste discharge requirements or conditional waivers of waste discharge requirements or other regulatory mechanisms (e.g., cleanup and

		administrative burden is costly and time-intensive and will further drive boaters from the Marina, causing economic impacts on local businesses in the Marina, creating potential environmental cleanup liabilities and the loss of jobs.	abatement orders). See also response to comment 14.8.
65.5		The Marina's local economy depends boating, which the recession hit hard. Recreational activities on the water attract locals, visitors, and tourists who dine at local restaurants, stay at local hotels, and shop at local businesses. The TMDL Amendment will drive boaters elsewhere and visitors with them. It is therefore critical that the economic impact be analyzed thoroughly and all reasonably feasible alternatives considered prior to any adoption.	The staff report takes into account a reasonable range of economic factors in estimating potential costs associated with TMDL compliance. The regional board has no discretion not to establish the TMDL at a level that will achieve the CTR water quality criteria. Consideration of economics in establishing the TMDL could not result in a different total maximum daily load; however, economics can be and have been considered in establishing a lengthy and flexible implementation schedule. See response to comment 05.11 and 19.2
65.6		The TMDL Amendment lists March 22, 2024 as the attainment date for discharges of dissolved copper from boats. This deadline is infeasible.	See response to comment 05.10
65.7		In 2006, the San Diego Regional Water Quality Control Board allotted stakeholders seventeen years to achieve a 75% reduction of copper in the Shelter Island Yacht Basin while meeting phased-in loading targets of 10 percent and 40 percent in 2012 and 2017, respectively Although copper loading in the Shelter Island Basin has decreased, representatives of both the Regional Water Quality Control Board and the Shelter Island Basin admit that they will not meet the TMDL deadline. Even the reductions that have occurred to date are attributable to the economic recession with fewer boaters and less maintenance being completed over the past eight years.	See response to comment 14.2
65.8		Despite the shortcomings of Shelter Island, a marina half the size of Marina del Rey, the RWQCB has set an even more aggressive deadline for compliance (10 years) with an even more aggressive cooper reduction target (85%). By giving the	See response to comments 05.6 and 05.10

		Marina's boaters only a decade to reduce copper by 85%, the RWQCB is setting them up for failure. At this time, there is no viable biocide-free bottom paint alternative and slip liners are of very limited use as they only work well for small vessels. Also, slip liners only transfer the growth from the bottom of the boat to the bottom of the liner which itself must be either protected with a biocide or aggressively cleaned as well. At bottom, the RWQCB has proposed an infeasible deadline.	
65.9		Alternatives to copper bottom paints present a host of problems that the RWQCB must consider before adopting the TMDL Amendment. Current alternatives include zinc formulations, organic formulations, and non-biocide coatings, such as epoxy and silicone formulations.	See response to comment 13.4
65.10		The RWQCB must analyze the potential impacts from alternatives. For instance, the United States Environmental Protection Agency ("EPA") has discredited both zinc and organic formulations as poor alternatives. Although EPA has endorsed the use of non-biocide formulations, such non-biocide paints do not provide the same protection or cost-effectiveness as copper-based hull paints. Non-biocide paints are soft, easily damaged, have a short effective lifespan (8-12 months), and cost three times more than traditional bottom paint. Additionally, some boat yards refuse to haul out boats with silicon bottom finishes because they are so slippery that they can easily slide out of the Marine Travel Lift straps.	The SED analyzes the potential impacts from replacement of copper-based antifouling paints with non-toxic coatings; zinc and organic biocides were not analyzed because they are not non-toxic. The SED and staff report discuss the fact that non-toxic coatings must be used with additional BMPs, including increased hull cleaning for them to be as effective as copper-based paints. The economic impacts due to the replacement of copper-based antifouling paints have been analyzed in the staff report. (See Staff Report, Chapter 5.2). The potential for boats coated with silicone coatings to slip out of marine travel lifts can be mitigated by boat yards by using other non-toxic coatings that do not contain silicon, such as epoxy-based coatings.
65.11		There is a demand for less toxic anti-fouling bottom paints, and, in time, manufactures will develop paints with reasonable lifespans and costs that will serve as viable alternatives to biocide paints. But, right now, such alternatives are not viable. RWQCB can take a more reasonable and realistic approach to reducing copper loading in the Marina. For example, RWQCB could require boaters to use low copper bottom paints, such as Petit's Hydrocoat SR, and Ultima SR,	See response to comments 5.12 and 15.2

		that can last about as long as regular copper bottom paints and can immediately reduce the amount of copper leached into the Marina.	
65.12		The TMDL Amendment's numeric target for dissolved copper in the water column is 3.1 micrograms per liter. In its 2009 report, the California Department of Pesticide Regulation ("DPR") suggested that a concentration between 6.0 and 9.4micrograms per liter may be a more appropriate standard.	See response to comment 64.2
65.13		None of the materials on the Marina del Rey Harbor Toxics TMDL website even mention DPR's standard. The RWQCB should adopt a numeric target consistent with DPR. But at the very least, RWQCB should explain why the 6.0 to 9.4 micrograms per liter standard is insufficient for the Marina.	See response to comment 64.2
65.14		The TMDL Amendment Does Not Sufficiently Address Non-Point Sources. The TMDL Amendment recognizes that many sources (e.g. storm water, passive leaching and hull cleaning, and direct deposits from airborne particles) contribute to the concentration of copper in the Marina. In particular, the Amendment highlights "urban storm water" as a "substantial source" of copper, and copper from storm water runoff can easily accumulate in marine sediments and then become a source due to sediment re- suspension.	See response to comment 29.1 and 29.3
65.15		Despite recognizing urban storm water as a substantial source of copper, the Amendment does not sufficiently address the non-point sources of urban storm water. Instead, the Amendment unfairly burdens boat owners in the Marina and disparately treats members of the Marina del Rey community.	See response to comment 29.1 and 29.3
65.16		The scientific modeling that the TMDL Amendment is based on is plainly deficient. The Amendment's high socio-economic stakes demand that RWQCB gather as much site-specific data as possible to support a reasonable and workable standard. And yet, the RWQCB's "Draft Staff Report" and "Substitute Environmental Documents" contain no discussion of the	See response to comments 04.4, 08.4, 09.1, and 15.3

		proposed standard for dissolved copper with respect to site-specific factors at Marina del Rey.	
65.17		The RWQCB has failed to consider any of the competing science introduced in response to Senator Kehoe's proposed bill (SB 623 (2011)) and the long-standing efforts of the broad-based State Executive Branch sponsored Copper Antifouling Paint Sub- Workgroup of the Non-Point Source Interagency Coordinating Committee's Marinas and Recreational Boating Workgroup (renamed "Antifouling Strategy Workgroup"). Efforts to pursue a ban on the use of copper-based paints in San Diego were abandoned by the Legislature due to many scientific issues raised in the legislative debates. The RWQCB must consider these scientific issues prior to any adoption of a TMDL. Also, the State science experts have been convening for nearly a decade (from 2004 to the present) as part of the State's Antifouling Strategy Workgroup and the science considered by that workgroup must be brought to bear in any determination by the RWQCB in developing a TMDL for copper-based paints.	See response to comments 04.5 and 09.1. Regional Board staff participates in the Antifouling Strategy Workgroup and considered science brought to bear by the workgroup when developing the proposed TMDL revisions.
65.18		The RWQCB has also failed to consider any of the science currently being developed by DPR pursuant to AB 425 (Atkins, 2013) which requires DPR to determine a leach rate for copper-based antifouling paint used on recreational vessels and to make recommendations for appropriate mitigation measures that may be implemented to protect aquatic environments from the effects of exposure to that paint if it is registered as a pesticide. DPR is required to release that report no later than February 1, 2014. Before proceeding with the TMDL Amendment, the RWQCB needs to reconcile its analysis with this science.	See response to comment 5.12 and 15.2
65.19		At a minimum, the RWQCB should do the following: • Adopt the EPA's Copper Biotic Ligand Model to	See response to comment 04.4

		evaluate whether site-specific conditions affect the Marina's threshold for a copper TMDL;	
65.20		• Perform benthic studies of indicator species beyond *mytilus edulis* to determine the real-world impact of dissolved copper on aquatic life in Marina del Rey	See response to comments 8.4 and 14.3
65.21		• Perform bioassay of indicator species beyond *mytilus edulis* to determine the real-world impact of dissolved copper on aquatic life in Marina del Rey;	See response to comments 8.4 and 14.3
65.22		• Consider emerging research on antifouling coatings to determine alternative means for controlling dissolved copper in the water column;	See response to comment 05.6
65.23		• Develop modeling for Marina del Rey that incorporates site-specific factors, such as the manmade impediments to flushing of the Marina.	See response to comments 08.4 and 09.3
65.24		Only after collecting and analyzing all this data can the RWQCB issue a proper standard for dissolved copper in Marina del Rey's water column. Without such information, the standard (3.1 micrograms per liter) is arbitrary, mere conjecture based on theoretical modeling originally drafted for Shelter Island.	See response to comment 04.4 and 09.3
65.25		The TMDL Amendment does not comply with California Government Code§11 346.3. Section 11346.3 requires state agencies to consider a regulatory proposal's "impact on business, with the consideration of industries affected including the ability of California businesses to compete with businesses in other states." Cal. Gov. Code § ll 346.3(a)(2). Specifically, a state agency must assess whether a regulatory proposal will affect the creation and elimination of jobs in California, the creation of new business in California, and the expansion of business in California. *!d.* § ll 346.2(b).	Chapter 3.5 of the California Government Code, which includes section 11346, does not apply to "the adoption or revision of water quality control plans and guidelines…." (Cal. Gov. Code § 11353). Therefore, the Regional Board is not required to comply with Government Code section 11346.3 in adopting the proposed TMDL revision.
65.26		The Amendment and its supporting documents do not discuss the Amendment's potential impact on Marina del Rey's businesses. It is likely that the TMDL Amendment will have	See response to comment 65.25. The Regional Board is not required to comply with Government Code section 11346.2 in adopting the proposed TMDL revision.

		an economic effect of at least fifty million dollars in any single twelve month period between the date of fi ling the regulation with the Secretary of State and the date that the regulation will be full y implemented. *See* l Cal. Code. Regs. § 2000(g). Therefore, the agency must prepare a standardized regulatory impact analysis pursuant to the Department of Finance's guidelines. Cal. Gov. Code.§ l1346.2(c)(l).	
65.27		The TMDL Amendment was not drafted in accordance with California Water Code § 13242(b) or (c). The Water Code mandates that the program of implementation for achieving water quality objectives include "a time schedule for the actions to be taken." Cal. Water Code§ 13242(b). The prior version of the TMDL included provisions describing what actions were to be taken at 6 months, 5 years, 6 years, and 7 years after the effective date. The TMDL Amendment does not have a "schedule" for implementing the copper standards that affect boaters; it merely has a deadline-March 22, 2024. Thus, the TMDL Amendment does not comply with the Water Code.	The deadline of March 22, 2024 constitutes a schedule for attaining the dissolved copper allocations. The proposed TMDL revision has been revised to include an interim milestone to develop a regulatory mechanism to implement the dissolved copper load allocations.
65.28		In addition, the TMDL Amendment does not comply with California Water Code§ 13242(c). Section 13242(c) requires that the program of implementation include a "description of surveillance to be undertaken to determine compliance with objectives." Cal. Water Code§ 13242(c). As above, the TMDL Amendment is plainly devoid of any "description of surveillance," and therefore it fails to satisfy with the Water Code.	The Proposed TMDL revision includes monitoring requirements to measure attainment of the dissolved copper load allocations.
65.29		The TMDL Amendment does not comply with the federal or state Antidegradation Policy. The federal Antidegradation Policy mandates that water use and quality "shall be maintained and protected." 40 C.F.R. § 131.12. Due to the lack of long term environmental testing on alternative biocide and non-biocide paint coatings, as well as the lack of site-	The antidegradation policy requires the attainment of water quality standards. The revision to the TMDL is necessary to achieve the water quality standards for Marina del Rey Harbor. There is a lack of evidence that non-biocide paint coating will cause degradation of the existing water quality and substantial evidence that biocide paint coatings do cause degradation and negative

		specific testing at Marina del Rey, RWQCB cannot confirm that the TMDL Amendment, which requires the use of alternative biocide or non-biocide paints, will maintain or protect the water use in the Marina.	impacts to beneficial uses. Given the available evidence, the Regional Board determined that the revised TMDL is appropriate and necessary to achieve water quality standards.
65.30		Similarly, the state Antidegradation Policy requires that any activity that may contribute to the concentration of waste must be controlled to assure that pollution or nuisance will not occur. State Water Board Resolution No. 68-16. Again, the RWQCB (or any other entity) has not performed sufficient testing on alternative biocide and non- biocide paint coatings to determine the long term effect of these compounds on the Marina or waters with comparable qualities. Accordingly, the RWQCB cannot ensure that the TMDL Amendment will not lead to increased or alternative forms of pollution or nuisance within the Marina.	See response to comment 65.29. There is a lack of evidence that non-biocide paint coating will cause pollution or nuisance. Given the available evidence, the Regional Board determined that the revised TMDL is appropriate and necessary to achieve water quality standards.
65.31		Potential for Impacts on Endangered and Threatened Species Copper-based antifouling paints have greatly reduced the transport of invasive species from marina to marina. Prior to adopting this TMDL Amendment, the RWQCB must examine the potential for the further spread of invasive species and the potential to harm endangered and threatened species, as well as ecologically sensitive habitat areas ("ESHAs"), along the California coast. The RWQCB should consult with the US Fish and Wildlife Service and the California Department of Fish and Wildlife regarding the potential for incidental take of federal or state-listed species, and with the California Coastal Commission regarding potential to impact ESHAs.	The particular method by which a discharger decides to achieve compliance with the revised TMDL is a project-level decision that will require an independent subsequent environmental review (Pub. Res. C. § 21159.2). Potential impacts to threatened and endangered species will be considered, and if necessary mitigated, at the time the method of compliance is selected. Furthermore, the Secretary of Resources was notified of the proposed revision of the TMDL and has not commented on the proposal
65.32		<u>Non-Compliance with California Government Code§ 11353.</u> The California Government Code mandates that the State Water Resource Control Board, when submitting regulatory provisions, must provide a "summary of the necessity for the	This provision applies after adoption of the TMDL by the State Water Board, and the basin plan amendment is submitted to the Office of Administrative Law. The summary is not required at this time. As detailed in the TMDL staff report, Basin Plan amendment, tentative resolution, and response to comments,

		regulatory provision." Cal. Gov. Code§ 11353 [hereinafter "Necessity Requirement"]. The RWQCB 's Tentative Resolution purports to satisfy the Necessity Requirement by referring to the Table 7-18 and the TMDL staff report as a whole.	however, the TMDL is necessary to comply with section 303(d)(1)(C) of the Clean Water Act. The standard is based on the CTR.
65.33		Neither document, however, sufficiently summarizes the necessity of this regulatory provision as to the amended copper standards. Table 7-18 lacks any succinct statement why the 3.1 micrograms per liter standard for copper in the Marina is "necessary." Likewise, the TMDL "Draft Staff Report" fails to summarize why such drastic copper reductions are "necessary."	See response to comment 65.32. In addition, the copper standard is based on the CTR and is not at issue in this TMDL. The provisions of the TMDL are necessary to meet the water quality standard for copper, which is dictated, in turn, by the beneficial uses of Marina del Rey Harbor. Protection of water quality necessary to protect and maintain beneficial uses is required by the Clean Water Act.
65.34		Moreover, three of the five beneficial uses that the staff report purports to protect are not currently permitted in the marina. These are: swimming, sport fishing, and shellfish harvesting.	See response to comment 13.6 and 14.9
65.35		In fact, the TMDL staff report only uses the word necessary in relation to copper once: "Refinement of the model may be necessary as efforts to reduce copper pollution in Marina del Rey Harbor proceed and our understanding of the site-specific factors affecting copper in Marina del Rey improves."10 This statement does not satisfy the Necessity Requirement, but it does underscore our earlier assertion that the RWQCB has not collected or analyzed data about site specific factors that may affect this standard for dissolved copper.	See responses to comments 65.32 and 65.33.
65.36		The RWQCB fails to satisfy the requirements of the California Environmental Quality Act ("CEQA"). The RWQCB has not analyzed the environmental impact of alternatives nor the reasonably foreseeable consequences of this regulation in the "Substitute Environmental Documents for Toxic Pollutants in Marina del Rey Harbor Waters Total Maximum Daily Load" ("CEQA Document"). *See* 14 Cal.	The comment mischaracterizes the SED. The Regional Board disagrees that the SED fails to include an analysis of the impacts of the alternatives. The SED analyzes three program level alternatives and more than 20 project level alternatives. The SED properly finds that program alternative 1 is the most environmentally feasible alternative, based on the fact that the

		Code Regs. §§ 15126.6 and 15187. For instance, the RWQCB failed to consider the economic losses to businesses in Marina del Rey when boaters will choose to dock their boats at nearby harbors that are not subject to this Amendment. More critically, the RWQCB fails to include an analysis of the impacts of the alternatives, and improperly defines away two reasonable alternatives as infeasible.	other two program alternatives do not meet the project purpose and would allow toxic pollutants to continue impairing Marina del Rey Harbor waters. (See Chapter 4). The potential for economic losses to businesses in Marina del Rey if boaters choose to dock their boats at nearby harbors is not a CEQA-relevant inquiry. The CEQA inquiry relates to what significant adverse environmental impacts are foreseeably attendant with the reasonably foreseeable means of compliance with the regulation.
65.37		The CEQA Document does not pass muster under Cal. Pub. Res. Code§21159(c). Section 211 59(c) requires that an environmental analysis take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and specific sites. The CEQA Document does not address enough specific-site factors (e.g. natural flushing rates of the Marina), and therefore does not satisfy Section 211 59(c).	The comment mischaracterizes the SED. The SED describes the proposed project and reasonable alternatives to the project in Chapter 4; identifies significant or potentially significant adverse environmental impacts in Chapters 6-7; analyzes mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts in Chapters 6.2 and 7; and analyzes reasonably foreseeable methods of compliance in Chapters 6.2 and 7. The Regional Board is prohibited from specifying the manner of compliance with its orders (Water Code § 13360), and accordingly, the actual compliance strategies will be selected by the local agencies and other permittees. Although the Regional Board does not mandate the manner of compliance, foreseeable methods of compliance are well known and site-specific factors are considered in the SED to the extent possible. For example, flushing rates of the Marina are accounted for in the modeling used for the dissolved copper linkage analysis. This SED, including the TMDL staff report the Basin Plan amendment, and tentative resolution should be considered as a whole when evaluating compliance with the Public Resources Code.

65.38		The CEQA Document does not have a proper scope of cumulative effects as defined in Section 15355 of the CEQA Guidelines. According to the CEQA Document, the only cumulative impacts of the project are noise and vibration, air quality, transportation and circulation, public service, and aesthetics. One overlooked impact is loss of recreation-dredging in the Marina and higher maintenance and administrative costs will impact the public's access to this recreation resource	The Regional Board disagrees that the SED does not have a proper scope of cumulative effects. The impacts to recreation due to dredging are analyzed in the SED in Chapter 6.2.2 at page 100. The argument that the cost of dredging will impact the public's access to Marina del Rey is not substantiated. In addition, potentially higher maintenance and administrative costs would be economic impacts, which do not contribute to and are not caused by physical impacts on the environment and an analysis of such costs is not required by CEQA.
65.39		In sum, the RWQCB has not satisfied its requirements to review all feasible alternatives, to compare the potential impacts of alternatives under CEQA and must take the ti me and research necessary to determine the Amendment's true impact on Marina del Rey.	Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the CEQA requirements for preparing environmental documents (14 Cal. Code Regs. § 15251(g); 23 Cal. Code Regs. § 3782). The Regional Board staff has prepared an SED for this project that contains the required environmental documentation under the State Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) The analysis considers all reasonably foreseeable environmental impacts associated with the proposed TMDL, including impacts associated with reasonably foreseeable implementation measures to be developed and deployed by others, at an appropriate level of detail.
65.40		The TMDL Amendment has not undergone external peer review under California Health and Safety Code§ 57004. Before this Amendment can be adopted, the Regional Board must consider and respond to all comments submitted by a peer review panel. See Cal. Health & Safety Code § 57004(d).	See response to comment 16.2. The Regional Board has complied with the external peer review requirements of Health and Safety Code section 57004 by relying on previously peer-reviewed scientific bases of the toxic pollutants TMDL.

65.41		Preempted by FIFRA The TMDL Amendment impermissibly restricts the sale of products that the federal and state government have approved. At a federal level, the EPA has authorized the sale of copper-based paints as pesticide products under the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. § 1 35 et seq.). And at the state level, the California Department of Pesticide Regulation (DPR") has authorized the sale of copper-based paints as pesticide products under 3 Cal. Code of Regs. § 6000 et seq. The RWQCB cannot usurp the authority of EPA and DPR and effectively foreclose a class of products that have been sold and used i n California for decades. The RWQCB has not cited to any legal authority that gives it this power nor can it do this *sua sponte.*	The proposed TMDL does not regulate the sale of copper-based paints. The Regional Water Board has the responsibility to formulate and adopt water quality control plans for all areas within the region. The plans must include beneficial uses to be protected, water quality objectives, and a program of implementation needed for achieving water quality objectives. A TMDL and its associated load and waste load allocations is a program of implementation to ensure that water quality objectives are achieved. Under the Clean Water Act, the Regional Board is required to adopt a TMDL for those waterbodies and constituents that are exceeding water quality standards. The proposed revision to the TMDL does not dictate the manner of compliance with the load and wasteload allocations. The Regional Water Board also has the authority to regulate the discharge of waste to waters of the state. "Waste" is defined as "any and all waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation…" (Cal. Water Code § 13050(d)). These waste discharge requirements shall implement any relevant water quality control plans and shall take into consideration beneficial uses to be protected (see Cal. Water Code § 13263(a)). Although EPA and the California Department of Pesticide Regulation may have authorized the sale of copper-based paints for use in general, the Regional Water Board has the authority to limit the discharge of copper to waters of the state. Because Marina del Rey Harbor exceeds water quality standards for copper, reduction in the discharge of copper is necessary to comply with the Porter-Cologne Water Quality Control Act and the Clean Water Act. In practical effect, the limitation on discharges of copper may require the discontinuation or reduction in use of copper-based paints.

65.42		In conclusion, much more work, analysis and study must be completed by the RWQCB before it can complete a TMDL Amendment for Marina del Rey. The public deserves a full analysis of the alternatives, their comparative environmental impacts, their economic impacts as well as a true understanding of their feasibility.	Comment noted
66.1	Thomas Santogrossi	To be clear, there would be a cost of $1000 per year? These costs are rather excessive don't you think? Many boat owners will not be able to afford these costs and it will became only affordable to the wealthy. I finally bought a boat last year and now I have to re-think it. What input do we have to this proposal?	See response to comment 14.8 and 5.11.
67.1	Asher Berlan	Re the proposed MDR WDR permit cost of $1094, is that a one time cost, or is it an annual fee, or what?	See response to comment 14.8
68.1	Essex Property Trust	As a lessee in Marina del Rey, we are concerned about the serious impact these regulations would have on our business. If adopted, this proposed change will affect our customers, our company, local businesses, and the surrounding community negatively.	See response to comment 19.2
68.2		Hundreds of boaters who rent slips in our marina would be forced to repaint their boat with an unproven, more costly alternative paint. Many boaters will simply leave this harbor altogether. Other potential customers would likely choose an unrestricted harbor instead of Marina del Rey.	See response to comment 05.6
68.3		We will also lose customers in the apartments and condominiums on the property, as they are here because of our waterfront views and the recreational lifestyle in the harbor. Local businesses engaged in boating activities depend upon the vitality of Marina del Rey as a destination for individual boaters and those seeking to enjoy the recreational amenities that are afforded by easy access to the water. The Marina is a	See response to comment 19.2

		destination for visitors who wish to enjoy our community and its renowned waterfront views. The economic effect on our business, and the business in the entire harbor, is immeasurable. Los Angeles County would also take a huge loss in revenue, as Marina del Rey contributes billions of dollars a year to the economy. There would be increased unemployment, reaching far beyond just the boating sector.	
68.4		These proposed regulations are nearly impossible for the lessees to enforce, as there is no way for marina operators to monitor what kind of paint boaters are using, especially in the case of visitors from other marinas. To make the lessees responsible parties in this amendment is akin to making parking lot attendants conduct smog checks.	Anchorages within the Marina congregate boats and thereby cause or contribute to the discharge of copper from a large number of boat hulls in the Marina del Rey Harbor. Anchorages also have the ability to control discharges. They exercise control and enforcement over boat owners and their discharges by way of conditional lease or license agreements with owners of boats moored within the anchorage leasehold. By way of these conditions, anchorage lessees can control the number of boats moored and the types of hull coatings used. For a full discussion of the legal authority to regulate discharges of copper from hull paints, see Section III of the Technical Report for the TMDL for Dissolved Copper in Shelter Island Yacht Basin included as a reference to the Marina del Rey Toxics TMDL Staff Report. The Regional Board will develop a regulatory program to implement and enforce the TMDL considering the input from lessees, boaters and other affected parties and stakeholders. At that time, the extent of involvement of lessees in implementing the TMDL can be determined. See also response to comment 14.8.
68.5		Limited outreach to the public, with highly technical information to respond to in a small time period. This will affect thousands of private citizens in the harbor and surrounding areas. Lessees were told to inform their	See response to comments 02.9 and 05.6

		customers just over 2 months ago, and the boater list provided by LA County for information to be distributed was 3 years old.	
68.6		The science on which the toxic levels were determined is not agreed upon by major regulatory agencies. The Department of Pesticide Regulation uses a biotic ligand model, with different limits than federal regulations. The BLM model is already used for freshwater, and the State of California is already on record in support of BLM. The Clean Water Act Section 101 (a)(2): "These criteria must reflect the latest scientific knowledge… And: EPA has made specific procedures available to States to derive site-specific criteria…" Predictions by the BLM that is under review by the USEPA will facilitate the development of a site-specific water quality standard.	See response to comment 04.4
68.7		The proposed TMDL has not utilized data from the leaching study required by AB 425, Life Cycle Contributions of Copper from vessel painting and maintenance activities [Earley, 2013]. This evaluation of toxicity found that passive leaching of copper antifouling paint created no toxicity, consistent with several previous studies.	See response to comment 04.2
68.8		No financial analysis is included in the TMDL. California Water Code (Section 13241) specifically requires that several, including economic cost be considered by a regional board in establishing water quality objectives.	See response to comment 16.5
68.9		There are no proven alternatives to copper-based hull paints.	See response to comment 05.6
68.10		The environmental impact of stripped paint disposal has not been acknowledged or addressed.	The comment is incorrect. The potential impacts to the environmental as a result of paint stripping are thoroughly discussed in the SED. (See Chapter 6.2.2, pp. 45 & 55) The SED was posted on the Regional Board website on November 5, 2013.
68.11		There was no specific site model for Marina del Rey. The 3.1 parts per billion has no basis.	See response to comments 04.4, 15.3, 08.4, and 09.3

68.12		Studies do not address the potential for invasive species when copper based paints are not used, nor the danger of additional algal growth to the fish populations.	See response to comments 13.7 and 16.13
68.13		The only other area with a similar regulation (Shelter Island) is nowhere near their copper reduction goal, and they are 60% of the size of Marina del Rey.	See response to comment 14.2
68.14		Boaters would simply take their boats to other marinas without restrictions and there would be a major loss of revenue and business in the area.	See response to comment 19.2
68.15		Because of these reasons, and the small amount of time to inform the public of this new proposal, there should be additional time to study the most effective way to reduce the copper levels in our harbor, and a consensus on what that target level should be. There are many things we can do proactively that allow our community to make important changes, and this proposed amendment is not the solution We believe that achieving better water quality is a laudable goal, but the effort must be reasonable and achievable. We hope to be able to proactively work with the appropriate groups to improve our water quality, and urge the Los Angeles Regional Water Quality Control Board to address all of these critical issues prior to adoption of a TMDL for copper in Marina del Rey Harbor.	Comment noted. See response to comment 2.9
69.1	Glen Solomon, Pacific Mariners Yacht Club	Pacific Mariners Yacht Club is not in favor of the upcoming regulations and fiscal impact they will have on the Marina del Rey Boating Community. Marina del Rey is a man-made marina that supplanted oil fields in the 1960s providing a recreational area for Los Angeles recreational boat use. The breadth of these requirements exceeds a level of reasonableness on the users of this community.	The Regional Board disagrees that the proposed TMDL revisions exceed a level of reasonableness. Marina del Rey Harbor was a wetland prior to the building of the harbor.

69.2		PMYC is in alignment with comments made by Los Angeles County Supervisor, Don Knabe, noting that there is not enough evidence to mount such an invasive burden on the merchants, residents, and boaters of Marina del Rey and the surrounding neighborhoods. PMYC supports healthy water initiatives in the Santa Monica Bay today for our future.	Comment noted
69.3		A review of the numerous papers and studies on copper based anti-fouling paints leave many unanswered questions about studies, and relativity of the studies, based on the immediate conditions in Marina del Rey from other marine locations.	It is not clear to which studies the comment is referring. See response to comment 05.6
69.4		The effects of copper leaching anti-fouling paints used in Marina del Rey have not been definitively proven to be detrimental to the developmental design and use of Marina del Rey. We acknowledge that using paints with lower levels of copper may provide an alternative means of achieving and maintaining the mandated TDM levels. This approach may accommodate boaters in not having to spend excessive amounts to completely remove existing bottom paints and repaint every two to three years and would promote less copper leaching and lower TDM levels.	See response to 14.7
69.5		The proposed annual permit cost of $1,094 mentioned in the literature is excessive and not well defined. What determination is used to that would require a boat owner to apply for and purchase such a permit? This seems more like a cash-grab than a potential solution to an unproven hypothetical environmental issue.	See response to comment 14.8
70.1	Greg Brinson	I oppose the dredging of Marina Del Rey without further consideration of less costly options or an outright cancellation of any such plans. It's my understanding that MDR is one of, if not the only marina considering a ban of copper paint and dredging at such expense to remove copper from the natural sediment.	There are several means of attaining the TMDL requirements and the County of Los Angeles, in complying with their load allocation, should choose an implementation alternative with minimum impacts to benthic habitat.

70.2		Boaters already pay inflated fuel charges, a bogus annual property tax on their vessels, and the government takes a cut of all slip fees paid. I understand as part of this proposal an additional fee in excess of $1,000 per vessel is being proposed. I'm still not sure if that's a one-time fee or annual. In typical California fashion, you'll continue to tax and spend without consideration of unintended consequences. Although, the more these types of decisions are made, the more I think they are fully intended. Boating and fishing are major contributors to the health of the businesses surrounding the marina and many livelihoods rely on this industry. You're destroying it and people will sell their boats and kill any headway we've started to make following the worst economic downturn we've experienced in decades. Please do not implement the Copper bottom paint ban. Especially with no alternative anti fouling options for the many boats in Marina Del Rey.	See response to comment 14.8
71.1	Hedy Aref	I completely disagree with imposition of new regulations that further reduce the durability of bottom paint we are currently using on our boats. As it is, due to reduction of copper content in the existing paint, we are faced with mediocre quality which drastically impacts how often we have to paint and the affiliated costs This, even additional, expense would hit everyone hard in the marina - particularly those that are just barely able to afford the monthly boat maintenance costs they are currently paying.	See response to comment 5.11
71.2		All of this would result in two things: 1) More defaults on slip rentals and abandonments than our marina is already faced with – leading to overall shoddy conditions of the area. 2) Boaters leaving Marina Del Rey in search of affordable rental rates – impacting property tax the County of Los Angeles is	See response to comment 19.2

		able to collect as boat owners would be leaving for Oxnard as an option.	
72.1	Jim Ferris	Don't so it. I agree with all the Marina Del Rey letters of protest. It is a scam to say the least.	Comment noted
73.1	Jeff Pence, Pacific Marina Development	Significant research has been conducted in the past 10 years to better understand leachate rates from boat paint and site-specific water quality conditions that affect copper bioavailability in the marine environment. We are concerned the Los Angeles Regional Water Quality Control Board's (RWQCB's) proposed 85 percent copper load reduction provided in this version of the Marina del Rey Toxics TMDL does not adequately consider the most recent available science. For example, recent studies conducted by Earley et al. (2013) suggest the passive leachate rate and boat-hull cleaning rates are significantly different than those provided in the steady state model provided in the Marina del Rey TMDL Draft Staff Report (dated November 5, 2013). We recommend the RWQCB consider the following studies and revise the steady state model assumptions to more accurately assess copper loading from passive leaching and hull-cleaning activities. We believe this more recent information will inform more effective copper reducing implementation actions and set more realistic expectations within the affected parties.	See response to comment 04.2
73.2		The use of the California Toxic Rule (CTR) copper value is overly conservative as a tool for predicting adverse impacts to marine organisms within Marina del Rey. We believe a site-specific numeric target should be developed for use in the TMDL. The use of CTR values is widely recognized within the scientific community to be overly conservative for use in a regulatory order and does not appear to be directly linked in any way to potential impacts in Marina del Rey. Multiple tools are now available to develop more accurate site-specific numeric targets for dissolved metals: Water-Effects Ratio	See response to comment 04.4

		(WER) and Biotic Ligand Model (BLM). While the use of the BLM for marine water quality is technically still under review by the U.S. Environmental Protection Agency (USEPA);the WER approach has been approved and recommended for use in similar situations by the USEPA for nearly 30 years. The WER provides methods for adjustment of criteria for the effect of site-specific water characteristics on pollutant bioavailability and toxicity to aquatic life. In 2001, the USEPA developed specific guidance for streamlined procedures for conducting WERs for copper. The use of site-specific numeric criteria for metals will allow a more clear and definitive demonstration of appropriate numeric standards. The use of strong science to demonstrate the linkage between boat paint and marine quality is necessary and required within the TMDL policy.	
73.3		Furthermore, the USEPA recommends the use of WERs specifically for copper in marine environments when dissolved organic carbon is present. "When the concentration of dissolved organic carbon is elevated, copper is substantially less toxic and use of Water-Effect Ratios might be appropriate." See USEPA's Aquatic life Criteria Table for copper footnote:	See response to comment 04.4
73.4		If the RWQCB will not consider the use of site-specific criteria for metals, then we request that water column toxicity data in conjunction with the exceedance of the CTR value be used to determine the potential for impairment to water quality. Further analyses (e.g., Toxicant Identification Evaluations) would be required to establish linkage between elevated chemistry and the presence of toxicity before cause and effect can be determined. This process is critical to ensure that reducing waterbody concentrations of a suspected toxicant, like copper will actually provide the targeted response in the resident marine organisms	See response to comment 08.4

73.5		As the RWQCB states in the copper loading allocation assigned to boats within Marina del Rey (Marina del Rey Taxies TMDL Staff Report, Section 4.10.2), the regulatory mechanism for controlling boat paint use is through the State's Department of Pesticide Regulation (DPR). As such, it is recommended that any limit on the use of copper-based antifouling boat paints be led by DPR.	See response to comment 04.5
73.6		With regards to the RWQCB financial impact analysis, potential cost impacts were only considered for individual boat owners and not the financial impact to marina operators and the local marina industry. Marina del Rey is the only harbor in Los Angeles and Orange counties that has been impacted thus far by the State's copper TMDL. Banning the use of copper-based antifoulant paints within Marina del Rey will simply cause most boaters to move to nearby harbors or leave boating because of this financial (and perceived as unnecessary) hardship. Only the wealthiest boaters will be able to afford to stay involved with boating and those may choose nearby harbors and hurt the local economy by creating unfair impacts on marina owners and businesses in Marina del Rey. While other harbors are scheduled for copper TMDL considerations; those TMDLs are years away from being enacted and when enacted will have years to become compliant. Thereby, the requirements set forth for Marina de l Rey will affect our community more than 10 years before other harbors are impacted by this legislation. The financial impacts also do not consider the socio-economic impacts.	See response to comment 5.11 and 19.2
73.7		We are concerned that an inadequate California Environmental Quality Act (CEQA) analysis has been performed an exemption is inappropriate. Given the significant financial burdens involved a full Environmental Impact Report (EIR) must be prepared.	Pursuant to Public Resources Code section 21080.5, the Resources Agency has approved the Regional Boards' basin planning process as a "certified regulatory program" that adequately satisfies the CEQA requirements for preparing environmental documents. The Regional Board staff has prepared an SED for this project that contains the required environmental documentation under the

			State Board's CEQA regulations. (23 Cal. Code Regs. § 3777.) See supra, Response to County of Los Angeles, Department of Public Works. The SED was posted on the Regional Board website on November 5, 2013. The SED is a programmatic environmental document and accounts for the reasonable foreseeable means of compliance. As a "certified regulatory program," the Regional Board must satisfy the substantive requirements of 23 CCR § 3777(a), which requires a written report that includes a description of the proposed activity, an alternatives analysis, and an identification of mitigation measures to minimize any significant adverse impacts. Mitigation measures and a CEQA checklist were included in the SED.
73.8		As new information is gained that increases our understanding of how these chemicals behave in the environment, how will the TMDL be modified to incorporate the latest science? As new regulations or state-wide policies become active, how will the TMDL be modified to incorporate the latest policies? Is the RWQCB planning on having another re-opener?	The TMDL can be reconsidered at any time to incorporate new information.
73.9		As a marina owner, how am I expected to implement this TMDL? Are we expected to police our tenants? How can we prevent the use of legal products?	The Regional Board will develop a regulatory program to implement and enforce the TMDL considering the input from lessees, boaters and other affected parties and stakeholders. At that time, the extent of involvement of lessees in implementing the TMDL can be determined.
74.1	John R. Walczyk	When I received notice from Marina Del Ray about the copper paint issue in the bay, I was immediately concerned. It's difficult to even gauge the impact TBT had on aquatic life back in the 60's and 70's and the thought of my boat leaching something similar made me sick. So I started to look for alternative paints and research the issue further.	Comment noted.
74.2		As you're probably aware, in addition to the push in our state, there's been a movement in a couple European countries to	The levels of copper coming from copper-based hull paint exceed water quality standards for California. See response to comment

		ban copper paints. However, after Denmark passed legislation to ban copper paint, their court later threw the law out because the impact copper paints have on the environment is "unproven." Do you have access to different scientific data than the Netherlands?	04.4.
74.3		I also understand the US EPA is set to make a decision by 2015 on whether registration is necessary countrywide. Can you justify this deeply cost-prohibitive policy change before the EPA makes a determination	It is not clear to what US EPA decision this comment is referring. See response to comment 04.5
74.4		I understand the 2011 Santa Monica Bay Watershed Management Area report done by the Regional Water Quality Control Board calls for the ban. I also have read reports dating back 10 years that monitor copper levels in the bay. What I haven't been able to find is the scientific data that shows what impact the existing copper level has on marine life.	The levels of copper coming from copper-based hull paint exceed water quality standards for California. See response to comment 04.4 and 14.3.
74.5		The Santa Monica Bay Restoration Commission's 2013 Plan mentions paint in "objective 2.4" but focuses more on the importance of controlling sewage than it does dealing with toxins in paints. I agree with the spirit of the commission and believe continuing to press pollution issues that have known consequences is a better use of time and resources.	Comment noted.
74.6		In my search for alternative paints, I found one company out of Massachusetts that makes EPaint, a paint which claims to be the number one copper paint alternative. I was unable to find a chemical analysis or any empirical data that proved the paint to be environmentally neutral. As such, I'm wondering if you might provide your data on alternative paints that can be guaranteed. After all, when TBT was banned, we were told copper paint was the safe alternative	The Regional Board cannot prescribe the manner of compliance with the TMDL. See response to comment 13.4
74.7		If you can prove to me that the copper paint on my boat has a negative impact on the environment, and that there's a tried and true environmentally safe paint, I'll be the first to get a new paint job.	Comment noted

75.1	John Rushing	The proposed ordinance requiring boat owners to strip old bottom paint and no longer use copper based bottom paint is precipitous, is not based on well founded science, and should not be enacted.	See response to comment 09.1
75.2		The studies cited by the ordinance's advocates were done on fresh water muscles, and not the muscles that live in our part of the Pacific ocean. A brief walk down any of Marina Del Rey's docks will show that our muscles and barnacles and other sea creatures are thriving. Dock bottoms, columns, walls, and rocks are covered with these creatures. Simply tie a board to the dock and come back in a few weeks and it will be covered in growth. Not only are these creatures thriving, but bait fish, shark, rays, octopus, and small fish are teaming in these waters. My son and I often see schools of sardines swimming below our dock, and have caught all of the above named sea life from the dockside. Whatever copper is being deposited into the MDR Harbor from boat bottoms does not have a noticeable effect on the wildlife.	See response to comment 04.4 and 14.3
75.3		The proposed ordinance will have a disastrous impact on MDR boating. Most MDR boat owners, like myself, are middle class. Just look at how many older boats are in the marina. Most of us have saved in order to afford a 30 year old boat. Requiring us to strip the bottom paint is financially prohibitive. Cost estimates for stripping the bottom paint are around $6,000 for a 30 foot boat. It is hard enough to afford a boat without this added cost. All this ordinance will do is cause middle class people to sell their boats--or move them to other marinas--leaving MDR to the wealthy. You will essentially be forcing families off the water. There will be thousands of kids who will be denied the chance to develop a love for the ocean, and if you are serious about helping the environment, you should be encouraging more middle class families to get out on the ocean. When a kid loves boating,	See response to comment 5.11 and 19.2

		he/she will be an environmentalist because of his/her close connection to the ocean. Please do not pass this measure.	
76.1	Dr. Joseph Nasser	This e-mail is on behalf of myself and five other people in my family. The Regional Water Quality Control Board issued a proposed amendment to the TMDL for toxic pollutants in the Marina del Rey Harbor last month, with an original comment period deadline to occur only days before the holiday season. Even the proposed extension to January 15th is insufficient for a number of reasons.	See response to comment 08.3
76.2		Unlike many environmental documents routinely reviewed by government agencies during a relatively short timeframe, the proposed TMDL for Marina del Rey Harbor is a complex set of documents and reports that require significant review by individuals and private parties, as well as experts, for a much longer period of time. The proposed TMDL requires scientific analysis and careful scrutiny of regulations that will be extremely onerous if not impossible to achieve.	See response to comments 05.6 and 08.3
76.3		As a marina operator, we have done our best informing our boaters and residents of this proposal within the short amount of time given, but many of them do not fully understand the language and scope of the amendment, or how it will affect them. Most of the boaters I have spoken with never received any kind of notification about this, and don't know what it means to be named a "responsible party". Even with our significant outreach through emails, postings on the gates, and talking to boaters in person for months, it has been very difficult to educate our customers in such a small window of time, especially since we are still learning the specifics of the proposal as well.	See response to comments 02.9 and 05.6
76.4		Many of the boaters I have spoken with expressed surprise at the proposal. They said that it will likely force them out of	See response to comments 02.9, 05.6, 19.2, 14.3, 14.8, and 24.3

		boating, or they will simply move to a different marina without regulations. Many of them thought the claim of hurting organisms in the harbor was laughable, as we all have noticed an increased population of fish, birds, sea lions, dolphins, whales, octopi, sea stars, jellyfish, mussels, lobsters, and other forms of marine life over the past few years. We are the people who enjoy marina life the most, and want the water to be of higher quality, more than the average person. This proposal wrongly targets and punishes the very population that could be the most proactive. There are many other ways to go about changing the habits and practices of people and businesses, and it takes more outreach and more education. Forcing boaters to switch to untested products that are vastly more expensive is not the best option.	
76.5		We need to do several things before we can begin to see a positive change in regards to the copper levels in Marina del Rey: First, our government regulatory agencies need to agree on the toxic level of copper. Other agencies and the State of California recognize the Biotic Ligin Model as the standard total maximum daily limit, and it is already used for freshwater bodies. Marina del Rey is also a contained, protected, man-made harbor. We do not have as much circulation, which does not flush our toxins out to sea. Why is this harbor being held to a higher standard than other marinas where the toxins are simply dispersed out into the ocean, doing other kinds of damage? We know that we have a higher level of copper compared to natural harbors; what we don't know is why there is no consensus about the science. Let's get one standard number for ALL marinas and water bodies, and use that as our goal.	See response to comments 04.4 and 21.9

76.6		Second, we need viable alternative paints to replace copper-based paints. There are NO EXISTING alternative paints that have been proven to be effective for boats in Southern California waters. The EPA-funded "Safer Alternative to Copper-Based Anti-fouling Paints Study" was vastly inadequate, in both the number of boats included in the study and the length of time the paint was monitored for effectiveness. The longevity estimated for alternative paints was extremely overestimated, and does not account for many variables, which is even acknowledged on the study. We need more studies done, specifically in our harbor, to determine the best options. We also need the paint companies to develop better, more affordable products. Currently, no boater is going to willingly switch to a costly paint that allows massive growth to slow and damage their vessel.	See response to comments 05.6 and 04.3
76.7		Thirdly, the boatyards, marina operators, divers, non-profits, yacht clubs, and other businesses involved in boating need to be able to educate and inform our customers. We need to have more accurate science and data, and be able to present good solutions to boaters instead of the Water Board forcing all of our hands by threat of "waste discharge permitting". Again, boaters want to have cleaner waters. This is not the way to reach our goal, and we can make vast improvements if given the opportunity. Let's increase dockwalker programs through the Bay Foundation, get more funding for classes regarding clean-boating, have more marinas get certified as a Clean Marina http://www.cleanmarina.org/, host events with alternative paint companies and environmental agencies and nonprofits, and finally, let's keep the discussion open about how to improve our waters together as a cohesive group.	See response to comment 02.9 and 14.8
76.7		Our anchorages and thousands of boaters are seriously impacted by these proposed regulations. The current review period is inadequate to the task. I respectfully request that the	See response to comment 08.3

		Regional Water Quality Control Board extend the comment and review period for at least 6 months.	
77.1	Keith Lambert	The complaint about copper paint is a mountain out of a molehill. Just like the scare tactics of the Fukashima radiation fake messages about it being here in the states. This too is a fake problem. There is plenty of life in the Marina Harbor. There is also a dearth of the same small animals as studied in the nearby basin on the far side of the Ballona creek at the Del Rey Lagoon. That lagoon does not have boats in it.	See response to comments 14.3 and 24.3
77.2		This marina is not a natural flowing waterway. This is a man made harbor. This was made for the benefits to the residents in Southern California. It enables average residents to boat and fish. Marina del Rey, California is a financial benefit to the County and the only real access point to Santa Monica Bay. A beautiful place to go out onto the waters of the Pacific. This is not a problem	See response to comment 38.1
77.3		This fake problem is an excuse to suck the life out of it and enrich someone and Flush millions of state money down the toilet for no good reason. Who is actually driving this insanity plan? For a minor expenditure you can do some real good by putting a reef in Santa Monica Bay. Call it mitigation if needed.	The TMDL is required by section 303(d) of the Clean Water Act.
77.4		Even the science behind this is suspect. This is a red herring to distract the people from other things that can be useful & relevant. Think about all the oil wells that used to be in this swampland. What chemicals were deposited then? Think about taking all the mud from the bottom of Marina Del Rey and placing them on the side of Ballona Wetlands to dry. Who wants to live down wind of that? Think about all the dredging soils stacked next to Ballona Creek to build Marina Del Rey. How about a test for copper and other metals in that soil for a base line before you make people spend thousands to scrape the bottom of their boats for no benefit. Or is this a	See response to comments 09.1 and 19.2

		payback for not being rich enough to not care. Or some sorry plot to drive many out of boating as this cost will force most of the small boaters to leave Marina Del Rey or quit boating all together.	
77.5		The down side is whopping big price and No useful end result. Just like the DDT and Montrose Super fund site off of PV. Over time it has proven that the best action is to leave it alone. The Montrose toxics are dissipating in place.	See response to comment 05.15
77.6		Same for MDR bottom sludge. Leave it where it is. Fish are doing just fine in Marina Del Rey. We should know. We have one of the MOST successful aquaculture fish raising pens in Marina Del Rey. My fishing club, Marina Del Rey Anglers, has raised well over 90,000 baby white seabass in our pens at Burton Chase Park. Of all the fish rearing pens up and down Southern California we have the lowest die off rates. Hubbs Sea World supplies us the fish. Their numbers do not lie. Growing healthy fish in Marina Del Rey is proof that we do not need to move this copper from the bottom of the harbor. This is a false problem.	See response to comment 14.3
77.7		The County Department of Harbors works long and hard to get just enough funding to keep the harbor open and barley get this much dredging. (http://argonautnews.com/sediment-removal-in-harbor-set-to-begin-soon/) Just 215,000 cubic yards of clean sediment in 2012.	See response to comment 15.14
77.8		Now this puffed up non-problem calls for how much dredging? At what outrageously expensive price? THIS proposal is like building the bullet train to San Francisco. Not a cheap proposition. Not needed. Not affordable. Not called for.	See response to comment 15.14
77.9		If not an out-right fabrication then, why force it through with	See response to comment 05.6

		insufficient public input and openness that allows all in Southern California and the whole state know what large expenditure you are planning. This would be a gross misuse of state funds. So give the public time to weigh in. Give the people of Southern California more information so that they can really weigh in. Not just a small set of environmental folks who do not care about the cost. And on the other side a few active boaters who are in touch with the actions of the county and city and your limited outreach.	
77.10		As for the removal of bottom paint, it will bankrupt and destroy boating for the little guy. This is a hobby sport for the typical boater. It is discretionary funds. This large expense will hurt a lot of people in a real deep financial way. AND it is unreasonable and libelous for the state to not offer an alternative before legislating out the current bottom paint. This needs more time. More openness. More options. Compromises or better yet, review of the need to allow boating in MDR Harbor to be exempt.	See response to comments 05.11 and 19.2
78.1	Mark Childir	I hate to express it but in contrary of the common believe, not every boat owner has lots of money to spend, I hardly justify the expenses like increasing slip fees, diver's bottom cleaning as single salaried family father with two kids. I have joined several times social cleaning activities around marina jetties and I know the water is disgustingly dirty, littered heavily by the help of Ballona creek's trash coming inside with tides. I will not be able to apply those fancy, expensive bottom paints and will prefer to give away my boat if you bring new expensive burdens on my little budget.	See response to comments 02.9, 05.6, 05.11 and 14.8

		As a boat owner being in the marina for a couple of years until now, I don't have any responsibility for the accumulation of the dirt in the water for decades, I don't have to pay the additional expense created to clean this dirt or in my belief, I should not think about giving away my boat since it is suddenly realized the water is contaminated. As already the livelihood at the marina for small boat owners with limited budgets is being trapped by economic conditions, I feel, our share at the marina is being removed and the marina is being converted to a place for wealthy people only.	
79.1	Marvin H. Sachse	The purpose of this comment letter is to request the Board's consideration of delaying the implementation of this costly, $100,000,000s, program with the potential for negative impacts on the environment, while additional studies and evaluations are conducted. The basis for the requested delay is enumerated in the following summary List of Concerns which are detailed in the body of this letter. Consideration of the impacts on the amount of copper entering Marina del Rey from storm water discharges from Ballona Creek have been neglected. The impacts from copper in storm water entering have been understated.	Comment noted. See response to comment 29.2 See response to comment 29.1
79.2		The impacts of the reductions of copper in the environment from both aerial deposition and storm water, resulting from: the recent ban on the use of copper in brake pads; the passage of the Municipal Separate Storm Sewer System (MS4)Permit and Construction General Permit (CGP); and the soon to be passed new Draft Industrial General Permit (IGP) were not considered.	See response to comment 29.1

79.3		The impacts on copper reduction through the process of natural attenuation have been dismissed in spite of significant evidence of its importance in reducing the presence of pollutants in the environment, and warrants further consideration.	See response to comment 05.15
79.4		The sampling of Marina water collected in December 2013, shows that there are locations in Marina del Rey with no (Non Detectable) amounts of copper, contrary to that which is stated in the referent report.	The data in the staff report were obtained through the Coordinated Monitoring Plan (County of Los Angeles Department of Public Works 2012a, County of Los Angeles Department of Public Works 2012b) and represent the time period from 2010 to 2012. More recent data was not available at the time that the staff report was released. Even if more recent data were included, the exceedance frequency would still be greater than the allowable amount under the Statewide 303(d) Listing Policy.
		The laboratory findings that Marina water with copper concentration of 12 ug/l and 14 ug/l were found to be non toxic even though the values exceeded the referent report acute target: CTR CCC of 4.8 ug/l. The limit for copper appears to be inaccurate based upon sampling data showing copper concentrations of 12 ug/l and 14 ug/l to be non-toxic.	See response to comment 08.4
		Modeling errors exist when using Shelter Island data for the basis of the Marina del Rey model.	See response to comment 09.3
		The cost estimate is inaccurate and incomplete	The cost estimate is an estimate based on reasonably foreseeable methods of compliance
79.5		The impact of the Copper Ban in Marina del Rey will adversely affect Marina del Rey's beneficial use of Recreational Boating.	See response to comment 41.1
		The results of the Department of Pesticide Regulation study to	See response to comments 05.12, 15.2, and 04.5

		determine the leach rate for copper-based antifouling paint has been ordered under California AB 425, but the results are still under study and have not been utilized in the establishment of the TMDL. The Referent report does not include a review of the impacts on copper concentrations resulting from the Shelter Island Copper Paint Ban Program. My concerns are based upon two personal perspectives. The first perspective is that of a lover of the ocean, manifested in my active SCUBA diving, ocean water skiing, and boating.	See response to comment 14.2 Comment noted
79.6		My other perspective deals with the technical issues of the copper ban. My technical qualifications include a Masters Degree in Environmental Engineering, a Masters degree in Industrial Engineering, a California State Licensed Professional Industrial Engineer, A CASQA certified Construction General Permit Trainer of Record, a Qualified SWPPP Developer and Practitioner, and an EnviroCert Certified instructor for the following certifications: Certified Professional in Storm Water Quality, Certified Professional in Erosion and Sediment Control, and Certified Erosion and Sediment Control Inspector. Additionally, I am the Program Manager for one of the largest State of California approved Storm Water Group Monitoring Programs, consisting of nearly 300 Automobile Recyclers, So CalGMP	Comment noted
79.7		The draft Report was completed November 5, 2013, and two meetings to discuss the findings were scheduled 30 days later, barely time for the "Xerography" to dry, and initially public comment was to submitted by December 15, 2013. The question is raised as to why an accelerated schedule is being impressed upon this program?	See response to comments 05.6 and 08.3

79.8		The efforts of the LARWQCB to meet with the public and provide additional public comment time by moving the submission date from December 15, 2013 to January 15, 2014 is greatly appreciated.	Comment noted
79.9		Consideration of the impacts on the amount of copper entering Marina del Rey from storm water discharges from Ballona Creek have been neglected. Ballona Creek is the second largest storm drain channel in the LA Watershed. Its discharge is contiguous to the south entrance of Marina del Rey. The water from Ballona Creek is tidal and also conveys tremendous amounts of polluted water to the ocean. The polluted contaminant laden water discharged into the ocean is know to circulate into Marina del Rey containing sediment and floatables into Marina del Rey. No mention of Ballona Creek's discharges or pollutant contributions, which include copper, to the waters of Marina del Rey have been addressed or even considered in referent report.	See response to comment 29.2
79.10		The impacts from copper in storm water entering Marina del Rey from Oxford flood control Basin have been understated. The Weston Solutions 2008 study, "Oxford Retention Basin Sediment and Water Quality Characterization Study", is believed to have been conducted during the time that the flood control basin was utilized as a bird and animal sanctuary. The removal of the basin's animal life from the basin would eliminate transfer mechanisms of polluted material to Marina's back basins. This consideration was not reflected in the sampling data.	The effect of Oxford basin and the Oxford basin Remediation project are considered in the Staff Report and BPA.
79.11		Para. 4.1.1.1 Figure 4-2a of the referent report shows a decline over time of pollution levels in basins D, E, and F.	All measurements exceed the numeric target.

79.12		The Oxford Basin serves as a settling basin and detention basin for the major storm water inflows to the back harbor. Many studies suggested that the Oxford Basin may be a significant contributor of contaminants in the back basins based on the high contamination levels existing in the drainage basin and the correlation between back harbor and Oxford Basin Concentrations during storm events (LARWQCB 2005c).	The effect of Oxford basin and the Oxford basin Remediation project are considered in the Staff Report and BPA.
79.13		Para 4.1.4 and 2.1.3 indicates that storm borne fine sediment pollutant loading was greater than the TMDL target limits. This, in essence, establishes the fact that other sources of copper exist besides copper bottom paint, which is contrary to the findings that the main source of copper in the marina is bottom paint.	See response to comments 29.1 and 29.3.
79.14		The impacts of the reductions of copper in the environment from both aerial deposition and storm water, resulting from: the recent ban on the use of copper in brake pads; the passage of the Municipal Separate Storm Sewer System (MS4) Permit and Construction General Permit (CGP); and the soon to be passed new Draft Industrial General Permit (IGP) were not considered.	See response to comment 29.1
79.15		According to the referent report, Figures 4-12 (4-11a and 4-12b), it appears that dissolved copper in the back basins and the front basins, respectively, are declining. It is clear that there is a downward trend in the pollutant concentration. It is readily apparent that existing BMPs; source control BMPs; and new source control BMPs will result in copper reductions. The elimination of copper in brake pads; and the implementation of source control BMPs on point source permitees mandated under the Industrial General Permit, the Construction General Permit, and the Municipal Separate Storm Sewer System Permit will further reduce cooper in the environment. Non-point source contributions are regulated by	The Regional Board disagrees that there is a significant downward trend in copper concentrations and notes that most of the data points exceed CTR criteria. See response to comment 29.1

		the MS4 Permit and will further act to reduce the presence of copper for assimilation in the environment.	
79.16		The impacts on copper reduction through the process of natural attenuation have been dismissed in spite of significant evidence of its importance in reducing the presence of pollutants in the environment, and warrants further consideration.	Copper is a conservative pollutant and does not readily degrade in the environment.
79.17		Remediation of the sediment is to be accomplished by dredging and capping the existing sediment according to Para of the referent report. Paragraph 4.10.3.1 - Regulatory Mechanism for Load Allocation to Sediment listed Monitored Natural Attenuation of Contaminants as a potential measure to cleanup the contaminated sediment and subsequently dismissed its consideration as a mitigation measure in favor of the $100s million dollar dredging and capping option. It should be noted that after years of study of the Montrose DDT superfund site off the Palos Verdes Peninsula, it appears that the DDT has significantly been reduced to such low levels of toxicity that mitigation has nearly been attained without the expenditure of the proposed $60 million Superfund cleanup, according to the latest EPA sampling, as stated in Environmental Health News, March 13, 2013, Marla Cone, LA Times November 16, 2013. The last round of tests indicated that the contamination has all but vanished according to the above sources and the EPA. It is believed that the DDT at this toxic hot spot has been eliminated through the natural attenuation process. The parallel between PV and Marina del Rey lies in the fact that in addition to the copper from boat bottom paint, copper bearing storm water runoff enters Marina del Rey from two storm	See response to comment 05.15

		drain systems, Ballona Creek and the Oxford flood control basin. In addition to copper from the bottom paint, an additional copper source is contaminated storm water. The parallel with PV is that a significant amount of copper will be eliminated from the storm water through the passage of legislation restricting the amount of copper material usage in brake pads, and the elimination of significant quantities of copper from industrial and construction sites due to the promulgation of the new Construction General Permit and the Municipal Separate Storm Sewer System Permit.	
79.18		The sampling of Marina water collected in December 2013, shows that there are locations in Marina del Rey with no (Non Detectable) amounts of copper, contrary to that which is stated in the referent report. Sampling data dated 12/11/2013, Sample #: 333566-002, Sample 3 G2116. The basis for the conclusion that the Marina is contaminated is from samples collected in 2008 and is an inaccurate pollution assessment. Paragraph 4.4.1 of the referent report inaccurately states, "Based on the number of exceedances at each site as well as the total number of exceedances throughout the harbor, the water column throughout the harbors is impaired by copper." The December 2013, non detect result is an accurate indication that copper is **not** throughout the harbor's water column. It seems extreme to base a program that could have the potential to run into 100s of millions of dollars on out of date data	See response to comment 79.4
79.19		The laboratory findings that Marina water with copper concentration of 12 ug/l and 14 ug/l were found to be non toxic even though the values exceeded the referent report acute target: CTR CCC of 4.8 ug/l. The limit for copper appears to be inaccurate based upon sampling data showing copper	See response to comments 04.4 and 08.4

		concentrations of 12 ug/l and 14 ug/l to be non-toxic. Sampling data, see attached, is based upon a questionable standard for copper in the water column of 4.8 ug/l or 4.8 parts per billion.	
79.20		The sea water with copper concentrations in the 12 to 14 ug/l range were utilized in an acute toxicity test, by Acute Bioassay Consulting labs (ABC Labs), **December 26, 2013** The sea water sample was found to be non toxic. This is in direct conflict with the findings that the acute California Toxics Rule (CTR) of 4.8 ug/l is a valid number, when copper concentrations of 12 and 14 ug/l were found to be non toxic.	See response to comments 04.4 and 08.4
79.21		Modeling errors exist because the model for Shelter Island data was applied to Marina del Rey Shelter Island is a Marina within a confined bay, removed from the open ocean by approximately 2 miles. The water from with the bay enters and exits Shelter Island's Marina through a 600 foot wide opening. Marina del Rey's main channel opens directly to open ocean through a main channel opening that is over 900 feet across.	See response to comments 08.4 and 09.3
79.22		The cost estimate is inaccurate and incomplete. The sediment removal costs, according to para 5.2 of the referent report range from a low of $14,737,800 to almost $200,000,000 if the sediment requires removal from under the boat slips. This accounting only dealt with the removal cost, ignoring the loss of revenue to lease holders and the county due to the need to vacate the slips during the dredging process. This does not include the fact that boaters will be relocating to other marinas which might be a more attractive long term location than the more costly MDR Marina. Also, many boaters deem boating a luxury, which can be replaced with another	See response to comments19.2 and 41.1

		lifestyle if the cost of boating exceeds the boat owners personal tipping point. The impact of the Copper Ban in Marina del Rey will adversely affect Marina del Rey's beneficial use of Recreational Boating (Rec 2).	
79.23		The results of the Department of Pesticide Regulation study to determine the leach rate for copper-based antifouling paint has been ordered under California AB 425, but the results are still under study and have not been utilized in the establishment of the TMDL, which is the purpose of the study. a. Referent report, Para 4.10.2, Copper load Allocation to Boats stated that, "the Department of Pesticide Regulation (DPR) is currently reviewing the use of copper in antifouling paints." AB 425 requires the DPR to ascertain the leach rate of copper based antifouling bottom paint used on recreational boats. b. This section continues to state, "The efforts discussed above vary in their readiness for implementation and it is uncertain what outcomes can be anticipated." The term "efforts" refers to antifouling paint recommendations other than the presently utilized copper based antifouling paints, and broader approaches to antifouling....that do not rely solely on hull paint. It would appear logical and appropriate to complete the necessary research to develop a practical and cost effective solution to a problem, and more over, to fully identify that a problem exists, prior to committing hundreds of millions of tax payer dollars to a poorly defined problem for which there does not appear to be an effective solution.	See response to comments 05.12, 15.2, and 04.5
79.24		The Referent report does not include a review of the impacts on copper concentrations resulting from the Shelter Island Copper Paint Ban Program. What are the result of the copper bottom paint ban on the waters of Shelter Island? No reports can be found and no evidence of the ban's effectiveness or lack of effectiveness has been located. Before	See response to comment 14.2

		investing hundreds of millions of dollars one would think that the Shelter Island program could well serve as a model test case to clearly establish what should be the science used in other marinas.	
79.25		The article entitled Spatial Distribution of Copper in relation to recreational boating in a California Shallow-water basin, Carlos Neira, et. al. Chemistry and Ecology, Vol. 25, No. 6. December 2009, 417-433 states:	See response to comment 52.4
79.42		Paragraph 6.3.2 Shelter Island Yacht Basin: a self detoxifying system? ..."This means, that despite the continued release of dissolved Cu (and Cu++) at the head region of Shelter Island Yacht Basin, Cu appears to be rapidly complexed, probably through the in situ production of Cu-binding ligands. The decline of Cu complexation capacity in surface water toward the mouth of the basin, and the relatively high and uniform Cu complexation capacity distribution in bottom water, ...suggests that in porewater a complex mixture of ligands may occur, lowering CU++ below toxic levels." Para. 6.3.4 concludes with the statement, "However, low free Cu++ suggest that sediment may be relatively non toxic to infaunal invertebrates."	See response to comment 05.9
79.43		There are far too many questions that are unanswered, with far too few options, to invest hundreds of millions of tax payer dollars in a program that may result in few, if any, positive environmental benefits. It appears that it would be prudent to delay the Marina del Rey copper bottom paint ban until a clear resolution of the unknown elements of its ban can be clearly identified.	See response to comments 05.6 and 09.1
80.1	Michael Auer	Of course protecting marine life and water quality get high value from me, and from folks like me. And some sort of copper mitigation plan is welcome, but yours is a nuclear option, and your plan as written will either cost me 10,000 to 15,000 dollars that I don't have, or force me to leave Marina	See response to comments 05.11 and 19.2

		del Rey, my liveaboard harbor since 1991, or force me to sell my boat, into which I've invested my life savings. My hope is that we can negotiate some sort of program to adequately protect marine life and to allow avid boaters like me to continue to responsibly enjoy our time around the water.	
80.2		Why such a strict standard for copper levels in the Marina bottom? You've proposed a level far stricter than anything I've ever seen, and I wonder what's so special about Marina del Rey that such a stringent standard is necessary? You note (page 39) that 'toxic pollutants shall not be present at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health...', but other State agencies have historically recommended against eating bottom-feeding fish caught in the near off-shore, and that water circulates into Marina del Rey; will our water ever be clean enough to support fish that you would eat? Do you eat fish from Los Angeles Harbor? Santa Barbara? Monterey? Who eats fish from boat harbors, anywhere? Some of my friends grew up in Venice, before the Marina was built, and they refused to eat fish from the wetlands, even then. The water simply does not circulate enough to clean itself.	See response to comment 21.9 and 04.4
80.3		What recreational uses are affected by copper accumulation from boats? These same friends would not swim in the wetlands in 1962, before the Marina was built, and there would be no Marina, in any condition, were it not for boating. What uses, real or imagined, are driving this parade?	See response to comment 14.9
80.4		And why are your models based upon 100 percent occupancy, when the Marina usually runs about a 10 percent vacancy rate? Your model overestimates the contribution of each boat by at least 10 percent, and this translates into additional inaccurate costings to boaters. We're willing to do our part, but we don't want to have our part defined by an inaccurate computer model. Finally, you note (page 33) that 'Marina del	Federal law and implementing regulations require that a TMDL address the critical condition. Thus, the proposed TMDL is designed to be protective of water quality while the harbor is operating at its maximum capacity. See also response to 08.4 and 09.3

		Rey modeling suggests antifouling contributes 3609 kg/yr of disssolved copper to Marina del Rey Harbor.' Your casual reliance upon a suggestive rather than a definitive modeling suggests a misuse of scientific logic; you have probably exceeded the permissible limits of inference on this critical point, with the inevitable clouding of the debate. Bad use of good science leads to bad policy, doesn't it?	
80.5		Why is replacement of copper antifouling paint voluntary in some harbors and mandatory for Marina del Rey? Why have you decided to make individual boaters responsible for a situation not of our making? We used the only paints available. If this were a tobacco liability situation, or an automobile exhaust emission case, would you go after smokers or car owners? Were you the judges hearing the National Football League concussion suits, your liability strategy would have you deciding to tell the players that they were out of luck, that they were solely responsible for their dementia and early deaths, and that the League bore no responsibility. Additionally, you're essentially setting up a situation to let paint manufacturers profit twice, once at the front end, with copper-based paints, and again, at the back end, by supplying environmentally acceptable replacements. Have you considered any of the economic aspects of your proposal, or are you looking only at a thin slice of the whole situation? Are you jumping on the little guy because you really think we're at fault, or are you doing it because it's the easiest way to enforce your program? Did you even consider a shared liability? Torts law-the law of damages-looks at contributory negligence, the relative contribution of each party to the damage; have you considered such a doctrine? Above all, why did you decide not to share your rationale for making individual boaters solely responsible for pollution resultant from products not of our making?	It is both fair and legal to assign responsibility for reducing copper in Marina del Rey Harbor to boat owners. Based on the source analysis and linkage analysis, the major source of dissolved copper in the harbor is copper from boat paint; therefore, this load allocation must be assigned to achieve the TMDL. Furthermore, the copper discharged from antifouling paints is a "waste" pursuant to California Water Code section 13050(d). According to CWC section 13263(g), "All discharges of waste into the waters of the State are privileges, not rights." For a full discussion of the legal authority to regulate discharges of copper from hull paints, see Section III of the Technical Report for the TMDL for Dissolved Copper in Shelter Island Yacht Basin included as a reference to the Marina del Rey Toxics TMDL Staff Report. See also response to comments 14.8, 16.5, and 29.1

80.6		Why no evident concern for the relative ineffectiveness of alternative antifouling products? Your proposal mandates that I spend lots of money to remove the copper-based paint from my vessel's bottom but appears to cast the welfare of that metal hull to the winds. What is it about 2024 that is so magical? Why can't you delay implementation of your very worthwhile program until alternative bottom paints of proven effectiveness are available? I am reminded of Werner von Braun, the eminent German rocket scientist, whose V-1 and V-2 rockets wreaked death and havoc on London during World War II. He was interested only in how the rockets went up, not where they came down. Your program has consequences for boaters, although it's designed to protect fish. Don't we humans also deserve some protection?	See response to comments 05.6 and 05.11
80.7		Why not explore a strategy that would allow us to paint over our copper-based paint with some sort of barrier coat, and then paint that with an acceptable alternative bottom paint? Has this approach been researched? What about copper-based paints with lower leach rates, combined with more environmentally friendly bottom cleaning protocols?	The Regional Board cannot prescribe the manner of compliance with its orders. The proposed TMDL revision is not a ban on copper-based paint and there are many potential means for attaining the required copper reductions. See also response to comment 14.8.
80.8		Why are you so willing to force an exodus of boats and boaters from Marina del Rey, and force the ensuing damage to businesses dependent upon boaters and boats, and lower Los Angeles County tax revenues attached to those boats that will leave the County? If I vacate, it will be to another county with a more reasonable toxics policy, and my pension and my vessel property tax will go with me. Multiply this by several hundred, or even a thousand, which is one-seventh of the boats moored in Marina del Rey, and the numbers get interesting. Why does your report include nothing about likely impact on boating economy in Marina del Rey?	See response to comment 19.2
80.9		Why are you unwilling to await the 'Department of Pesticide Regulations... (determination) of a leach rate for copper based	See response to comments 05.12, 15.2, and 04.5

		paints on recreational vessels and to make recommendations for appropriate mitigation measures...'? As you note (page 42), AB 425 authorizes DPR to perform this work. Why are you not working with them? And while your endorsement of a multiagency, multiharbor approach may yield a larger number of promising strategies, invevitably, some boaters in some harbors will be penalized by ineffective yet costly strategies. We are not your research subjects, and we do not want to fund your explorations with our dollars. You do the research with your budgets, identify a set of best practices, and then go public. Answering these questions will take time, assuming you actually care about the points of view of persons affected by your policies. A basic tenet of democracy is that people affected by a decision should be deeply involved in shaping it. I therefore urge as lengthy a period of discussion and reconsideration as is feasible, and I look forward to answers to my questions. Something has to be done about copper levels in the Marina, and something will be done. Why not do it right?	
81.1	Michael Riley	Please reconsider your " in a rush " evaluation of the new regulations with regards to the reduction of copper based paints. I believe that a much more thorough investigation of this matter is needed. Please consider the enormous cost, in the tens of millions of dollars for any and all of the small boaters such as myself. Please consider the loss of revenue if boaters leave Marina del Rey for another marina ? Finally PLEASE stop trying to over regulate boating as with everything else our way over-zelous government can get their hands on. Yesterday someone said to me " maybe the city should just pave over the entire marina and charge for parking and a surcharge for breathing ocean air "	See response to comments 05.6, 05.11, and 19.2
82.1	Neil Hamadey	Please be advised that the extremely small copper element caused by bottom paint exuded from boats doesn't warrant the environmental cost of dredging nor the banning of the paint at	See response to comments 29.1 and 29.3

		this time.	
83.1	Randy Short Almar Marinas	Significant research has been conducted in the past 10 years to better understand leachate rates from boat paint and site-specific water quality conditions that affect copper bioavailability in the marine environment. We are concerned the Los Angeles Regional Water Quality Control Board's (RWQCB's) proposed 85 percent copper load reduction provided in this version of the Marina del Rey Toxics TMDL does not adequately consider the most recent available science. For example, recent studies conducted by Earley et al. (2013) suggest the passive leachate rate and boat-hull cleaning rates are significantly different than those provided in the steady state model provided in the *Marina del Rey TMDL Draft Staff Report* (dated November 5, 2013). We recommend the RWQCB consider the following studies and revise the steady state model assumptions to more accurately assess copper loading from passive leaching and hull-cleaning activities. We believe this more recent information will inform more effective copper reducing implementation actions and set more realistic expectations within the affected parties.	See response to comment 04.2
83.2		The use of the California Toxic Rule (CTR) copper value is overly conservative as a tool for predicting adverse impacts to marine organisms within Marina del Rey. We believe a site-specific numeric target should be developed for use in the TMDL. The use of CTR values is widely recognized within the scientific community to be overly conservative for use in a regulatory order and does not appear to be directly linked in any way to potential impacts in Marina del Rey. Multiple tools are now available to develop more accurate site-specific numeric targets for dissolved metals: Water-Effects Ratio (WER) and Biotic Ligand Model (BLM). While the use of the BLM for marine water quality is technically still under review by the U.S. Environmental Protection Agency (USEPA); the	See response to comment 04.4

		WER approach has been approved and recommended for use in similar situations by the USEPA for nearly 30 years. The WER provides methods for adjustment of criteria for the effect of site-specific water characteristics on pollutant bioavailability and toxicity to aquatic life. In 2001, the USEPA developed specific guidance for streamlined procedures for conducting WERs for copper The use of site-specific numeric criteria for metals will allow a more clear and definitive demonstration of appropriate numeric standards. The use of strong science to demonstrate the linkage between boat paint and marine quality is necessary and required within the TMDL policy. Furthermore, the USEPA recommends the use of WERs specifically for copper in marine environments when dissolved organic carbon is present. "When the concentration of dissolved organic carbon is elevated, copper is substantially less toxic and use of Water-Effect Ratios might be appropriate."	
83.3		If the RWQCB will not consider the use of site-specific criteria for metals, then we request that water column toxicity data in conjunction with the exceedance of the CTR value be used to determine the potential for impairment to water quality. Further analyses (e.g., Toxicant Identification Evaluations) would be required to establish linkage between elevated chemistry and the presence of toxicity before cause and effect can be determined. This process is critical to ensure that reducing waterbody concentrations of a suspected toxicant, like copper, will actually provide the targeted response in the resident marine organisms. As the RWQCB states in the copper loading allocation assigned to boats within Marina del Rey (*Marina del Rey Toxics TMDL Staff Report*, Section 4.10.2), the regulatory	See response to comment 08.4 See response to comment 04.5, 05.12, and 15.2

		mechanism for controlling boat paint use is through the State's Department of Pesticide Regulation (DPR). As such, it is recommended that any limit on the use of copper-based antifouling boat paints be led by DPR.	
83.4		With regards to the RWQCB financial impact analysis, potential cost impacts were only considered for individual boat owners and not the financial impact to marina operators and the local marina industry. Marina del Rey is the only harbor in Los Angeles and Orange counties that has been impacted thus far by the State's copper TMDL. Banning the use of copper-based antifoulant paints within Marina del Rey will simply cause most boaters to move to nearby harbors or leave boating because of this financial (and perceived as unnecessary) hardship. Only the wealthiest boaters will be able to afford to stay involved with boating; and those may choose nearby harbors and hurt the local economy by creating unfair impacts on marina owners and businesses in Marina del Rey. While other harbors are scheduled for copper TMDL considerations; those TMDLs are years away from being enacted, and when enacted will have years to become compliant. Thereby, the requirements set forth for Marina del Rey will affect our community more than 10 years before other harbors are impacted by this legislation.	See response to comment 19.2
83.5		The financial impacts also do not consider the socio-economic impacts. There are hundreds of live aboard boater who, mostly life on a very tight budget that would be severly impacted.	See response to comment 05.11
83.6		We are concerned that an inadequate California Environmental Quality Act (CEQA) analysis has been performed; an exemption is inappropriate. Given the significant financial burdens involved, a full Environmental Impact Report (EIR) must be prepared.	See response to comment 16.12

83.7		We respectfully submit the following questions. Question 1. As new information is gained that increases our understanding of how these chemicals behave in the environment, how will the TMDL be modified to incorporate the latest science? Question 2. As new regulations or state-wide policies become active, how will the TMDL be modified to incorporate the latest policies? Question 3. Is the RWQCB planning on having another re-opener? Question 4. As a marina owner, how am I expected to implement this TMDL? Question 5. Are we expected to police our tenants? Question 6. How can we prevent the use of legal products?	See response to comment 73.9
84.1	Richard Schaefer	I too about the environment. However this proposal for Marina Del Rey does not make a good investment. It is not good for the boaters. It is not enough benefit for the cost for the fish. And, it will cost boat owners an unfair amount. Also I just learned about the proposal. Obviously it needs to be vetted more in the public. This is too big a project to be rushed through. And the proposed expense and labor intensive proposal is worthy of more public input and possibly some compromises. Please do not implement the Copper bottom paint ban. Especially with no alternative anti fouling options for the many boats in Marina Del Rey. Please include me on the future mailing lists of meetings. We sportsmen do care about the environment.	See response to comments 05.6 and 05.11

		We have no desire to fish in a cesspool or fishless waters. We willingly support and fund ecologically sound management of our natural environments. This project is not a sound one for financial and recreation reasons.	
85.1	Robert Godfrey	The official justification for this initiative is outrageously overstated. The facts are there are more bathers at Mothers Beach, more kayakers, more paddle boarders, more seals and sealions, more fish and more seabirds than ever before. I have had a boat in the Marina for over 50 years and have first hand knowledge of the improvement in water quality recently The payoff for this expenditure by the Board has been totally over looked. What will this TMDL change that will improve the local environment for the people and wild life? The Boards resources would be better invested in solving the "red tide" or "contaminants of emerging concern, storm run off problems.	See response to comment 14.3 and 24.3
86.1	Roger West	This regulation of governmental intrusion on monitoring my bottom paint is an outrage!! If we have to use a different paint that needs to be applied more often what about the paint dust produced by having to sand and repaint the bottom more often. What happens if this paint dust settles on the water at the marina?? What about the toxic fumes produced by the open paint cans because the boat has to be painted more often. It is clear to me that the $1094 permit fee is just a way to shake down the boating community. My boat is a 23' sailboat, it is worth less than $4,000. I can live with the $25 fee to the DMV for registration, but the $1094 is way out of order.	See response to comments 14.8 and 16.12

		I would appreciate it if you could answer the above questions.	
87.1	Ronald Hasson	In regards to the proposed dredging of Marina del Rey and the copper bottom paint ban: I am a sportsman, fisherman and most important a taxpayer in Los Angeles. I have been actively fishing the Pacific Coast for over 60 years. I have kept a boat in Marina del Rey for about 25 years. First off, before we rush into spending money that I have sent into our government we should have a complete understanding of the total amount to be expended---we have been fighting a balanced budget for sometime now and now is not the time to waste my money. In regards to copper paint, it has been used for years and I for one have noticed our harbor (MDR) getting cleaner----the last 2 years I have seen more small fish anchovy, mackeral, etc than ever in our harbor. Please vote no on this proposal	See response to comments 05.11, 14.3 and 24.3
88.1	Sean Caples	All this to do about improving the water quality by limiting the amount of copper is a joke compared to what you really should be focused on, radioactive water!!!! It is killing everything in its path, and it's here now. I am selling my boat because I know more than most, pass this copper law and the marinas will empty soon after. Look into what's happening in Japan, and it will give you something to really rally for. Wake up!	See response to comment 24.3
89.1	Sharon Cloward	The San Diego Port Tenants Association represents the maritime and hospitality businesses operating in the tidelands surrounding San Diego Bay. We sincerely appreciate this opportunity to comment on the proposed amendment to the Water Quality Control Plan – Los	Comment noted

		Angeles Region revising the Total Maximum Daily Load for Marina Del Rey Harbor, Toxic Pollutants (Marina Del Rey TMDL Amendment). As regional stakeholders, vitally concerned with the economic impact of the Dissolved Copper Total Maximum Daily Load (TMDL) applied to the Shelter Island Yacht Basin and adopted by the San Diego Regional Water Quality Board in 2005, we are faced with corrective actions for dissolved copper water quality impairments similar to those proposed for Marina Del Rey. The Port Tenants Association and the San Diego Port District have studied the science associated with dissolved copper and developed an understanding of the concerns and the challenges related to complying with water quality regulations that stem from the use of copper antifouling paint. Many of the technical references and findings identified in the proposed Marina Del Rey TMDL Amendment are based on the methods and modeling used in the Shelter Island TMDL as well as the remedial actions executed under that TMDL. With parallel circumstances facing both regions, we respectfully submit the following comments that may be useful in your evaluation:	
89.2		The Association supports the use of proven, science-based methods and data. Information that has been scientifically validated must be used when calculating or considering water quality regulations, including the recently published emission rates validated by the US Navy. There has been	See response to comment 04.2

		long-standing concern over the load allocations identified in the Shelter Island TMDL, specifically the loading estimates allocated to passive leaching and hull cleaning. In a recent study, the U.S. Navy thoroughly evaluated the contribution of copper from antifouling paint. The published Navy study, entitled, Life Cycle Contributions of Copper from Vessel Painting and Maintenance Activities (SPAWAR, November 2013) examined copper paint emissions over three-year life cycle. This report was a component of the Department of Pesticide Regulation's (DPR) paint re-evaluation process and identifies hull cleaning emission rates that are vastly different from those used in the Shelter Island TMDL. three-year life cycle. This report was a component of the Department of Pesticide Regulation's (DPR) paint re-evaluation process and identifies hull cleaning emission rates that are vastly different from those used in the Shelter Island TMDL.	
89.3		Site-specific Water Quality Objectives. The Port Tenants Association encourages the use of site-specific water quality objectives at the onset of the TMDL process, including a cost-effective method, the Biotic Ligand Model (BLM), when developing TMDLs. The BLM is a tool used in determining aquatic toxicity that examines the bioavailability of metals in the aquatic environment and the affinity of these metals to impact organisms. The BLM depends on the site-specific water quality, including such parameters as pH, hardness, and dissolved organic carbon. Because the Marina Del Rey TMDL Amendment has not been adopted, it would be appropriate to consider extending the amendment hearing until a site-specific study can be completed. Regulation Consistency. We strongly advocate for	See response to comment 04.2 See response to comment 04.5

		consistent, permanent regulations at the state and federal level. We encourage you to work with the Port Tenants Association, the Port of San Diego, and our San Diego Regional Board as well as with the DPR to understand our experience dealing with the complexities of TMDLs that could broadly impact the State. Timeline for Compliance. The proposed 11-year timeframe for complying with an 85% reduction in copper loading will be challenging. The Port Tenants Association and the Port District have been aggressively encouraging the use of alternative paints for six years. While we recognize that the foundation for evaluating paints was improved by the Port's and the Navy's research and testing efforts, promulgating information to the boating public relative to alternative hull paints, securing grant funds, and encouraging changes in behavior, procurement, application and maintenance will be extremely problematic within an 11 year window.	See response to comment 04.3
89.4		The San Diego Port Tenants Association remains steadfast in its commitment to support the Port District and the Regional Water Quality Control District in their efforts to manage operations and resources in an environmentally sensitive and responsible manner. Together, we will continue to strive to ensure that regulations are consistent and effective, balancing economic feasibility and the need to protect the health of our coastal waters. As we address our own TMDL process, we appreciate the willingness of your staff to work collaboratively to ensure that regulations being presented in Marina Del Rey are created with the most advanced, sound, scientific methods available.	Comment noted

90.1	Simon Landt	As the General Manager of a boatyard and repair facility, part of our business is preparation and application of marine antifouling paint. I believe that the proposal to remove the copper and biocides from existing antifouling paints is the wrong course of action. I would strongly suggest modifying the proposal to include paints with reduced copper leaching rates or copper free paints that include irgarol or econea as biocides. The suggested replacement products as copper free alternatives are not viable as antifouling paints as they still allow the growth to form on the bottom of the boat and rely heavily on the efforts of a dive service to clean the bottom effectively and efficiently with more cleaning frequency than is currently necessary.	See response to comment 13.4
		After attending all the meetings in the marina with the water board and listening to all the testimony given by many individuals, I believe that more exhaustive testing should be carried out to determine that 3.1 ug/l, should be the correct TMDL. There is a probability that the Biotic Lignand Model (BLM) currently used for testing fresh water bodies, is to be considered for use in testing saltwater/brackish water bodies , and has been done so in the San Francisco Bay area successfully. Testing using the BLM could result in a higher ug/l for the TMDL, and therefore be a more achievable target than the current proposed 3.1 ug/l. The water sample test panels that were demonstrated to us in the meetings were taken from 2009 thru 2012, during 2012 dredging operations were taking place in the marina entrance and any samples taken in that period would be contaminated and not usable for accurate results.	See response to comment 04.4
		If the Copper content or Biocide content of this marina is reduced, there is a significant chance of an Invasive Species	See response to comment 13.7

		entering our waters and taking over from the natural resident species, rendering our marina lifeless. As has been seen in many of the fresh water bodies throughout the US, once these Invasive species take hold it is extremely hard if not impossible to eradicate them.	
90.2		The environmental footprint that goes with stripping and recoating the bottoms of approximately 4,200 boats is going to make an immense impact on a hazardous waste level, be it disposed of in California or another state.	The potential impacts to the environmental as a result of paint stripping are thoroughly discussed in the SED. (See Chapter 6.2.2, pp. 45 & 55) The SED was posted on the Regional Board website on November 5, 2013.
90.3		The cost of all this to the individual boater, also a taxpayer, should be a huge consideration. After just coming out of a recession it is still extremely difficult to convince our customers to take care of the regular maintenance items, let alone trying to convince them that they have to strip and reprime/repaint their boat bottom. In summary, if the reconsideration for the TMDL moves forward as it is and it is mandatory for boat owners to strip and repaint their boats, I believe there will be an exodus of boaters from Marina del Rey, and even owners just abandoning their boats because of the additional expense. In a fragile economy as this is, Marina del Rey cannot afford to lose our boating population. Please consider very carefully before making recommendations to your board members.	See response to comment 05.11 See response to comment 19.2
91.1	Stephen Greg Campbell	As both a recreational and commercial mariner I would like to voice my opposition to the proposed dredging of the Marina Del Rey Harbor to eliminate residual copper from anti-fouling paints used in maritime applications. From my limited review of the proposal and other opinions the	Comment noted

		cost of the project far outweighs the benefits to the environment. Please accept this e-mail as my opposition to the project and proposed regulations.	
92.1	Sue Breitore	My sailboat has been @ Pier 44 G Basin since 1995 and I have been very pleased with the location and with Pier 44. My income is from Social Security and the commission I receive from my work as a Designer and Project Mgr. and my income is limited. I simply cannot afford the permit price of $1,094 nor the price to strip and repaint my 25' sailboat. I request that the proposed plan to require boaters to strip and repaint their boats not be approved.	See response to comment 05.11 and 14.8
93.1	Tom Hollar	The subject proposed revision to the TMDL regulation is misguided attempt to control the release of copper into coastal waters. The fact that the release of copper contaminants by copper water pipes is many, many magnitudes of those released by bottom paint is not even considered. Instead, a much smaller community, boaters, will be penalized for keeping growth off of the bottoms of their boats. Typical of a bureaucracy, it is easier to attack a smaller population and the population as a whole. I enjoy boating and live in Marina del Rey. I do not want our recreational boating opportunities to be made more costly than they already are, by the whim of a bureaucratic entity.	See response to comments 29.1, 05.11, 19.2, and 04.3

		The Regional Water Quality Control Board proposes a complex set of regulations for boaters and anchorages to comply with the reduction of copper-based paints on boats. These regulations are onerous and will create great financial hardship for small boaters, forcing most of us to leave the Marina. Yes, you may assume that I do not hold bureaucracies, in general, in high regard. And, once again, an entity that is responsible to no one, but itself, has determined to impose its will on a small portion of the population that it is (here is the funny part) supposed to serve. The approach is too costly and the time frame is unrealistic. Rethink it. Ask for the assistance of the boating population. The proposed water regulations need to be evaluated in a serious review by experts familiar with the effect of various pollutants on our water basins.	
93.2		The timetable adopted by the Water Board is unrealistic. It does not allow sufficient time for the public review and comment on the proposed changes to the regulations. I strongly urge a continuation of the public comment period for 6 months. It is only reasonable to extend implementation for 6 month to allow our boating community sufficient time to address the issues of the proposed TMDL. Hopefully my blunt approach will have a positive effect.	See response to comment 08.3
94.1	Manfred Borks	This is to advise the Water Board that there is no creditable real world peer reviewed scientific evidence that trace elements of copper leaching from boat bottom paint has any adverse effects upon the local	See response to comments 04.4, 08.4, 14.3, 24.3

		wild/native marina aquatic inhabitants of Marina del Rey unless the Board considers hazardous pathogens such as e-coli to be protected species… The Water Board should take note that plankton, the bottom starting life support system for the entire marine food chain thrives in Marina waters that are "treated" daily with leached copper from bottom paint. Copper water lines and utensils have been safeguarding the worlds fresh drinking and bath water for two thousand years and continue to do so today. Proof that very fragile plankton and other fragile aquatic species can thrive in trace elements of copper can easily be witnessed by anyone: Suspend a bright underwater light about 12 inches below the surface between the copper painted boat bottom hull and the berth walkway, within minutes the light will be surrounded by thousands of plankton, very soon small baitfish will appear eating the plankton and soon larger fish will most likely be there eating the baitfish, a mini-feeding frenzy taking place in seawater laden in freshly leached trace elements of copper, this is not speculation or theory, it is the real world in live action. See "Attached" picture. Every member of the Water Board should review two on-line articles directly related to copper bottom paint:	
94.2		1. The "Coppergate Chronicles" http://www.vonborks.org/coppergate.html this article was a key instrument that convinced Senator Kehoe of San Diego to pull her Bill SB-623 (in June 2012) re the removal of copper bottom paint in California. It is my understanding that she pulled the Bill because it lacked support in the Legislature due to questionable (false) scientific evidence and if it passed the Legislature the Governor was going to veto it. The Water Board	See response to comment 04.5

		Members should take note of that Bills failure and careful read the article. 2. An article in the December 2013 issue of The Log Newspaper: http://www.thelog.com/Article/Copper-Bottom-Paint-Targeted-in-Marina-dei-Rey A current discussion on the Water Boards potential ruling to eliminate copper bottom paint. This is a timely "must" read article. As tax-payer paid public employees it is important, necessary and mandatory that every member of the Water Board carefully read and study the fore-mentioned articles and be fully prepared to justify their intended position with peer reviewed scientific evidence that banning copper bottom paint is necessary and is in the best interest of the environment and the public. I expect the Water Board to address this subject at the February 6, 2014 meeting.	See response to comment 09.1
94.3		It is my professional opinion shared by many scientists that trace elements of copper leaching 24/7/365 into Marina waters are restraining the growth of hazardous pathogens, I am of the opinion that within a few years after copper removal the marina will become a breeding swamp of pathogens harmful to humans and the water will have to be treated, the recommended and most effective procedure available today to treat contaminated poor circulating water is with copper based chemicals.	The Marina del Rey Harbor Mothers' Beach and Back Basins Bacteria TMDL has been effective since 2004. The bacteria TMDL addresses microbial sources of pollution to Marina del Rey Harbor. Additionally, the use of copper antifouling paints to control potential disease vectors is not an approved use of such products by the Department of Pesticide Regulations; nor is there evidence that this is an effective means of disease control.
94.4		I browsed the fore-mentioned 23 page document and **I** did not notice any reference to what **I** believe is the major underlying pollution problem affecting the Marina, that being poor water	See response to comment 21.9

		circulation. .I am not a Marine Civil Engineer thus I cannot offer a professional opinion however I am well versed in the subject, consequently I undertook a very brief hydrodynamic survey of the Marina using current NOAA Charts available on-line (note "Attachment" and below) and my personal experience navigating that area as a previous part-owner of two vessels berthed in the Marina. The Chart shows only Entrance soundings, I know that the main channel is shallow in comparison to the adjoining ocean. What is obvious is that the Marina (by design) is protected/shielded from the ocean, meaning that the vigorous daily tides are moderated thus producing a protected quiet water Marina. There is a tradeoff, that being reduced circulation, meaning most of what contaminates that go into the Marina stay in the Marina. A clean Marina is a Marina with a good twice daily tidal flow, a complete "flushing" action which refreshes the Marina waters.	
94.7		The main Marina area causing a growing "standing water" pollution problem. The many Marina's in San Pedro located only a few miles south are good examples. Those Marina's are located within the Port of Los Angeles, one of worlds busiest sea ports, more copper, contaminates and miscellaneous pollution enter the Port of Los Angeles in a day than enter Marina del Rey in a year yet the Port of Los Angeles Marina's have no copper or pollution problems. Its all about circulation. The present weak tide available to Marina del Rey simply moves the water back and forth a bit between the Entrance and the main marina causing a growing “standing water” pollution problem.	Comment noted
94.8		I suggest that the powers that be immediately address this	Comment noted

		obvious problem, solving same will require deepening the entrance and the main channel, a master dredging plan costing a few million dollars and about a year to complete. I suggest that the entire Basin Plan be put on hold until the water circulation problems are resolved. After they are resolved the Basin Plan may not be needed.	
95.1	lprater	The proposed new regulation regarding copper paint replacement has brought to mind some disturbing thoughts. First, this will be displacing many senior residents on boats in the harbor who live solely on social security, next, people such as myself, 66 years old, still working, will have a very hard time affording to keep my sailboat, which my disabled son and I find very theraputic. Is it not a right to enjoy boating on the ocean whether or not you have a lot of money? This ordinance will stop lots of people in my income bracket from enjoying the beauty of boating. It seems the board is saying only the rich can have this as a pastime. On one other note; is it not unfair that this regulation only pertains to Marina Del Rey? Seems the entire coast of California has many boats with the same problem. This targeting of Marina Del Rey boat owners is certainly biased and intolerant, and needs to be re-addressed.	See response to comment 05.11 and 21.9
96.1	Michael Geraghty	Unless they are apathetic, I would imagine that every boat owner, virtually all of whom are taxpayers and voters, will oppose your attempt to lay yet another layer of bureaucratic grief on us all. If you want to reduce copper in the water, why don't you ask the EPA address the matter with the paint manufacturers? If I correctly understand what you are up to, what you are doing is akin to attempting to reduce lead in paint by	See response to comment 04.5

		harassing anyone who might want to paint their living room.	
97.1	Roger Gripe	I understand the reasoning behind wanting to reduce the copper content in the waters at Marina del Rey. However, to require boat owners to strip the hauls of their boats and/or have the hauls painted with a non-copper based paint will not serve the best interests of the Marina. To avoid the extremely high cost, some boat owners will move their vessels to other marinas. I do not slip my boat in Marina del Rey, but I bring it to Windward Yacht Center, located in Marina del Rey, about every 4 years to have the haul of my boat repainted. Many other boat owners do the same who slip there boats outside of Marina del Rey. If this proposal passes, I, and many other boaters, will be forced to take their boats somewhere else to get the necessary work done. It is very expensive to have the haul repainted and I am not going to put a paint on the haul of my boat that won't protect it and won't last. If Marina del Rey loses it customers, it can hart Los Angeles County financially and it may cause some businesses such as Windward Yacht Center to relocate or go out of business. I have heard that in past years where this type of proposal has happened and latter reversed, that some boat owners traveled to Mexico to get their hauls repainted. Let's hope that you do not force boat owners to do that here. Restricting the use of current bottom paints is a bad idea for every board owner and business that will be hurt by this change.	See response to comments 05.11 and 19.2
98.1	Fred Weinhard, SMWYC	The Board of Directors of the Santa Monica Windjammers Yacht Club, representing almost 200 members, having held a special meeting for said purpose, passed the following Resolution in support of the above motion by Supervisor Knabe:	Comment noted.

		"Whereas, if the cost of the proposed revisions were to be borne by or financed with revenue to be generated by Marina del Rey area boat and land tenants, the increases to the leaseholders required to support the projected costs would make it prohibitive for most to keep a boat or do business in this area thus defeating the whole purpose of the harbor's existence. It is therefore hereby resolved that the Santa Monica Windjammers Yacht Club supports the Motion by Supervisor Knabe to be presented to the Board of Supervisors on January 7 to oppose the revisions to the Marina del Rey Harbor Toxic Pollutants TMDL as currently proposed by the staff of the Regional Board." Please include this memorandum as part of our comments being provided on this agenda item. A copy of this resolution is also being forwarded to the California Regional Water Quality Control Board to go on record as being opposed to the proposed changes.	
99.1	Gary Magnuson	I am now concerned that sailing in Marina Del Rey may no longer be economically feasible for small boat owners like me because of the additional expenses we will encounter.	See response to comment 05.11
99.2		It is my understanding that to transition my boat to the new bottom paints will require all the existing paint to be removed for my hull, which is a very expensive proposition and a project I wouldn't try to tackle myself at my age. In addition, I've been told that the new paint will need to be reapplied three times more often compared to existing paints representing further expenses in the future.	See response to comments 05.6 and 05.11
99.3		I urge you to move the deadline for public comments back one year so the boating community has a chance to consider all the ramifications we will suffer.	See response to comment 08.3

Comment Summary and Response on November 5, 2013 Draft:
Reconsideration of the Total Maximum Daily Load for Toxic Pollutants in Marina del Rey Harbor
Comment due date: January 15, 2014

100.1	Richard Jacobs	In the strongest possible terms, I request an extension of the review period regarding the proposed regulation of hull paints containing copper. I've been a boater all my 62 years, and can't imagine bearing the economic demand this would place on me and the thousands of other boaters. The harm caused by copper paints would have to be so clearly and obviously severe to the environment for the Board to take such a callous step. As well, being so obvious and harmful, all marinas and all boaters across the nation would need to be similarly obligated. Given the costs involved, that is the high standard you must use before implementing such a regulatory burden on the boating public.	See response to comments 08.3 and 05.11
101.1	Jennifer Huntzicker	The Regional Water Quality Control Board proposal of regulations for boaters and anchorages to reduce copper-based paints on boats are onerous and will create great financial hardship for small boaters, forcing most of us to leave the Marina.	See response to comments 05.11 and 19.2
101.2		Boaters are sensitive to the environment and the need to maintain and enhance water quality. But regulations should be realistic and achievable so as not to displace a vital recreational opportunity. The proposed water regulations need to be evaluated in a serious review by experts familiar with the effect of various pollutants on our water basins.	See response to comments 05.6 and 09.1
101.3		The Water Board has adopted an unrealistic timetable for public review and comment on the regulations. I strongly urge a continuation of the public comment for 6 months. Please allow our boating community sufficient time to address the issues of the proposed TMDL. Many boaters are still unaware of these proposed regulations as there has been insufficient outreach to our community	See response to comments 02.9 and 08.3
102.1	Larry Silver	Los Angeles Regional Water Qua!ity Control Board's ("Water Board") arbitrary and capricious behavior in failing	This comment was addressed to the Attorney General, but was mailed to the Regional Board address during the public comment

		to fully legally Comply with Cal, Gov. Code §11120 et al (aka Bagley Keene Open Meeting Act), including but not limited to §11125.9 (b).	period for the proposed TMDL revision, so it is being included in the record. The Regional Board understands the commenter to be referring to public meetings held by Los Angeles County on December 7 and 11, 2013, that were attended by Regional Board staff, and not the February 6, 2014 meeting of the Regional Board. The Regional Board's compliance with Government Code notification requirements for the February 6, 2014, meeting is addressed in the response to comment 102.7. No Regional Board members attended the meetings held by the County, nor was any formal action taken by the Board at these meetings. The Bagley-Keene Open Meeting Act defines a "meeting" as any congregation of a majority of the members of a state body at the same time and place to hear, discuss, or deliberate upon any item that is within the subject matter jurisdiction of the state body. Because the public meetings held by staff did not include Regional Board members, staff was not required to notice the meetings in compliance with the Bagley-Keene Act.
102.2		Brief history, The Water Board is attempting to restrict the use of Copper in the bottom paint used on boats ("Paint"). This Paint is used to prevent the growth of plant and animal organisms on the hull of the boat in that their growth is of significant detriment to the boat and boat owner. There is no replacement Paint. This restriction is of major concern to the approximate 5,000 boaters in Marina del Rey. It will increase the cost of maintaining boat's bottom by at least three times the existing cost. It will cause many boats to leave Marina del Rey. It will significantly reduce the appraised value of a boat causing a mass filing of requests for reassessment. The latter of which will be financially consequential to the County's personal property tax roll.	The Regional Board disagrees that there are no replacement paints. Alternative antifouling paint options are available and have been tested in Shelter Island Yacht Basin. It is anticipated that additional paint options will become available during the implementation of this TMDL. The Port of San Diego has shared results of studies and made paint recommendations available to the public on their website: http://www.portofsandiego.org/environment/copper-reduction-program.html. Additional information to aid in selecting an alternative hull paint and on integrated pest management can be found through the University of California website: http://ucanr.org/sites/coast/. The Regional Board has considered the additional costs of

		There will also be severe consequences of a reduction in value of much of the real property located around the marina, such as the slip rental Marinas and/or Condos and apartments.	conversions to non-copper paint. The Regional Board will identify paint conversions in Marina del Rey as a preferred project for the Los Angeles Region in the 2015 CWA 319(h) grant request for proposals. Assuming that grant funding is obtained, given that repainting costs would be incurred whether or not the proposed TMDL is adopted, boaters may in fact spend less money applying an alternative antifouling paint using grant money than they would reapplying copper based antifouling paint.
102.3		The Water Board has already held two (secret) meetings on the subject at Burton Chase Park in Marina del Rey on Dec 7 and Dec 11, 2013. They then issued a printed report dated November 5, 2013 that reached many conclusions ("the Report"). This Report was both written and printed at least one month before the two meetings, and is 100% devoid of any mention of what was said by those citizens who spoke at the meetings. This Report is over 124 pages long and is not signed by anyone. I have a copy of the Report. The attendance at these two meeting was small as alleged below. (About 14 people attended at the first meeting and 35 at the 2nd meeting, yet there are over 5,000 boaters in the Marina). The meeting on Dec 11. 2013 was recorded on video by the Water Board.	Regional Board staff were invited to attend two meetings held and recorded by the Los Angeles County Department of Beaches and Harbors at Burton Chase Park on December 7 and 11, 2013 to discuss the proposed TMDL revisions with boaters. The Los Angeles County Department of Beaches and Harbors e-mailed notice of the meetings to their lessees and dockmasters. As stated in the response to comment 102.1, no Regional Board members attended these meetings and notice of the meetings was not required to comply with the Bagley-Keene Open Meeting Act. The Draft Staff Report was written prior to the December meetings; it was noticed for public comment on November 5, 2013. The Draft Staff Report was posted to the Regional Board website and notice was distributed to approximately 1000 interested persons on the Regional Board's mailing lists. This information was also provided in a fact sheet that was mailed to 4,337 boat owners on November 25, 2013. The purpose of Regional Board staff's attendance at the two meetings in December was to provide an additional opportunity for interested parties to submit comments on the Draft Staff Report. As a result of attendance at these meetings, the Regional Board received comments from numerous boaters, including this comment. The Draft Staff Report has been revised in response to comments and will become final once the TMDL revisions are approved by the Regional Board at the February 6, 2014 Hearing.

102.4		On page 52 of the November 5 Report the Water Board estimates the cost as ... "it would cost approximately $147,378,000. to $196,504,000 to dredge and to dispose of…". I have learned from what I believe are reliable sources that some of this money will personally benefit certain members of the Water Board in several different ways.	This comment is not correct and is unsubstantiated.
102.6		The Water Board has another meeting planned for Thursday Feb 6, 2014 at 9 am in downtown Los Angeles, that I will refer to as the 3rd meeting that I know of. The Water Board is not sure of the specific address of the meeting and requires interested parties who might want to attend to go on line to check the address. This location (approximately 30 miles) and especially the early time (9 am on a workday) in the morning makes it very difficult for people who live in Marina del Rey to attend. I believe the time and location were purposefully picked by the Water Board to maliciously prevent attendance by interested parties and boat owners.This is especially true in that there are meeting halls that are much closer, such as at Burton Chase Park in Marina del Rey which is County owned and has a largeroom that can hold at least 200 citizens.	The location and start time of the February 6, 2014 Hearing was identified in the November 5, 2013 Notice of Hearing. The Regional Board is sympathetic to the fact that many people will be driving from Marina del Rey to the meeting downtown. As a result, the Regional Board will wait to hear the proposed TMDL revision (Item 16) until at least 2 PM and noted this fact on the January 23, 2014 Notice of Public Meeting and agenda. There are 16 other items on the agenda that are not specific to Marina del Rey, so the meeting is being held at a central location in downtown Los Angeles. This location is the default location for meetings of the Regional Board, and is the location most often used.
102.7		Additionally, the Water Board has not given the legally required notice for this meeting. While they do have a web site, after one hour of attempts my attorney or his staff could not locate any information on the Water Board web site about the meeting. In addition, the Water Board has adopted a complicated and time consuming requirement that must be complied with for anyone who wishes to speak at this meeting, and that is impossible to comply with, especially in that they did not disseminate the requirements to speak as required by law.	The Regional Board properly noticed the proposed TMDL revision. The Notice of Hearing contained a link to the correct web page and contained staff contact information if interested persons had any questions. The Notice of Hearing was posted to the Regional Board website and distributed to approximately 1000 interested persons on the Regional Board's mailing lists. This information was also provided in a fact sheet that was mailed to 4,337 boat owners on November 25, 2013. In addition, Regional Board staff mailed a hard copy of the TMDL Staff Report to this commenter on December 12, 2013. On January 23, 2014, the Regional Board staff circulated a notice

			of public meeting and agenda for the February 6, 2014 meeting to all persons who had requested such notice in writing, and posted the notice of meeting and agenda on the Regional Board's website. As described in the Notice of Hearing, interested persons are invited to attend the hearing and provide oral comments. Persons who would like to request more than three minutes to present oral comments at the hearing must contact one of the staff persons at the Regional Board listed in the notice, and state the amount of time requested. This request may be made by phone call and need not be time consuming. The Board may adjust the amount of time for speakers at the meeting depending upon the number of speakers.
102.8		The aforementioned Cal Gov Codes have many requirements to protect the public, which the Water Board both arbitrarily and capriciously failed to legally comply with. For example the Water Board violated § 11125.9 (b) in that the three meetings were NOT advertised in all the Newspapers over 10,000 circulation, etc. There are many other violations not only of the prevailing codes, but also as to the Water Board's lack of honesty in holding and arranging secret meetings arranged to not allow those who are interested from attending.	See response to comment 102.1 and 102.3. As previously described, the December meetings were informal workshops attended by Regional Board staff, and did not constitute meetings or hearings for purposes of the Government Code. No Regional Board members attended these meetings and no actions were taken by the Regional Board at these meetings. Attendance of Regional Board staff at these meetings was intended to enhance the opportunity for the public to comment on the proposed revisions to the TMDL. The Regional Board made significant efforts to ensure that all interested persons were aware of the February 6, 2014, meeting and the items to be addressed. There is no evidence that any person was prejudiced by any untimely notice of the February 6, 2014, meeting, or that additional notice would have enhanced the public's opportunity to attend or participate. On January 23, 2014, the Regional Board staff circulated a notice of public meeting and agenda for the February 6, 2014 meeting to all persons who had requested such notice in writing, and posted the notice of meeting and agenda on the Regional Board's website.

			This notice was provided more than 10 days in advance of the meeting, in compliance with the Government Code. The Government Code also requires regional water boards to notify all newspapers of at least 10,000 in circulation and all clerks of city councils and county boards of supervisors, in writing, of the agenda of a regional board hearing at least 10 days prior to the hearing. Regional Board staff provided written notice of the February 6, 2014, meeting to 96 newspapers in Los Angeles and Ventura Counties on the morning of January 27, 2014. This notification included The Argonaut, the local newspaper of Marina del Rey. Regional Board staff provided written notice of the February 6, 2014, meeting to the clerks of city councils and county boards of supervisors within the region on the morning of January 28, 2014. Although the notice to the city and county clerks was sent out only 9 days in advance of the meeting, the notification was in substantial compliance with the Government Code requirements. (See *North Pacifica LLC v. California Coastal Com'n* (Cal.App.2Dist. 2008) 166 Cal.App.4th 1416.) In addition, many representatives of cities in the region were notified of the agenda on January 23, 2014, when the notice of public meeting and agenda was initially circulated. The Regional Board is not aware of any evidence that any of the cities or counties in the region were prejudiced in their ability to participate in the hearing to be held on February 6, 2014, because of the one day delay in notification.
102.9		I herein request a full and complete investigation as to violations of the law by the Water Board and its members. If you find that the Board did not comply fully with the law, then I believe that it is legally correct that they at a minimum be required to throw out any and all existing research, reports, studies and conclusions. They should also be ordered to hold new meetings in Marina del Rey (and not	This comment is not directed to the Regional Board and is not relevant to the decision regarding the proposed TMDL revision.

		downtown) in compliance with the law, but in this case under your direct supervision, including someone from your department should attend to insure full compliance with the law. There should also be a check and control to prevent anyone on the Water Board (or their relatives, corporations, LLCs etc) from personally benefitting directly or indirectly from the "$147,378,000 to $196,504,000" to be spent. It would be criminal for a government official to personally benefit from tax dollars.	
103.1	D. Joshua Staub	The entire purpose of the marina is to provide a resource for boaters in Los Angeles County, and the proposed regulation will seriously impair the affordability of maintaining a vessel in Marina del Rey. Since when is the role of government the protection of “sedimentary organisms" in an active harbor? It does not matter if there is any sea life in the marina at all. The marina is a place for boats not a marine sanctuary. You need to focus on water quality issues that matter, and if you cannot find one more pressing than this perhaps your bureaucracy should not exist. In short, no one with 1/1,000,000th of a brain should give one f***ing rat’s ass about the ‘quality of life’ of sedimentary organisms. Because it must be said, and stated 1,000,000 times over please with all haste go f*** yourselves.	Comment noted