Comment Summary and Responses

Marina del Rey Harbor Toxic Substances TMDL Reconsideration

Comment Due Date: May 16, 2024

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6	Kathy Knight, Ballona Ecosystem Education Project
7	Alicia Kunz, Essex Marina City Club
8	Simon Landt, Windward Yacht Center
9	Patricia McPherson, Grassroots Coalition
10	NGO Joint Letter (Los Angeles Waterkeeper, Heal the Bay, WeTap, Green LA Water Committee)
11	Chris Potter
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13	Recreational Boaters of California
14	Tim Riley, Marina del Rey Lessees Association
15	Lori Vincere
16	Steve Austin, International Paint LLC
17	Joey Vermeulen

No.	Comment	Response
1	**Barnaby Baker**	
1.1	First and foremost, it should be noted that the boating community is deeply committed to environmental protection. Our slip tenants care profoundly for the environment and strive to protect wildlife and their habitats. We are the ones who stop on the way to Catalina to pull out mylar balloons, give migrating whales a wide berth, and constantly remove trash and debris from our waterways.	Comment noted.
1.2	However, it is important to highlight that recreational boaters need viable alternatives and initiatives to the existing technology and materials that can make a real difference. The studies conducted so far merely highlight the problem, a problem we all agree is significant. Yet, we have not seen significant action efforts to practical alternatives.	All stakeholders agree that additional copper-reducing measures are needed (whether that be improved antifouling paints, methods to provide barriers between boats and the water, or others). However, in the 10 years since the 2014 TMDL reconsideration, little has been done to implement the TMDL beyond using the currently available paints that have lower copper leach rates compared to previously available paints. As the staff report for the currently proposed TMDL reconsideration shows, the current lower leach rate paints are still not sufficient to achieve copper water quality objectives – either the current water quality objectives or the proposed water quality objectives as adjusted with a water effect ratio.
1.3	Funding for this research, as well as the encouragement of better marina management practices, are necessary if water quality in MDR is to be improved.	The Los Angeles Water Board has spent the last 10 years pursuing funding opportunities for the boating community, including championing the County's effort to secure Clean Water Act 319(h) grant funding. There are funding opportunities available, but the boating community must be willing to pursue them.

		Better marina practices are beneficial for many reasons but will have limited impacts on reducing copper concentrations in Marina del Rey Harbor.
1.4	Marina Harbor Anchorage has consistently demonstrated a commitment to clean water standards and environmental stewardship. This is evidenced by our Clean Marine certification as well as by our active participation in various initiatives aimed at improving water quality.	Comment noted. We also note that the Clean Marine certification carries many environmental benefits, none of which are related to dissolved copper from antifouling paints (AFPs), which is the focus of the current reconsideration.
1.5	We have utilized automated trash collection devices to remove debris from the marina for several years. Additionally, we conduct regular marina cleaning days, encouraging our recreational boaters to join together and collect debris and trash that washes into the harbor.	Comment noted.
1.6	Since the inception of the In-Water Hull Cleaning BMP, we have recommended that our slip tenants only employ the services of divers who have been certified by attending the In-Water Hull Cleaning BPM Training. All new slip tenants are provided with material covering this in their welcome packets. Further, this recommendation will soon become a mandatory requirement for any diver operating within Marina Harbor Anchorage.	Comment noted. We also note that these are important actions that will help address the portion of the water column dissolved copper impairment that is caused by hull cleaning.
1.7	At our own expense, we have installed additional mechanical debris barriers on all storm water drains leading into the harbor. We regularly inspect and clean these to ensure the prevention of as much debris as possible from entering the harbor.	Comment noted.
1.8	Recent pilot studies and collaborative efforts, including those with the Port of San Diego, have not yet identified a universally effective and affordable non-biocide paint alternative. We urge the Board to consider these findings and support continued research into viable paint solutions.	These findings were considered during the current reconsideration effort. See Staff Report section 5.1. However, addressing the dissolved copper impairment in Marina del Rey Harbor cannot wait until a “universally effective and affordable non-biocide paint alternative” is identified. Research into

		alternative paint solutions continues and some promising effective solutions may be coming. In the meantime, impacts to the beneficial uses of Marina del Rey Harbor are currently occurring. All parties will need to move forward with an array of practices and approaches to reduce dissolved copper impacts in the marina. Research into AFPs continues. In fact, in 2024, the Los Angeles County Department of Boating and Harbors, in conjunction with the Port of San Diego, started a new study to examine the effectiveness of a recently released new non-biocide paint that has been advertised to rival traditional AFPs in performance and cost, without leaching contaminants to the water column. It is also important that boaters and marinas take an active role in exploring alternatives to the current paints and methods. We note that TMDLs are rarely met by one “universally effective” solution, especially in cases of dispersed nonpoint source discharges like those from boats painted with AFPs.
1.9	Mechanical solutions, such as boat lifts and in-water dry docks, are not viable alternatives to effective paint barriers. In my experience, these mechanical solutions often lead to greater issues due to constant breakdowns and failures, causing additional hardships for vessel owners. The application of the site-specific WER provides a more accurate assessment of copper toxicity in our local waters. However, we are not	Addressing the Marina del Rey Harbor copper impairments will most likely require the employment of many different management practices and alternatives. Mechanical solutions are part of the mitigation measures Los Angeles County

	convinced that the proposed adjustment fully acknowledges the unique conditions of the Marina del Rey Harbor.	proposed. There may be other, more reliable, mechanical solutions in addition to those which have been used in Marina del Rey. We agree that the application of the site-specific WER provides a more accurate assessment of copper toxicity in Marina del Rey that includes Marina del Rey Harbor specific conditions per US EPA guidance for adjustment of water quality standards.
1.10	However, at the very least, achieving these targets will still require significant time and resources well beyond the proposed extension timetable. For instance, repainting all existing boat hulls within MDR would take the two boatyards located within the marina 12 years to complete. We support a longer extension period beyond the proposed implementation schedule, including the current extension to March 22, 2026. This timeframe is still unrealistic for conducting appropriate studies and identifying effective and affordable paint alternatives for boaters. Current non-biocide paints do not work effectively, and mechanical options are not viable. There is currently no suitable solution.	As discussed in the staff report and in recent stakeholder meetings, the TMDL reconsideration does not require, recommend, or imply that all boats must be painted in two years. The two-year extension included in the current TMDL reconsideration is intended to set up the future road map for the many steps and alternatives to fully meet the load allocations for boats. The two-year extension is intended to allow for the development of a regulatory mechanism to implement the TMDL. It is not meant as an end-date for studies, product solutions and alternatives. A future regulatory mechanism, developed in collaboration with stakeholders and adopted by the Los Angeles Water Board, could include provisions for studies and other steps that would take place after its adoption.

1.11	We advocate for continued collaboration between the Water Board, local stakeholders, and scientific entities to develop and implement effective management practices. This iterative approach should include ongoing education, monitoring, and adaptive management to ensure that TMDL goals are realistic and can be met practically and sustainably. Funding must be provided to study and consider alternative solutions to the TMDL problem.	The Los Angeles Water Board looks forward to continued collaboration. Continued collaboration will be necessary to address water column copper impairments and other water quality issues, as discussed in the staff report. Also see response to comment 1.3.
1.12	We urge the board to consider and recognize that many in the boating community have already been using the lowest effective copper paints available without the desired success. The paint industry, government agencies and the recreational boating public will all need to invest resources in making further improvements.	It is unsupported by data to state, “many of the boating community have already been using the lowest effective copper paints available without the desired success”. The state of paint availability and preference was recognized and considered during the current TMDL reconsideration effort, however, there are limited data currently available as to what paints the boating community is actually using. While the Department of Pesticide Regulation did lower the maximum copper leach rate to 9.5 ug/cm^2/day (effective as of 2018), use of higher leach rate paints was allowed during the transition time. No data have been supplied by the boating community as to how much paint of what type has actually been applied since the allocable leach rate was lowered. While many of the comments from the boating community frame the discussion as the dichotomy of full copper paint (with a leach rate of 9.5 ug/cm^2/d) or non-copper paints that aren’t effective (or as effective), there are, in

		fact, a number of commercially based paints that have a copper leaching rate somewhere in the range from 0 to 9.5 ug/cm^2/d. While some users of the lower-leaching paints have stated that effectiveness of these paints may wane, there has been limited systematic evaluation of these paints.
1.13	Recreational boating is the top priority in the Marina del Rey Harbor, as emphasized by the Coastal Act and the Marina del Rey Land Use Plan. Any regulatory measures must consider the financial impact on all boaters, particularly those from low and moderate-income backgrounds. Ensuring equitable access to the marina is essential. Placing the burden for compliance on the boating community without exploring alternative solutions is troubling. Increasing access to the water-oriented activities and amenities in MDR is critical to the future success of the County's "MDR for all" agenda.	The Coastal Act and Marina del Rey Land Use Plan recognize boating as **a** top priority, not **the** top priority. Environmental considerations are also included in both the Coastal Act and the Marina del Rey Land Use Plan. The Coastal Act did intend to help preserve access to water-orientated recreational uses as accelerating coastal development threatened that access. While recreational uses include boating, it also includes other uses that could be impaired through the discharges of copper from AFPs. The Coastal Act also was not intended to preserve access to recreation at the expense of environmental considerations. No determination has been made as yet on how to comply with the TMDL for dissolved copper in the water column as there is not yet a regulatory mechanism to implement the TMDL. However, the boating community are the dischargers responsible for copper impairment in Marina del Rey and will need to address

		the fact they are actively contributing to pollution in Marina del Rey Harbor. The Los Angeles Water Board has worked with stakeholders since before the 2014 reconsideration was adopted to explore alternative solutions and will continue to do so. LA County's "MDR for All" effort is intended to be a "…community based effort to re-imagine Marina del Rey to be more inclusive, equitable and sustainable for all" which includes the goals "Protect, preserve and promote awareness of natural resources at the Marina" and "reduce the environmental footprint of Marina operations and development" (https://www.mdr4all.org/future). Addressing the impairments to Marina del Rey Harbor due to anti-fouling paint (as reflected by the 2014 and current TMDL reconsideration efforts) is also critical to the success of the MDR for all effort. As discussed in the staff report for the 2024 reconsideration of the Marina del Rey Harbor Toxics TMDL, it has not yet been decided what type of regulatory mechanism will be developed to implement the TMDL. Ultimately, it may or may not be through waste discharge requirements under Water Code section 13363, which requires the consideration of factors, including economic impacts, listed in Water Code section 13241. The

		costs of discharge permits vary and can vary depending on the structure of the permit. Stakeholder outreach and collaboration will be part of the development of any regulatory mechanism and information from the boating community on costs and barriers is welcome. Also see section 9.4 of the Staff Report for additional discussion of the economic considerations of the current reconsideration.
1.14	Marina del Rey Harbor is not a natural harbor but was designed and built by the Army Corps of Engineers over 70 years ago. Today, we better understand man's impact on the environment and believe the design of the harbor entrance, sea wall, and harbor flushing should be re-examined. Improving the flushing of the marina could have a significant impact on water quality.	While changing the design of Marina del Rey or its structural features could contribute to improved circulation, the initiation of a re-examination circulation would be led by the Army Corps of Engineers. The Army Corps of Engineers, typically in conjunction with a local municipality, does conduct Feasibility Studies for prospective projects such as projects to alleviate flood damage, ecological restoration, improvements to navigation or circulation. The Army Corps of Engineers' Feasibility Studies include alternative solutions to address the identified problems, a comparison of those alternatives, and recommendations. Feasibility Studies include analyses under the California Environmental Quality Act (CEQA), the

		National Environmental Policy Act (NEPA) and an analysis of cost effectiveness.
1.15	We suggest researching additional and alternative methods that may have an even more effective impact within the harbor.	See response to comment 1.8.
2	**County of Los Angeles, Department of Beaches and Harbors (DBH)**	
2.1	In collaboration with MdR stakeholder groups, DBH has worked diligently to implement its Copper Reduction Program (Program).	Comment noted.
2.2	However, an additional two years may be insufficient for compliance with the TMDL due to limited information on the effectiveness of alternative paints and the uncertainty of the potential ecological impacts of non-biocide paints. Additionally, the limited number of local boat yards that would be available to re-paint boats in a short period of time, and lack of financial support for lower-income boaters who will face increased costs of non-biocide paints as well as more frequent hull cleaning present additional barriers to successful implementation in a condensed timeframe.	See response to comment 1.10.
2.3	DBH is also concerned that the future permit or other regulatory mechanisms described in the TMDL Staff Report and potential future enforcement thereof will result in additional obstacles to increasing lower-cost coastal access via recreational boating.	Comment noted. Although the specific regulatory mechanism developed to address the Marina del Rey Harbor Toxics TMDL is currently unknown, a mechanism developed by the Los Angeles Water Board would likely take into consideration economic factors. Furthermore, the TMDL is not intended to add additional access burdens but rather improve water quality, which brings free benefits to stakeholders in the recreational community and those seeking access to other beneficial uses.
2.4	DBH is committed to ongoing collaboration with the Los Angeles Water Board and MdR stakeholders to assure future achievement of the water quality goals while providing inclusive and equitable access to MdR for all.	The Los Angeles Water Board is committed to continued collaboration with the County and other stakeholders as well.

3	**Douglas Fay**	
3.1	If the reconsideration was based solely on improving water quality I would support it. However, my impression of the narrative compels me to oppose this reconsideration and to recommend viable solutions. …you haven't considered the history, the narrative, and viable solutions to alleviate the 303(d) violation burden on the County of Los Angeles (County) Board of Supervisors (BOS), who are charged with responsibly managing unincorporated MDR	The reconsideration is solely based on improving water quality using the most up-to-date scientific information available. The history and historical context of the impairments in Marina del Rey Harbor were considered in the original 2005 Toxics TMDL, the 2014 Reconsideration and the current reconsideration.
3.2	Over my 61 years of life observing marine life in the MDR Harbor, it has been a steady decline.	Comment noted.
3.3	The narrative has unjustly been switched from protecting water quality to creating a TMDL protocol that is limited in scope. It is the unnatural amount of sediment that has accumulated in this man-made marina that is the primary contributor to water quality impairment and significant loss of marine biodiversity and abundance, not the Toxics TMDL Reconsideration narrative. Another bogus multi-million dollar study to disprove my assertions will do far more harm than good. To date, the County has allocated approximately $10 million on studies and insignificant mitigation efforts.	The Marina del Rey Harbor Toxics TMDL addresses both dissolved copper and contaminated sediments. This current TMDL reconsideration, however, is focused on dissolved copper impairments in the waters of Marina del Rey Harbor. The current reconsideration is limited in scope to the copper impairment and the rest of the TMDL remains in effect. Sediment accumulation is not the primary contributor to the water column dissolved copper impairments (see the source and linkage analysis in the 2014 Marina del Rey Harbor Toxics TMDL staff report). The WER study followed and exceeded U.S. EPA Guidelines, was based on past peer-review studies, and was subject to review by a Technical Advisory Committee (TAC). The WER study allowed the development of the proposed

		TMDL targets, which are more specific to Marina del Rey.
3.4	Might I suggest that: 1. You do not raise/reconsider the copper toxicity TMDL 2. That you enter into discussions at the Local (County) level, State (CDFW, SMBRC, CCC), and Federal (US EPA NEP, USACE) on how best, also known as Best Management Practices (BMPs), to implement a Pilot Management Plan for the removal of accumulating sediment in the MDR Harbor. USACE dredging, similar to how they keep the harbor entrance navigable, absolutely should be discouraged.	Comment noted. Additionally, we note that, while outside the scope of this reconsideration, the Los Angeles Water Board is overseeing the County's management of the sediments in Marina del Rey to comply with its allocations in the TMDL.
3.5	If in-water hull cleaning would be ongoing, so should the sediment management.	See responses to comment 3.3 and 3.4
3.6	Also, in water hull cleaning divers should be certified in SCUBA and water safety first aid & CPR training, not just hull cleaning certification.	Comment noted. We note that safety requirements are outside the authority of the Los Angeles Water Board.
3.7	In an effort to comply with the 303(d) violation within my lifetime, it would be wonderful if the BOS would authorize a developing/exploring a pilot management plan and having a County representative contact me.	This comment is outside the scope of this TMDL reconsideration. We note that the regional water boards have the legal authority to require dischargers to meet water quality objectives but may not dictate the manner in which dischargers meet those objectives.
3.8	Read and support the suggestions submitted by Patricia McPherson	Comment noted. See responses to comments 9.1-9.30.
3.9	The primary beneficial use of the MDR Harbor and SMB is to fully support a thriving ecology and economy.	The Los Angeles Basin Plan, which designates the beneficial uses for waters within the Los Angeles Region, does not designate a primary beneficial use. All designated beneficial uses (existing and potential) are to be fully supported. When TMDLs are developed, the numeric target chosen corresponds to the most sensitive

		beneficial use as this is intended to support all other beneficial uses.
3.10	Yes, assuring that fresh water aquifers adjacent to the marina have a positive charge would be reflected in salinity sampling and testing. Oxygen levels are crucially important to prevent hypoxic events from occurring, especially as the biomass is restored.	Comment noted.
3.11	When kelp, algae, mussels, clams, tube worms, oysters, crabs, sea hares, urchins, nudibranchs, octopus, squid, fishes, sharks, turtles, dolphins, sea lions, harbor seals, and a myriad of marine life is allowed to live in the marina/harbor, the chances of the Santa Monica Bay being restored and enhanced become a reality, not the fictional narrative we've been forced to live with, and your roll as respected and honored LARWQCB members will be fulfilled	The current TMDL reconsideration is intended to address the copper impairments and improve water quality conditions for aquatic life.
3.12	The original harbor design was changed to the current layout, and is currently managed by the County of Los Angeles. What is important to note is the fact that there wasn't specific language as to how to manage the sediment that accumulates in the man made harbor when this part of the historical Ballona Wetlands was developed, and the County has failed to create and implement a maintenance plan.	The Marina del Rey Harbor Toxics TMDL as adopted in 2005 and revised in 2014 addresses the accumulation of toxic pollutants in the sediments of the harbor. However, the TMDL focuses on the pollutants that reside in the sediments rather than the amount of sediments themselves. See also response to comment 3.5.
3.13	Specifically to the MDR Harbor water quality problems, they have been ongoing since the man made marina was developed.	Comment noted.
3.14	When more boats filled the slips, this increased the amount of organic sediment due to in water hull cleaning. It's never been just a Copper TMDL problem	The Marina del Rey Harbor Toxics TMDL does not just address copper, it also includes chlordane, lead, zinc, PCBs, DDT, and sediment toxicity. However, the current reconsideration is limited in scope and is focused on the copper water column impairment. The remaining

		portions of the TMDL which address sediment contamination remain in effect.
3.15	Further contributing to water quality degradation, was the construction of two large urban flood control storm drains that imported runoff from the inland side of Lincoln Blvd. When the animal waste and urban runoff entered the adjacent MDR Harbor basin, several of the commercial divers became very ill. I don't believe the changes made during the OBMUEP adequately addressed the water quality and habitat enhancement needs, especially for nesting, migratory and juvenile birds.	Previous work completed during the 2014 reconsideration of Marina del Rey Harbor Toxics TMDL linked the water column copper impairments to the leaching of copper from anti-fouling paints, not storm water drainage.
3.16	How can you as the LARWQCB, allow the County, CCC, and others to deny a vitally important historic source of sustenance in a Bird Refuge?	This comment is outside the scope of the current TMDL reconsideration.
3.17	Given the fact that the SMBRC is governed under the California State Water Quality/Resources Control Board, you have a responsibility to restore the needs of the wildlife that were unjustly taken.	The Marina del Rey Harbor Toxics TMDL is meant to address water quality impairments in the harbor that negatively affect aquatic life.
3.18	It almost seemed like action would be taken to maintain the sediment accumulation over a decade ago. Sam Unger suggested that the only reason why the large orange crabs could no longer be found in the marina was the copper paint problem. I disagreed. They can be found in the SMB. Optimum species diversity and populations cannot be achieved due to several factors: exceeding copper TMDLs (which should be declining since it is being phased out of bottom paint applications), organic sediment accumulation (training divers how to perform in water hull cleaning does not prevent the removed materials from settling to the bottom or drifting as toxic synthetic micro particles), human/urban trash (whether intentionally or unintentionally, a significant amount of trash enters the marina daily. It can be viewed on the surface and found in the harbor sediment), electrical current…, historical fresh water removal...	See response to comment 3.12.
3.19	On November 22, 2022, several residents and boaters were completely distraught when I arrived at the Dolphin Marina C1000 dock… Are you aware of this incident? Were there any fines or penalties levied on the contractor? What mitigation was required?	This comment appears to be outside the scope of the current TMDL reconsideration.
3.20	Won't you don't see is the abundant diversity of marine species that can be found in other harbors and marinas along the California Coast: kelp,	The current reconsideration has been undertaken to continue the effort to

	algae, eel grass, sponges, urchins, star fish, anemone, crabs, shrimp, lobster, limpets, Aplysia, scallops, mussels, clams, barnacles, nudibranchs, sea cucumbers, sea squirts, and hundreds of other species, especially fishes. Many marine species are filter feeders. They clean the water. Marine plants removed carbon dioxide. There are far more benefits to managing the harbor for optimum populations of diverse SMB species than counterproductive considerations.	address the water quality impairments affecting the aquatic life beneficial use.
3.21	From a comprehensive regional perspective, if the MDR Harbor was also managed in a manner that encouraged full tidal marine species to thrive, this would negate the need to transform the predominately fresh water BWER into a full tidal habitat. It would be a win-win solution. Do you agree?	The proposed restoration work at Ballona Wetlands Ecological Reserve is outside the scope of the current TMDL reconsideration and does not have an impact on leaching of copper from antifouling paint on boats in the marina.
3.22	Over a decade ago, I read that approximately 600 tons of sediment laden with copper and other toxins was impairing the water quality. I don't believe reconsidering the established MDR Harbor Toxic Pollutants TMDLs is going to achieve anything.	The 2014 Marina del Rey Harbor Toxics TMDL reconsideration included components addressing sediment and the water column. The current reconsideration is focused on the water column copper impairment. The portion addressing the sediment is still in effect from the 2014 reconsideration and actions are ongoing to address those impairments.
3.23	Would maintaining the full tidal marina for optimum populations of marine species meeting the objectives of the SMBRC, a commission that you are a member of?	Addressing the copper impairment in the water column is required by federal and State law and furthers the mission of the Los Angeles Water Board.
3.24	Given the fact that SCCWRP has a long history of failing to provide adequate research results that reflect the realities of why the SMB has not been restored to the abundance of life documented when it was considered a world class fishery, I do not anticipate that the special study they've concocted for copper will be productive other than to waste more time and money	The WER study was conducted by the Southern California Coastal Water Research project (SCCWRP) in collaboration with a variety of stakeholders (boaters, local nongovernmental agencies, the Los Angeles Water Board, Los Angeles

		County), was overseen by an independent TAC and following U.S. EPA recommended procedures and guidance. SCCWRP is an intergovernmental public agency including membership of both regulatory agencies such as the Los Angles Water Board and regulated agencies such as the County of Los Angeles and has long acted as a reliable and objective agency conducting nationally and internationally recognized research.
3.25	When the SMBRC was created around 1985 there were two primary objectives: 1. Initiate a 5 year study that identifies all sources of ocean pollution and develop plans that end it. 2. Creation of the Santa Monica Bay National Marine Sanctuary. How is possible, that over 35 years later, you haven't completed a single objective? If any revisions to current TMDLs are made, they should be made in a conscious effort to meet the objectives promised decades ago, and the true needs of the significantly compromised marine species of the MDR Harbor and SMB today.	The Santa Monica Bay Restoration Commission is a separate agency from the Los Angeles Regional Water Quality Control Board.
3.26	…support the efforts … to have the County establish a Pilot Sediment Removal Program that would become an integral part of Beaches & Harbors as a maintenance program. If the MDR Harbor was managed for full tidal species there wouldn't be a need to transform the BWER from a primarily fresh water wetland to a full tidal habitat. Do you agree?	Los Angeles County is working to address sediment impairments as required under the existing Marina del Rey Harbor Toxics TMDL. See response to comments 3.4, 3.12, and 3.14. The Marina del Rey Harbor Toxics TMDL has no bearing on proposed work at the Ballona Wetlands Ecological Reserve. The water quality impairments in the harbor must be addressed and beneficial uses restored.

4	**Ken Flwellyn**	
4.1	We scrimp and save when possible, but at some point it will become too much of a financial burden. I don't know what a discharge permit costs, I can only hope that I've won the lottery before that happens.	See response to comment 1.13.
4.2	My dive service provider is one of the bigger companies in the harbor, and they assured me that their divers are all trained to properly clean my hull. There is no way for me to know if they actually do, as the divers come very early in the morning when I'm not at the dock.	Los Angeles County Department of Beaches and Harbors is moving forward with steps that will assist the boating community in making sure hull cleaners are trained, certified and following best practices to reduce copper impacts from cleaning events.
4.3	I have spoken with boatyards in several harbors, and no one has a good non-copper paint that will work. They tell me that I would have to take my boat out multiple times a week for the new non-biocides to be a good option. I'm not that kind of boater.	Research into non-copper paints is ongoing, not just locally but world-wide. There are commercially available non-copper paints, but acceptance has been slow and not uniform. The boatyards, in general, have not been supportive of wider application of non-copper AFPs. Part of the reason a two-year TMDL deadline extension has been proposed is to expand discussions with stakeholders, in particular with the boatyards, to determine what copper reduction practices are: 1. Being utilized? 2. In what magnitude? 3. What are the successes? 4. What are the problems? 5. Are there additional barriers that can be collaboratively addressed to make adoption more widespread and more quickly adopted?

		There are also some newer non-copper paints that have recently been developed and released commercially that are being included in paint studies. According to manufacturer literature, these new paints may address some of the concerns expressed by the commentor.
4.4	If the future TMDL enforcement causes boat owners to get a discharge permit, I will likely sell my boat, or dispose of it with the Vessel Turn-In program. I would not be able to pay for to strip the current paint and get an expensive non-copper boat paint, nor do I use my boat enough to allow for the non-copper paints to be effective at preventing growth on my hull.	Comment noted. See response to comment 1.13 for more details on economic considerations of waste discharge permits.
4.5	I would like to have less toxic boat paint, of course. I just don't know how or when that will be available, so until then I will continue to do my best clean green boating.	The commentor does not state what paint is currently on their boat. Not all commercially available paints have the same environmental impacts. Even among the copper containing anti-fouling paints, there is range of options in paints. The commentor is encouraged to look at educational material produced by Los Angeles County Department of Beaches and Harbors (https://file.lacounty.gov/SDSInter/dbh/docs/ 1129661_MDRLow-Leach-RateCopperPaints.pdf)
4.6	In the meantime, I hope we can have more time for the TMDL deadline, so that the paint market can be expanded to allow small boat owners like me to have options.	See response to comment 1.10.
5	**Emmy Goldknopf**	
5.1	I oppose the proposed increase of the TMDL for copper discharge in the Marina. Instead of loosening standards and just extending the deadline, the Water Board should continue with a more protective TMDL and quickly take steps to implement and enforce it.	The proposed changes do not loosen standards, but rather allow for data-based, site-specific adjustments to broadly applied lab-based standards using a water effect ratio (WER) per U.S.

		EPA guidance. WERs are included as part of the copper criteria in the California Toxic Rule criteria. Currently, the WER is expressed as the default value of 1. As allowed for by the California Toxics Rule and following U.S. EPA guidance, the proposed amendment applies a site-specific WER to adjust the copper water quality objective and associated TMDL load allocation. As TMDLs are not self-implementing, the proposed extended deadline is intended to provide time to develop implementation steps and regulatory mechanisms that are enforceable. This must be done thoughtfully, equitably and in collaboration with stakeholders, all of which requires time.
5.2	Regarding the TMDL -- In the WER study, two of the five successful samples were taken under "wet weather" conditions, in which toxins such as copper are diluted. Wet weather conditions are not characteristic of our region; a WER so heavily based on them would not be protective during the much more common dry weather. I hope, then, that the staff and Board will choose a standard that more effectively protects aquatic life year-round during our normal Southern California weather.	The WER study actually collected thirty samples over the course of the seventeen-month study, allowing for the calculation of twenty-four separate WERs. The U.S. EPA guidance recommends collecting samples across conditions but includes no particulars as to how those conditions should be incorporated. The study was not intended or structured to exam WERs of the wet-weather versus the dry but rather to develop a final WER (fWER) that incorporated samples across conditions. The straight geomean fWER was initially chosen for the TMDL reconsideration and included in the draft

		documents as the method most aligned with the work plan, the U.S. EPA guidance and previously calculated and reviewed copper WERs for other waterbodies in California. It is also of note, wet-weather does not always result in conditions where toxins such as copper are diluted nor does wet-weather sampling automatically result in lower WERs. The sampling conducted during the WER study indicates that for most sites, wet-weather samples did not have the lowest observed copper concentrations. Some studies have indicated samples collected in wet-weather and after rain events may actually result in lower WERs because the form of organic carbon and total suspended solids concentrations may change. This was documented in the study that developed a copper WER in San Diego Bay and discussed in the U.S. EPA Guidance.
5.3	The Technical Advisory Committee was unable to reach consensus on the WER levels. Despite this lack of consensus, the resolution proposes going ahead with the least-protective WER. This does not make sense to me.	The TAC concluded both of the proposed WERs derived from the study were valid, which is why both were included in the WER study report. The mission of the TAC was to ensure that scientific rigor was maintained during the development and execution of the study and there was consensus on the part of the TAC that this was completed.

		The TAC did not reach consensus on which calculation to use to derive the final WER (weather-weighted geomean vs non weather weighted geomean). Both proposed WERs were included in the final WER Study report as both calculation methods were considered valid and protective (the TAC stated that they considered this a regulatory decision not a scientific one). The non weather-weighted geomean was initially selected as the method to derive the final WER for the proposed Basin Plan amendments, as it most closely followed the U.S. EPA Guidance and the study workplan. However, after consideration of the public comments received and further review of supporting documents, the Staff Report, proposed Basin Plan amendments and the TMDL have been revised to include the weather-weighted geomean derived WER instead of the traditional geomean-derived WER. See response to comment 10-2 for more details on the change.
5.4	The resolution extends the deadline for compliance by two years without requiring interim benchmarks or creating an enforcement mechanism. Given that over the past 10 years, there has been little compliance with the previous standard (and little progress on the actions described in the Justification Report), why should we think that boat owners will comply with even a less-protective standard without benchmarks and an enforcement mechanism?	While it would have been preferrable to see more boaters adopt management practices (whether that be even lower copper-containing AFP, non-copper AFP or some physical separation method) in the 10 years since the 2014 Reconsideration was adopted, the fact of the matter is they were not legally required to as the TMDL was not

		implemented into an enforceable regulatory mechanism for boaters. The point of the proposed two-year extension is to develop such a regulatory mechanism. This regulatory mechanism, which could be a permitting tool such as waste discharge requirements or a waiver, will include benchmarks and milestones to hold boaters accountable. To date, it has been difficult to develop a permitting tool because the County was planning and then conducting a study that might result in changes to the TMDL copper load allocation. There are challenges in crafting enforceable provisions for what amounts to a moving target. Staff determined it was prudent to allow the County to complete the site-specific study, and for the Los Angeles Water Board to revise the TMDL as appropriate based on the results of the study, before developing a permitting tool to implement the TMDL. Now that the study has been completed, under the oversight of staff, the TAC, environmental organizations, and other stakeholders, there can be little dispute from boaters over the applicability of the copper objective in Marina del Rey Harbor or the harm that current copper levels cause aquatic life in the harbor. This is solid ground for developing and enforcing a permitting tool.

5.5	Regarding the proposed WER, I hope that the staff and the Board will do one of the following, with the best ones first: • Retain the current TMDL • Redo the WER calculations using only dry weather data • At least use the weather-weighted geometric mean WER	Concerning retaining the current TMDL, see response to comment 5.1. Concerning WER calculations using only dry weather data, see response to comment 12.4. The Staff Report, proposed Basin Plan amendments and the TMDL have been revised to include the weather-weighted WER, see response to comments 5-3 and 10-2 for more details.
5.6	Regarding implementation and enforcement, whether of the current TMDL or a new standard, I hope the staff and the Board will do all of the following: • Shorten the extension • Set interim steps and benchmarks • Create an implementation plan and an enforcement mechanism. Without these, any standard is meaningless.	The 2-year extension is intended to allow development of a regulatory mechanism that would incorporate interim steps, benchmarks, and an enforcement mechanism.
5.7	Copper-free anti-fouling paint is widely available. I understand that some boat owners are resisting repainting their hulls. But if the staff and Board create a protective standard and an effective implementation plan, many boat owners will get the repainting over with. Going forward, they can use best management practices to protect water quality and aquatic life.	While there is significant reticence among boaters to move away from copper AFPs, we intend that the regulatory mechanism will be an effective implementation plan that will lead to more boaters using copper-free antifouling paints.
5.8	I hope that the staff and the Board will act to provide maximum protection for aquatic life in the Marina.	Comment noted.
6	**Kathy Knight, Ballona Ecosystem Education Project**	
6.1	The Ballona Ecosystem Education Project supports the letter written to you today by Grassroots Coalition,	Comment noted.
6.2	We oppose the LARWQCB optional raising of the copper acceptance levels in the TMDL formula for Marina Del Rey. The change would raise it from the existing 3.1 ug/L maximum to between 4.1 and 4.3 ug/L. We support the	The Staff Report, proposed Basin Plan amendments and the TMDL have been revised to include the weather-weighted WER, see response to comments 5-3 and 10-2 for more details.

	current 3.1 ug/L maximum, and would go up to 4.1, but would not want to see it any higher than that.	
6.3	Also, the cumulative toxic stress effects that are part of the current, overall TMDLs were left out of the Water Effects Ratio (WER) analysis.	Cumulative effects are not left out of the WER analysis. The U.S. EPA WER guidance specifically states "…a WER is expected to appropriately take into account…synergism, antagonism, and additivity with other constituents of the site water, using a WER is more likely to provide the intended level of protection than not using a WER".
6.4	This area is very important, and the Precautionary Principals of the United Nations which states "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation. "	Marina del Rey Harbor, like all waters of the US, are very important and are protected under federal and State laws and regulations, including this TMDL. While some implementation practices have been postponed due to practical difficulties, other implementation actions have been taken since the 2014 TMDL Reconsideration was adopted and before the WER Study was completed.
6.5	Marina Del Rey is a very important coastal Basin, and what is done here to keep a healthy environment is very important as an example to the rest of North American small craft harbors.	Comment noted.
7	**Alicia Kunz**	
7.1	I am the organizer of the Marina Manager's meetings in the harbor, where we gather to discuss ongoing issues and brainstorm different approaches. A frequent discussion is water-quality, and we all agree that while the harbor health is visibly better, we still have more to go.	Comment noted.
7.2	We do our best to distribute information to our boaters about best practices when cleaning vessels and other boat maintenance laws/policies. That is why the Marina Managers and MdR Lessees Association encouraged LA County Dept of Beaches & Harbors to implement the Hull Cleaning BMPs Dive Program, which is in effect now.	Comment noted.

7.3	Many of the Marinas have earned their “Clean Marine” certification, which is a voluntary program to show BMPs in place at their property. We have also coordinated multiple harbor in-water cleanups, with boaters and local businesses fishing out trash all over the marina.	See response to comment 1.4.
7.4	What the Site Specific study showed us was what many of our group suspected from the start. This manmade marina without a natural ebb and flow was very different from other harbors with TMDLs. It was created essentially to be the largest boat parking lot for small recreational vessels.	Nothing in the site-specific study showed that Marina del Rey Harbor functions very differently than other harbors with TMDLs. See the response to comment 1.15 for more discussion of the relationship between the design of the harbor and the copper impairment.
7.5	Swimming and fishing are prohibited in the harbor, which are the focus of the copper concerns.	While swimming and fishing are restricted in some areas in the Harbor, they are allowed in other areas. Furthermore, the beneficial uses identified in the Basin Plan apply regardless of access restrictions. The Basin Plan designates the navigation, commercial and sport fishing, marine habitat, wildlife habitat, and shellfish harvesting beneficial uses in Marina del Rey Harbor. Several of these beneficial uses are affected by the copper impairment.
7.6	We hope the timeline can be extended more to reflect the uniqueness of the structure of this harbor, built to prevent storm systems and large currents from damaging the docks, which simultaneously prevents “flushing” of the harbor water.	Both the 2014 and the current reconsideration considered the history and physical environment of Marina del Rey Harbor. See response to comment 1.15 for more discussion on the necessity to meet the TMDL irrespective of the design of the harbor. See response to comment 1.10 for discussion of the timeline.

7.7	Over the years, the lessees, managers, and boatyards have tried to find a viable non-copper or nonbiocide paint. They have been unsuccessful in finding an alternative. There are low-leaching paints that seem to work a little better, but it is unknown if those will help hit the target reduction or if they will be cost-preventative to boat owners. Hopefully, a timeline extension can allow for more studies to find good paint alternatives. We are not currently at that point in the paint market	See response to comments 4.3 and 1.10.
7.8	The local boatyards are already using lower-leach paints, since the original TMDL implementation, and surely that has contributed to the better numbers.	Comment noted.
7.9	If there is no alternative to copper/ biocide paints, what are the other options? At this time, nothing else is reasonable. LA County conducted a study that found no other viable option.	See response to comments 1.8 and 4.3.
7.10	Boat lifts are supposed to be maintained and receive dive service like a boat. If they do not, they can fail, either sinking or partially submerging. Boats have sunk and been totaled, and parts of the lift have fallen to the harbor floor. There is only one single repairman who works on boat lifts in all of Southern California and Mexico. He is difficult to reach and booked out for months. Not ideal in a dangerous and costly situation. It is now becoming a liability for any marina to accept these lifts, even if they are brand new, as there is not a vendor to maintain them properly and regularly.	Comment noted. See, also, response to comment 1.9.

7.11	Boat liners are pointless; the copper may stay within the liner while it is up, but the liner has to be dropped for the boat to safely be removed from the slip for use. The concentrated copper (and whatever else people add to the water inside the liner) is immediately released into the water. Boat pillows often fail, easily getting holes. They have the same issues as boat lifts in that not many vendors can repair them. They also have a large amount of plastic, just like liners. When they both eventually fail, all that plastic goes to the landfill.	As per the Los Angeles County Mitigation Report (https://file.lacounty.gov/SDSInter/dbh/docs/1143110_AppendixBMitigationMeasures.pdf), traditional boat liners were not considered as a mitigation measure to address the copper impairment in the water column. The County did study Fab-Dock systems which are similar to liners but pumped dry so that copper is unable to leach into water. The Fab-Docks showed promise but wider adoption was hindered by that fact the supplier is located in Australia and the travel and supply disruptions beginning in Spring 2020 from the Covid-19 pandemic event affected continued operations. See also response to comment 1.9.
7.12	The most practical solution to improving the water is simple: improve the flushing and movement of water in the harbor. LA County should consider ways to increase the current flowing through the harbor. They should investigate water filtration methods, possibly a way to collect the copper in the water column.	See response to comment 1.15.
7.13	They should investigate water filtration methods, possibly a way to collect the copper in the water column. The County could look into ways to naturally remove copper, like oyster farming and aquatic plants used in other harbors.	Comment noted. See response to comment 14.5 for more information on oyster farming and filtration.
7.14	Studies should continue on viable and affordable paint solutions.	See response to comments 1.8 and 4.3.
7.15	The marina that I manage has 25% boaters with 30-foot boats or smaller. The overall harbor slip mix is even higher, with the most recent LA County slip report showing 42% of 4326 slips in the harbor as 30 foot or less. This large number of small slips is required by the Coastal Development Permit from the California Coastal Commission. It is also a result of the Small	See response to comment 1.13.

	Craft Harbor Commission and the intention of the artificially constructed marina to be a small-boat recreational facility. Because of the decades of encouraging small boats and “entry-level” boaters, any significant increase to the cost of boating in this harbor will undoubtedly lead to the sale and abandonment of those vessels.	
7.16	Already we have less boats in the harbor than 10 years ago, which could have contributed to the overall decrease in copper. While less boats in the harbor will help us reach the goal, it will drop the community access to the public asset of Marina del Rey. LA County’s policy is to increase access to the water, and ensure that it is equitable and affordable.	See response to comment 1.13.
7.17	While our initial efforts are admirable, it will take significant time to address the lack of resources to enable the small-boater to change their paint. It will take an ongoing marketing campaign to educate locals on the viable options, when some are found. With all of these complicated issues, we humbly request a longer extension than 2 years.	See response to comment 1.10.
8	**Simon Landt**	
8.1	…when the DPR reduced leach rates for Antifouling Paints to Category 1 in 2015, we immediately restocked with the new lower leach rate paints available, we have provided outreach at the yacht clubs to educate the boat owners as to their expectations with the newer paints and provided seminars to our customers at our Maintenance events using the Antifouling Representatives from the coatings industry to pass over their expertise with the most up to date antifouling paint products.	The boatyards of Marina del Rey Harbor are important collaborative stakeholders for the Marina dey Rey Harbor Toxics TMDL and their continued leadership in addressing the copper impairment and anti-fouling paints will be important as all stakeholders work to implement the TMDL.
8.2	We would like to see the TMDL have an even greater extension period before implementation, the MS4 permittees were granted 3 to 5 year extensions for their TMDL discharge permits, additional time would assist in allowing paint manufacturers to keep advancing paint technology and use less copper in their paint, retarding growth on boat bottoms.	The MS4 permittees were granted 3- to 5-year extensions in a limited number of the many TMDLs which apply to their discharges as most had made progress on implementation of mitigation measures but needed additional time due to unforeseen market and funding disruptions beginning in Spring 2020 stemming from the world-wide Covid-19 epidemic. The permittees could provide tangible evidence (such as design plans)

		of the work that would be completed during that extension. As of now, while there are efforts being conducted to develop a “magic bullet” AFP that counters fouling as well as copper AFPs, but without the water pollution side-effects, there is no guarantee a product breakthrough will occur in any time period beyond the 2-year extension currently proposed. Mitigation efforts must continue in Marina del Rey Harbor and the TMDL must be met, regardless of whether that advanced paint technology is realized.
8.3	We would like to see the ability to use lower copper paints with Biocides to be able to keep reducing the copper level in Marina del Rey, we are aware of the possibility of not allowing Biocides in the paints that we apply, the lower copper paints use only a small percentage of Biocide to help activate the reduced copper ingredients to retard fouling of the boat bottoms.	The current reconsideration effort does not restrict the ability to use lower copper paints containing biocides. As per page 23 of the 2024 Reconsideration Staff Report, one of the methods by which compliance with the TMDL can be demonstrated has been updated to include non-copper, non-biocide paint (compliance option B). However, nothing in the staff report precludes the use of non-copper, non-biocide paint to demonstrate compliance with the TMDL through option A or C.
8.4	We would like to see the Diver Training Ordinance program that LA County Beaches and Harbors has implemented really being encouraged and enforced on the Diver cleaning community in the marina, currently the list of approved divers is very small and the enforcement apparatus has no teeth, there should be active Code Enforcement Officers working throughout the marina, overseeing diver activity and issuing warnings and citations for non-compliance.	This is outside the scope of the TMDL and should be addressed to LA County. However, in TMDL development meetings staff from LA County have indicated plans to increase enforcement of the ordinance.

8.5	On a side note, the Trash Interceptor that is operating in Ballona Creek entrance by Dept of Public Works is very effective, it has definitely helped with the reduction of trash entering the marina, especially during the winter storms, we understand that this is not a permanent fixture but it would be beneficial to find additional funding to keep it working as long as possible	Comment noted.
9	**Patricia McPherson, Grassroots Coalition**	
9.1	Grassroots Coalition as its first option opposes the LARWQCB's optional raising of the copper acceptance levels in the TMDL formula for Marina del Rey, from the existing 3.1 ug/L maximum to between 4.1 and 4.3 ug/L. The change is not great but still significant. As it is not great, why change the already approved TMDL for copper?	The proposed change is the result of additional scientific work that has demonstrated the current target does not reflect site-specific conditions in Marina del Rey Harbor. The State Water Board and Department of Pesticide Regulation encouraged additional scientific work to evaluate whether a WER was appropriate. The WER study was conducted following U.S. EPA guidance.
9.2	The cumulative toxic stress effects that are part of the current, overall TMDLs are left out of the Water Effects Ration (WER) analysis.	See response to comment 6.3.
9.3	And, consistency issues with the WER alongside utilization of only mussels (1 species) provides for concerning variables. Why take the risk?	The WER study is based on guidance from U.S. EPA and previous peer reviewed studies and was conducted under the review of a TAC. One species was decided upon based upon the specifics of Marina del Rey Harbor.
9.4	Was the WER model used due to its expected ability to raise what might be considered, acceptable levels?	The WER study was conducted because it is allowed for by the California Toxics Rule and it was encouraged by the Department of Pesticide Regulation and the State Water Board. It was not conducted with a predetermined outcome. Also, to clarify, The WER study methodology was based the U.S. EPA guidance and not a model. While SCCWRP did calculate WERs using the biotic ligand model, these were not used in the final WER calculations and are not

		the basis of the proposed site-specific objective. The WER study methodology was used because it is the guidance provided by U.S. EPA and follows the methodology in similar previously peer-reviewed studies.
9.5	https://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/petitions/a2054apetitionpart2.pdf Note that, in the examples above, use of a site-specific WER for copper raised the criterion concentration allowed at the site from 4.1 ug/L to 6.2 ug/L, an increase of 50 percent. pg 42 of 52. The Services agree with Welsh et al. (1997) that imbalances in Ca-to-Mg ratios between site waters and dilution waters may result in WERs which are overestimated because calcium ions are more protective of metals toxicity than are magnesium ions. The EPA has noted this problem with determining WERs but limits the suggested correction of matching the laboratory Ca-to-Mg ratio and the site ratio to a single sentence at the end of the proposed rule. **Thus, the significance and correction of this problem is not adequately addressed.** Emphasis added. pg. 42 of 52 The use of a ratio based WER determined with 2 or 3 test species limits the reliability. of the resultant site-specific criteria and calls into question the level of protection provided for families or genera not represented in the WER testing. p.42 of 52. The inherent variability of toxicity testing can also have a significant effect on the final WER determination, especially because it is used in a ratio. As discussed above, the EPA has developed its criteria based on a relatively large database. However, even with such a large database variability in test results can still cause difficulty in determining a criteria value. p.42 of 52 Procedures for acclimation of test organisms prior to toxicity testing may also be inadequate to assure meaningful comparisons between site and laboratory waters. For the reasons stated above, the Services believe that	The commenter provided a link to, and is quoting, a document that appears to be a part of a petition to the State Water Board of WDRs issued by the Central Valley Regional Water Board to the City of Manteca, Wastewater Quality Control Facility in 2009 (R5-2009-0095). It is unclear how this petition relates to the Marina del Rey WER. We note that while the WER guidance does not remove all imaginable uncertainty, the current guidance and the methods followed in this WER procedure represent the best available science and methods. The WER study followed and exceeded U.S. EPA Guidelines, was based on past peer-review studies and was reviewed by a Technical Advisory Committee. See also response to comment 12.1 on the protectiveness of the WER.

	the EPA procedures for determining WERs for metals may result in criteria that are not protective of threatened or endangered aquatic species. Thus, WERs of three (3) or less are unacceptable because they are likely within the variance of the toxicity tests. WERs over three must be carefully developed and evaluated to ensure that listed species will be protected." The agencies agreed that: "EPA, in cooperation with the Services, will issue ~ clarification to the Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals (EPA 1994) concerning the use of calcium-to-magnesium ratios in laboratory water, which can result in inaccurate and under-protective criteria values for federally listed species considered in the Services' opinion. p 43 of 52	
9.6	Challenges for the development of a biotic ligand model predicting copper toxicity in estuaries and seas https://setac.onlinelibrary.wiley.com/doi/full/10.1002/etc.1705	It is not clear why the commentor included a link to the scientific paper on challenges for the development of a biotic ligand model. The biotic ligand model was not used for the copper WER calculation for Marina del Rey Harbor.
9.7	All of the acknowledged toxins that are part of the overall TMDLs for the Marina exert a **cumulative**, harmful influence upon the immunology, reproductive, neurology, and other organ, gill failure issues that face the aquatic life in Marina del Rey.	In addition to copper, the Marina del Rey Harbor Toxics TMDL addresses chlordane, lead, zinc, PCBs, DDT, and sediment toxicity. However, the current reconsideration is limited in scope and is focused on the copper water column impairment. The WER method used in this reconsideration takes into account cumulative effects, see response to comment 6.3.
9.8	The studies provided by LARWQCB demonstrate a a continuing high, upward trend of copper contamination in the marina, hence bringing the life threatening copper values back down to below 4.1 would be a significant change/goal.	The data included in the Staff Report do not show a continued upward trend in water column copper concentrations. Data collected from about 2015 onward have shown an overall downward trend in dissolved copper levels.

9.9	Santa Monica Bay was once considered a vibrant, healthy and exceptionally highly regarded fishing bay in the world. Today, warnings of toxicity are the norm. After roughly four decades of studies, paid for with millions of public dollars we have still not achieved a sustainable healthy marina ecosystem	A sustainable, healthy Santa Monica Bay has not yet been attained and significant work remains; however, the application of publicly funded studies, regulatory efforts, community engagement and improved technology and awareness have resulted in water quality improvements throughout the region, including in the Santa Monica Bay.
9.10	Grassroots Coalition supports Best Management Practices that are well known and studied that provide for containment of contamination and proper disposal and/or remediation of all the TMDL toxins noted in the Staff Report. As part of an overall process of decontamination and healthy maintenance of Marina del Rey, Grassroots Coalition is supportive of Best Management Practices such as are noted herein and supportive of ongoing efforts, as in part noted in the Staff Report, to remove copper from the aquatic environment of Marina del Rey.	Comment noted.
9.11	As an overarching premise, changes to the existing maximum levels should err on the side of protecting water quality and beneficial uses. The Precautionary Principle was endorsed at the United Nations Conference on Environment and Development in 1992 as an appropriate guideline in environmental decision making.(U.N., Rio Declaration on Environment and Development, June 14, 1992, 31 ILM 874) This principle encourages environmental managers to err on the side of caution, in order to ensure that neither human nor environmental health, and aquatic life is compromised. In implementing this approach, uncertainty should not be a valid rationale for inaction.	See response to comment 6.4.
9.12	Continued efforts towards a more stringent approach to a proactive, pro-protective course of action to eliminate the use of bottom paints containing copper (currently, copper is still allowed in bottom paints), on boats in	See response to comment 1.10 for a discussion of the use of the 2024 deadline to develop an effective

	Marina del Rey will provide a positive model toward a healthier marina environment. Changing deadlines from 2024 to 2026 is disappointing. Grassroots Coalition requests that if a delay is necessary, then we request the deadline to remain at least at 2025.	regulatory mechanism. A deadline of 2025 does not allow for enough time to collaborate with stakeholders and develop a regulatory mechanism.
9.13	Second guessing via Water Effects Ratio (WER) methodology cited by SCWRRP simply adds to the prolongation of the removal of the anthropogenic copper in the environment, which is not desirable.	The WER methodology utilized by SCCWRP is based on U.S. EPA guidance and is an appropriate method for developing WERs. The method has also been used by other peer-reviewed copper WER studies in California.
9.14	Grassroots Coalition supports the current TMDL approvals or for expediency would not oppose 4.1 for the curtailment of copper entering the waters of the marina.	Comment noted.
9.15	And, while appreciating the efforts thus far to educate the boating public and others as to the decontamination needs of the marina, there is still a need for enforced regulations and a continuance of strong pilot programs.	Comment noted.
9.16	Programs and regulations that promote public and industry awareness that will end the use of copper in bottom paints alongside other options for the protection of boats are needed to continue. Such pilot efforts of active, biologically friendly decontamination will likely promote other toxic decontamination and cumulatively create a positive trend toward public awareness, willingness to participate in achieving a healthy environment.	Comment noted.
9.17	Final approval of the Basin Plan amendments by USEPA is required for the Basin Plan amendments to become effective and thereby form a legal basis for orders by the LARWQCB to require implementation.	To the extent that the comment is stating that TMDLs are not self-implementing, the Los Angeles Water Board agrees. U.S. EPA approval of a TMDL is not sufficient for the Los Angeles Water Board to require compliance with the TMDL. An enforceable regulatory mechanism implementing the TMDL, such as an order, is also required.
9.18	The following bad environmental actor sets an example for successful removal of toxins in the boating community. https://www.law.cornell.edu/regulations/california/3-CCR-6488	The commentor is referring to the global ban on tributyltin AFPs. This ban was successful, in part, because boaters used replacement AFPs (specifically copper leaching AFPs). There is not yet broad

		recreational or commercial adoption of non-copper AFPs which makes addressing the copper impairments in Marina del Rey Harbor more challenging. However, the copper impairment must be addressed with or without broad acceptance of non-copper AFPs.
9.19	**Marina del Rey is a cash cow for the region, and as the largest small craft harbor in North America, establishing itself as a potential example of best management practices for the world**	Comment noted.
9.20	**T**ask **F**orces of multi agency investigation and review have been receiving public funding for establishing an ecologically healthy marina in combination with healthy human recreational use since at least the mid to late 90s. Yet, we remain with a TMDL impaired, unhealthy aquatic ecological environment in Marina del Rey that is also unhealthy and dangerous for human recreational uses. Specific changes have helped (ex. Tributyltin removal in boat bottom paint, as well as city engagement in community discharges into storm drains that lead to the Marina	Comment noted. However, the WER study was not part of a task force effort and was funded by the Los Angeles County Department of Beaches and Harbors.
9.21	however, after roughly 30-40 years of studies and plans we remain with an unhealthy marina environment.	The water column copper impairment has been included in the Marina del Rey Harbor Toxics TMDL for only 10 years, since 2014.
9.22	Decades have gone by without implementation of many TMDL enforcement actions within the marina itself based upon comments regarding financial cost. Marina del Rey generates enormous profits by the County of Los Angeles and its resident businesses. These profits can be reinvested into the biological health of the marina if we are ever to have a sustainable, healthy marina.	Comment noted.
9.23	We request review and response to potential pilot programs that could start implementation of biologically friendly clean up of Marina del Rey	The Los Angeles Water Board is actively and collaboratively working with

	sediment and disposal and/or remediation techniques which abound in in scientific journals and ongoing actual use.	stakeholders to address the Marina del Rey Harbor TMDL. See response to comments 3.4, 3.5, 3.22 for more information on the sediment portion of the TMDL. See also response to comment 3.7 for more information regarding jurisdiction over the manner of compliance.
9.24	https://www.sabreyachts.com/sabre-yachts-blog/why-swimming-in-your-marina-is-a-bad-idea It is likely that many, if not most, people are unaware that swimming in one's own marina poses a life threatening hazard to humans as well as to wildlife from an electrocution potential	The commenter provided a link to a short article that discussed the potential for electrical 'leaks' from boats.
9.25	https://www.sierraclub.org/texas/blog/2018/09/simple-app-helps-texans-report-pollution-houston-galveston-waters What can be done? How can the Basin Plan engage in greater benefits to public and environmental health and safety?	The commenter provided a link to an article about an app for reporting pollution in Texas. This is outside the scope of the TMDL reconsideration. However, we note that while the Water Boards do not provide an app, the CalEPA website allows individuals to report water, air, toxic substances, solid wastes and pesticides pollution problems in English and Spanish. (https://calepa.my.salesforce-sites.com/complaints/)
9.26	Final Note: per the WRP of SCWRRP, without actually knowing what the potentials are for future saltwater input into the marina inclusive of contamination from regionally adjacent projects being actively promoted by the California Department of Fish & Wildlife and the California Coastal Conservancy; is it not difficult to ascertain the full extent of contamination	The TMDL revisions are based upon the most recent salinity data and known conditions in the harbor.

	that Marina del Rey may be experiencing in the relatively near future due to CDFW's Plans to excavate Ballona Wetlands to convert it into a tidal saltwater bay while also expanding the areal extent as a holding basin for toxic contamination that may carry over into the marina on a daily basis?	While there are other proposed projects close to the area of the harbor (including the proposed restoration project at Ballona Wetlands), they are not expected to affect the salinity of the harbor nor is it expected that they would result in contamination of Marina del Rey Harbor.
9.27	Per the model itself utilizing mussels / and as the sole receptor: Effects of copper on olfactory, behavioral, and other sublethal responses of saltwater organisms: Are estimated chronic limits using the biotic ligand model protective? - PubMed	See response to comment 9.6.
9.28	**Department of Water Resources- Sustainable Groundwater Management Act** **DWR corrections are required for the unevaluated southern portion of Santa Monica Basin per its Sustainable Groundwater Management Act needs (SGMA) & Groundwater Dependent Ecosystem (GDE) evaluation needs that are inclusive of saltwater intrusion monitoring data gaps.** The overall TMDL issues of Marina del Rey and the region are not discussed in tandem with SGMA for cumulative considerations. Certain freshwater drainage areas into Marina del Rey from Ballona Wetlands are relatively new and have no known permits. While the Fiji Slough is tidal, the larger portion of Area A (noted in green in the diagram below) is a documented area of seasonal freshwater ponding. Recent documentation of this area's drainage into the Fiji Slough reveals a breech in the berm along the Fiji Slough that has been allowing for the drainage of Ballona's ponding freshwater.	This comment is outside the scope of the TMDL as the current TMDL effort has no impact on groundwater and overdraft.
9.29	**Best management practices** are well known and understood and should be required and stringently enforced within the boating communities and marina operations.	See response to comment 5.9
10	**NGO Joint Letter (Los Angeles Waterkeeper, Heal the Bay, WeTap, Green LA Water Committee)**	
10.1	Our organizations participated extensively in the Water Effects Ratio ("WER") study for copper in the Marina del Rey Harbor ("MdR"), which is the impetus for this MdR TMDL Reconsideration. Our intent in participating was to ensure that the study would not substantially weaken critical water	Comment noted.

	quality protections applicable to MdR, pursuant to previous Total Maximum Daily Load ("TMDL") requirements for copper. While we do not contest the process or findings of the copper WER study, we have two comments on the MdR TMDL Reconsideration to ensure adequate protection of water quality and aquatic life in MdR.	
10.2	**First**, we urge the Los Angeles Regional Water Quality Control Board ("Regional Board") to **use the weather-weighted final WER value of 1.32, rather than the 1.4 value based on a geometric mean of all samples taken**. The Staff Report notes that the Technical Advisory Committee ("TAC") did not reach consensus on which WER to use, but the Staff Report ultimately recommends the WER of 1.4 solely because Los Angeles County, the regulated actor responsible for compliance with the TMDL, is requesting it, and because previous WER studies adopted WER values based on a non-weather weighted geometric mean.	While Los Angeles County did request that the non-weather weighted final WER (fWER) be adopted instead of the weather weighted fWER, that is not the reason it was the proposed value included in the April 2024 publicly released version of the staff report and draft documents, rather that is why both alternatives were considered before the draft staff report was completed. As scientific practice recommends and state law requires, peer review is an important consideration in such situations. The April 2024 staff report recommended the WER of 1.4 because the calculation methodology more closely followed that in the 1994 U.S. EPA Guidance, the methodologies in the previously peer reviewed studies and the methodology in the WER Study Workplan. However, in response to this comment, a further review of the stakeholder comments and concerns during the WER Study workplan development and project process was undertaken in May and June of 2024.

		The record shows that Heal the Bay and Los Angeles Waterkeeper (HtB/LAWK) were actively involved in the development and commencement of the WER Study. Early in the process, HtB/LAWK raised concerns about making sure any adopted WER took into consideration seasonality in Marina del Rey Harbor. As discussed throughout this Response to Comments, both WERs included in the WER Study report are protective of aquatic life, are consistent with the U.S. EPA Guidance, are scientifically valid and take seasonal impacts into account. As such, the choice of which WER to incorporate into the Basin Plan is a policy decision that takes into account stakeholder input and implementation considerations. In light of these considerations and in acknowledging the consistently expressed concerns from HtB/LAWK regarding seasonal effects, Los Angeles Water Board staff have revised the Staff Report and TMDL documents to include the weather-weighted geomean WER (1.32) instead of the traditional geomean WER (1.4). The Staff Report, proposed Basin Plan amendments and TMDL have been revised to reflect this change, which is a logical outgrowth of the comments received.

10.3	We disagree with the use of the non-weather weighted WER value of 1.4 because it treats all water samples taken equally, even though in practice, those results do not occur in equal frequency. The conclusions of a WER study must account for climate patterns to ensure the new TMDL limits accurately reflect environmental conditions—as the final WER study noted, "[t]he weather-weighted WER is more representative of the average year-round condition."	The WER guidance does not recommend or require a weather weighting of samples based on frequency of occurrence. Rather, the U.S. EPA guidance provides that sampling should occur during the extreme seasons. Specifically, the guidance states "ensure that…samples span the range of water quality characteristics that might affect the toxicity of the metal", including seasonal effects (page 68). The WER study does account for climate patterns by including samples collected in the extreme seasons of summer and winter. However, see response to comment 10.2 regarding changes to the WER in the Staff Report, proposed Basin Plan amendments, and TMDL documents.
10.4	Moreover, as the Implementation Plan for the WER study acknowledges, "[s]ince both WERs were generated through the study which is consistent with the EPA guidance, either WER value reflects the intended level of protection for MdR." Thus, selecting the WER of 1.32 is not only legally proper pursuant to EPA guidance, but it is analytically appropriate to reflect the accurate environmental conditions at MdR.	The fact one WER is lower than the other does not necessarily make it more analytically appropriate. See also response to comment 10.2.
10.5	And the fact that previous WER studies did not utilize a weather-weighted final WER value is irrelevant to which WER value is most analytically sound in this situation. As a matter of principle, a subjective action taken before does not justify making the same decision again, particularly where there is a better option available.	The previous WER studies are not subjective actions but are instead peer reviewed processes. Building upon previous work is foundational to science. A lower weather-weighted WER does not mean it is more analytically sound.
10.6	We also note that the Implementation Plan proposed reducing the WER from 1.4 to 1.32 if "further analysis" shows impairment of beneficial uses	The site-specific objective does not weaken existing water quality standards,

	still occurring in MdR.[1] This approach conflicts with the Regional Board's obligation to ensure an adequate margin of safety when adopting site-specific objectives that weaken existing water quality standards. The Regional Board must ensure that the MdR TMDL Reconsideration has the least possible negative impacts to water quality and aquatic life, and that can only be accomplished by adopting the WER of 1.32 as sanctioned by the TAC.	rather it provides a more targeted objective based on the actual conditions of Marina del Rey Harbor. The Implementation Report was a Los Angeles County Department of Beaches and Harbors document. However, this was not included in the staff report for the current TMDL reconsideration. As stated in the staff report, the WER study indicated a WER of 1.4 is protective of beneficial uses. Monitoring will be required in any regulatory mechanism developed to implement the dissolved copper TMDL. If monitoring showed a WER of 1.4 is not protecting beneficial uses, even though the study behind it indicated it would, this would indicate additional unknown factors may be simultaneously occurring and might also keep a WER of 1.32 from being protective. Such a scenario would trigger a re-evaluation of the WER. It should be noted that the WER can be re-evaluated, revised or rescinded by the Los Angeles Water Board with reasonable justification based on new science, data or guidance. While the TAC did not arrive at a consensus as to the preferred WER, the TAC considered both ratios valid and appropriate.

[1] Implementation Report at p. 1.

		See also response to comment 10.2 for discussion of changes to the proposed WER in the Staff Report and TMDL documents.
10.7	**Second**, we urge the Regional Board to **eliminate or shorten the extension of the final compliance deadline proposed in the MdR TMDL Reconsideration**. We have significant concerns with yet another proposed extension to the final TMDL compliance deadline for MdR—the previous copper TMDL for MdR had final compliance deadlines of 2018, which were not met, and in 2021 those deadlines were previously extended to March 22, 2024 against our objections (and, in our view, without proper justification). Now, even though the March 2024 compliance deadlines were also not met, the Regional Board proposes to once again extend TMDL compliance deadlines for copper in MdR by an additional two years, to March 22, 2026, again without sufficient justification for the extension.	The Marina del Rey Harbor Toxic Substances TMDL contains multiple TMDLs for different pollutants with differing targets, load allocations, waste load allocations and implementation schedules. The deadline for the TMDL components addressing the discharge of dissolved copper from boats utilizing AFPs was established in the 2014 reconsideration as March 22, 2024. This has not changed since the 2014 reconsideration was adopted.
10.8	The primary reason for the compliance deadline extension cited in the Staff Report is that additional time is needed to assess the water quality in MdR, to account for impacts from leach rate reductions from the California Department of Pesticide Regulation ("DPR") adopted in 2018 and impacts of hull cleaning enforcement by the Los Angeles County Department of Beaches & Harbors ("DBH"). Additional time is not necessary to assess impacts of those regulatory actions, because there has been ample time to undertake those actions prior to 2024 and assess the impacts.	The staff report also states an extension is needed to "provide time for Los Angeles Water Board staff to collaborate with stakeholders to develop WDRs or another regulatory mechanism". The development of these mechanisms requires time and resources, especially to collaborate with the many different types of stakeholders (the County, the anchorages, boat yards, boats and NGOs). Two years is a very ambitious schedule for developing and adopting a mechanism.
10.9	The Staff Report does not indicate to what extent enforcement of the new leach rate requirements or hull cleaning BMPs has actually been completed, calling into question the diligence of the responsible parties in	TMDLs are not self-implementing, therefore a regulatory mechanism must

	seeking to achieve compliance with the final TMDL compliance deadline. Regardless, to the extent additional implementation actions are necessary to achieve water quality compliance with the reconsidered copper TMDLs following the WER study, those actions were and are available to the responsible parties irrespective of a compliance deadline extension.	first be developed, adopted, and in effect to implement or enforce the TMDL.
10.10	We remind the Regional Board that the TMDLs for MdR were initially adopted in 2005, and subsequently reconsidered in 2014. Therefore, responsible parties have already had over two decades to chart a path toward compliance with the final TMDL limits, and rather than pushing forward with implementation actions on an expedient timeline, responsible parties have delayed implementation for years and instead sought to weaken standards and extend deadlines at the 11th hour. This extension, and any further extensions, will only serve to give the responsible parties additional time to drag their feet on long-overdue measures to reduce copper pollution in MdR and achieve (soon-to-be-weakened) copper limits in the harbor. We would not be surprised to see yet another TMDL extension request filed around the March 22, 2026 deadline if this extension were to be granted. For these reasons, we urge the Regional Board to reject any extension to the current copper MdR TMDL final compliance deadline of March 22, 2024, or as an alternative, adopt a shorter compliance extension of one year to March 22, 2025. A more stringent compliance timeline than what is proposed in the MdR TMDL Reconsideration will provide certainty to the regulated community and the public regarding the critical need for urgent action to reduce copper pollution in MdR, without any further unnecessary delay.	The water column dissolved copper impairment was not included in the 2005 Marina del Rey Harbor Toxics TMDL, as at that time there was not enough data for the constituent-waterbody combination to be listed. It was not until the 2014 reconsideration that it was included. Even at that point it was recognized that additional information would be needed, which is why the State Water Board directed the Los Angeles Water Board to consider site-specific objectives following a study conducted by the County in its Resolution approving the TMDL (Resolution Number 2014-0049). Implementation has occurred since the 2014 reconsideration, through education (to boaters, cleaners, anchorages and the public), widespread changes in hull cleaning practices (cemented in a fully adopted county ordinance), paint studies, the WER study and adoption of the AFPs with a leach rate less than 9.5 ug/cm^2/d. It is true the vast majority of boaters have not switched to non-copper paint, but to date they have not been required to because TMDLs are not self-implementing.

		Adoption of a regulatory mechanism is required to implement the TMDL. A regulatory mechanism will provide certainty to boaters and will contain enforceable provisions that will compel compliance with the TMDL. The two-year extension for the water column copper load allocation deadline provides time for adoption of a regulatory mechanism to be accomplished.
10.11	We look forward to continuing our collaborative work with the Los Angeles Regional Board to preserve, enhance, and restore the quality of water resources in the Los Angeles region for current and future generations.	Comment noted.
11	**Chris Potter**	
11.1	Despite keeping annual maintenance costs under $1000 by doing most of the work myself, I still face significant financial strain. For instance, the $6000 for new bottom paint this year exceeds my boat's value, yet I cover this expense due to my passion for boating. Many boaters share similar financial challenges. We manage expenses as best we can, but added TMDL compliance costs, especially for discharge permits, could be overwhelming. I am unsure of the permit's exact cost, but fear it might exceed my financial limits.	See response to comment 4.1.
11.2	While my dive service assures proper hull cleaning, I cannot verify this as the work is done early in the morning	See response to comment 4.2
11.3	Also, effective non-copper paint options are unavailable, requiring frequent haul-outs and significant investments, which are impractical for recreational boaters.	See response to comment 4.3
11.4	If TMDL enforcement requires a discharge permit, I might be forced to sell my boat or use the Vessel Turn-In program. I cannot afford stripping the current paint and applying a costly non-copper alternative, and my boat use is too infrequent for non-biocides to be effective. While I support reducing toxins in our waters, current options do not offer practical or affordable solutions for small boat owners.	Comment noted. See response to comment 4.1 for more details on economic considerations of waste discharge requirements.
11.5	Extending the TMDL deadline would allow time for viable alternatives to develop.	See response to comment 1.10

11.6	Increasing transparency and accountability in hull cleaning practices would also benefit our community.	See response to comment 8.4
11.7	However, I request your support in considering the financial burdens of TMDL compliance on small boat owners. Allowing more time for affordable and effective paint options will help us continue enjoying and preserving our waterways.	See response to comment 1.14 and 4.1
12	**Shana Rapoport**	
12.1	Data from the WER study shows dissolved copper to be more toxic to aquatic life during dry weather than during wet weather (Staff Report, pg. 16, Table 5-2). Rather than designing a WER to be protective of the most sensitive hydrologic condition, the proposed WER of 1.4 is only protective during wet weather (geometric mean of WERs calculated for wet weather: 1.57, 1.81). All WERs calculated for dry weather days have a value less than the proposed WER, resulting in a water quality standard that is not protective of the aquatic life beneficial use during dry weather (geometric mean of WERs calculated during dry weather: 1.31, 1.38, 1.0). During winter dry weather, the protection is less than during summer dry weather. All individual samples during winter dry weather indicated water quality conditions where aquatic life is not protected by the proposed WER (WERs during winter dry weather: 1.0, 0.925, 1.01, 1.09, 1.27).	The notion that the WER is only protective during wet weather is incorrect and contrary to the U.S. EPA WER Guidance. The U.S. EPA WER Guidance provides a methodology by which the multitudes of variation present in a natural water body can be more adequately captured and considered in adjusting a water quality objective. The guidance recognizes that waterbodies, especially large waterbodies, have many parameters that vary from place to place, time to time, etc. The U.S. EPA WER Guidance was developed and published because it was recognized that the existing toxics criteria promulgated by the U.S. EPA was based on a national dataset and for does not reflect site-specific conditions for most waterbodies. The WER Guidance utilizes a geometric mean calculation to derive a final WER for a site as a way to accommodate the variation while finding a middle point that is not skewed by the extremes of variation.

		The U.S. EPA could have recommended that the lowest sample WER of all WERs be used as extra protection method, but it did not. The WER Guidance generally recommends that all sample WERs be pooled and the geomean of that sample be calculated and used as the WER. This is one of the methods used in the WER study and initially recommended in the April 2024 version of the TMDL reconsideration Staff Report. According to the WER Guidance, the WER of 1.4 is protective of the conditions in Marina del Rey Harbor. See also response to comment 10.2 for discussion of changes to the proposed WER in the Staff Report and TMDL documents.
12.2	As evidenced by the data discussed above and presented in the Staff Report (pg. 16, Table 5-2), adoption of the proposed water-effect ratio (WER) by the Los Angeles Regional Board will permanently remove from Marina del Rey Harbor the protection of aquatic life during dry weather. This is contradictory to the current water quality standard which is designed to be protective during all conditions.	See responses to comment 10.6 and 12.1.
12.3	As the technical advisors did not agree on an appropriate WER to recommend, and the majority favored a more-protective WER calculated using a weather-weighted geometric mean, submitting this study for peer-review seems appropriate and necessary. The inability of this group of experts to collectively support the proposed WER raises significant concerns regarding the proposal. Relying on peer-review from an older process for a different water body, rather than the advice of the majority of experts tasked specifically with providing their	The Staff Report relies on peer-review of other studies **and** the advice of the experts on the TAC that was incorporated into the WER study design and execution. The WER study results do not reflect the assertion that the experts of the TAC did not support the WER, in fact the opposite

	expertise regarding this study, seems insufficient as a basis to support an action. Completing a peer-review process would provide assurance that technical experts support the proposed approach.	is true, by the very fact both WERs were included in the study and left the selection as a policy decision, not a scientific one.
12.4	In addition to the two methods of determining the WER discussed in the Staff Report, it is unclear if consideration was given to omitting wet weather data entirely during the calculation of the WER. Given (1) the infrequency of wet weather in Southern California and (2) the considerable difference in copper toxicity during varying weather conditions in Marina del Rey Harbor, calculating a WER using only dry weather data would ensure a site-specific objective that is protective during all weather conditions. Please discuss the potential for calculating a WER based solely on dry weather data in the Staff Report.	The TAC did not recommend calculating a WER based solely on dry weather data so this option was not considered in this TMDL reconsideration. Deference was given to the scientific expertise of the TAC.
12.5	The MdRH Toxics TMDL relies on conservative modeling assumptions to ensure a margin of safety is applied to the TMDL. The Staff Report states that "….the model also included the additional conservative assumptions of a maximum number of boats present, that all boats are painted with antifouling paint and all cleaning is completed in-water." An additional conservative assumption was incorporated in the 2014 MdRH Toxics TMDL and has been replaced with the utilization of higher (less protective) values in the proposed revision: utilization of the lower range of salinity values in the box model. Based on the information in the Staff Report, it appears that most boats in Marina del Rey Harbor are currently painted with antifouling paint and cleaned in the harbor water. If this is indeed the case, they may not provide a margin of safety in the TMDL.	The update of the salinity values in model calculations was discussed in the Staff Report for the current reconsideration. The salinity values were replaced in the model not because they were less protective but because the values could be updated with a more current and rigorous dataset. The salinity values used in the 2014 TMDL Reconsideration were limited in number (n=12) and temporally separated from current conditions of the harbor. The salinity data set collected during the recent effort is substantially larger (n= 177) and more accurately reflects current conditions in the harbor. The use of the current salinity dataset also addresses a weakness in the previous modeling undertaken for the 2014 TMDL. The model includes a calculation of residence time. When the model was run for the

		previous effort, the model produced a calculated residence time of almost -127 days, which is neither possible nor reflective of documented conditions in the harbor. Updating the salinity data, the model calculates the residence time in the harbor at almost ten days (which agrees with previous estimates of residence time in Marina del Rey Harbor). As was the case when the staff report for the 2014 reconsideration was written, most boats in the harbor are painted with copper AFP and are cleaned in the harbor. These conservative margins of safety are carried over from the 2014 reconsideration. However, instead of not providing a margin of safety as commentor suggests, they actually provide more so than previous efforts. The calculations of loading and load allocations are based on the maximum allowable leach rate of 9.5 ug/cm2/day, but in the 10 years since the TMDL was previously considered, additional lower leach rate and no leach paints have continued to enter the market and are being used by boaters. Additionally, while most boats are having hulls cleaned in the harbor, the passing of the Hull Cleaning Ordinance (which requires the use of the management practices that release lower amounts of copper) will lead to less copper

		discharges through this activity, but the TMDL assumes the discharges due to cleaning remain at the same level as when the 2014 TMDL was developed. Also included as a margin of safety but not discussed by the commentor is the fact that the number of boats in the harbor (and in fact the capacity for boats) have decreased in the last ten years (as confirmed by Los Angeles County DBH and anchorages (see comment 7.16) but for purpose of revising this TMDL, the load allocation calculations used the total number of boats as the maximum possible based on historical capacity.
12.6	Please provide data on the average capacity of boats present in Marina del Rey Harbor, the percentage of boats currently understood to be painted with antifouling paint, and the percentage of boats cleaned in-water. Evaluation of this data is necessary to ensure a margin of safety is indeed incorporated into the proposed TMDL.	This evaluation was conducted during the 2014 TMDL reconsideration, details of which can be found in the staff report from the 2014 reconsideration effort.
12.7	The proposed revisions to the MdRH Toxics TMDL include an extension to the compliance timeline for the TMDL water column load allocations to March 22, 2026. As background, the 10-year timeline for the 2014 MdRH Toxics TMDL was based on the length of time local boat yard representatives estimated it would take to repaint sufficient boats in Marina del Rey Harbor to achieve the TMDL. Combining repainting of boat hulls with other implementation efforts could have resulted in a shorter timeline to achieve the TMDL.	The background of the 2014 TMDL reconsideration was fully considered during the development of this proposed TMDL revision.
12.8	The Staff Report states that the recommended extension would allow additional time to evaluate long-term effects of the updated leach rate reduction, effectiveness of the Los Angeles County Department of Beaches and Harbor's increased enforcement of hull cleaning best management practices (BMPs), and whether recent (post-2016) downward trends in copper concentrations remain steady.	The staff report clearly states on page 24 that current efforts are not enough to achieve the TMDL, and a regulatory mechanism will need to be developed to ensure additional actions are pursued and enforceable.

	Please clarify if an analysis has been performed to determine if the current actions being taken by the dischargers are anticipated to achieve the TMDL and, if so, if this may be accomplished within the compliance timeline.	
12.9	**Ongoing Implementation of TMDLs for Metals and Toxic Pollutants in Marina del Rey Harbor Sediment May Result in Changes to Dissolved Copper Toxicity.** The U.S. Environmental Protection Agency's (U.S. EPA) 1994 Interim Guidance on the Determination and Use of Water-Effect Ratios (Interim WER Guidance) states: "The appropriate regulatory authority might recommend that one or more conditions be met when a WER is determined in order to reduce the possibility of having to determine a new WER later: 1. Requirements that are in the existing permit concerning WET testing, Toxicity Reduction Evaluation (TRE) (U.S. EPA 1991a). 2. Implementation of pollution prevention effort, such as pretreatment, waste minimization, and source reduction. 3. A demonstration that applicable technology-based requirements are being met. If one or more of these is not satisfied when the WER is determined and is implemented later, it is likely that a new WER will have to be determined because of the possibility of a change in the composition of the effluent." U.S. EPA's Interim WER Guidance additionally states that "It is unlikely that a WER determined before remediation would be considered acceptable for use after remediation." In addition to a TMDL for dissolved copper, the MdRH Toxics TMDL includes TMDLs for metals (copper, lead, zinc) and organics (chlordane, total PCBs, Total DDTs, p,p'-DDE) in the sediment of Marina del Rey Harbor. The source analysis primarily attributes these impairments to stormwater discharges into Marina del Rey Harbor. The TMDL allocations for these pollutants have not yet been achieved. Ongoing implementation of these TMDLs will likely result in changes to Marina del Rey Harbor	The TAC was consulted on this topic during the WER study development and concluded efforts to address the sediment allocations are not expected to affect the toxicity of dissolved copper in Marina del Rey Harbor. No change been made to the Staff Report.

	water quality, akin to remediation, and may affect the toxicity of dissolved copper in Marina del Rey Harbor. Adoption of a WER under such circumstances creates uncertainty for the discharger, potentially increases the work load for the Los Angeles Regional Board if the WER needs to be amended, and may create a period of time during which aquatic life in Marina del Rey Harbor is not protected. Please clarify in the Staff Report how ongoing implementation of TMDLs for other pollutants has been considered in determining the appropriateness of a WER for dissolved copper at this time. Please specifically discuss how item number 2 in the Interim WER Guidance section quoted above and the caution noted in the WER Guidance regarding adopting WERs in waterbodies that are undergoing remediation have been considered.	
12.10	The Interim WER Guidance states: "Downstream WERs should be reevaluated whenever newly implemented controls or other changes might substantially impact the effluent, i.e., might impact the forms and concentrations of the metal, hardness, alkalinity, pH, suspended solids, organic carbon, or other toxic materials." U.S. EPA's Interim Guidance further states that, "Even if no changes are known to have occurred, WERs should be reevaluated periodically." As noted in U.S. EPA's Interim WER Guidance, changes in water quality due to implemented controls may alter the appropriateness of a WER for a particular water body. Please provide details regarding how monitoring will be utilized to assure a WER for dissolved copper in Marina del Rey Harbor remains appropriate if it is adopted. Please include in this clarification the frequency for how often the WER will be reevaluated. It is recommended that a process for periodic reevaluation of the WER be adopted simultaneously with the incorporation of the WER into the TMDL to assure timely identification of any potential increase in toxicity.	Additional language has been added to the Basin Plan amendment to clarify monitoring related to the WER. On page 14 of the revision to the Chapter 7 Basin Plan amendment, the following text has been added, "Monitoring will include WER confirmatory monitoring."
12.11	U.S. EPA's Interim WER Guidance states: "The U.S. EPA cannot ignore the existence of pollution problems and delay setting aquatic life criteria until all scientific issues have been adequately resolved. In light of	This statement referenced by the commentor is from the U.S. EPA WER Guidance and is presented out of

	uncertainty, the agency needs to derive criteria that are environmentally conservative in most bodies of water." In the preceding statement and throughout its Interim WER Guidance, the U.S. EPA makes clear its intent of erring on the side of protectiveness of aquatic life. In addition to the language in the Interim WER Guidance, the Clean Water Act includes requirements to assure TMDLs err on the side of protectiveness by taking into account critical conditions and the inclusion of a margin of safety (40 CFR §130.7(c)(1)). Please clarify how a conservative approach to the development of water quality standards has been considered in the proposed revision to the MdRH Toxics TMDL.	context. This passage is not intended to imply that the lowest criteria must be applied to be protective. Rather, this passage (page 13 of the guidance document) is intended to reiterate that the national criteria (as found in the NTR or CTR) is overly conservative for most waters because it is attempting, based on lab analysis, to be protective of all waters without any consideration of site-specific conditions. The passage later (page 14) states, "use of site-specific criteria are intended to provide adequate protection for almost all bodies of water without excessive overprotection for too many bodies of water" and "Use of WERS to derive site-specific criteria is intended to allow a reduction or elimination of the general overprotection associated with application of a national criterion to individual bodies of water." The current reconsideration follows a conservative approach and protectiveness by incorporating a WER study more robust than the guidance (to capture more of the natural variation) and includes multiple conservative assumptions to retain the margin of safety (for more discussion see response to comments 10.6 and 12.5).
12.12	Table 6-2 and the preceding discussion in the Staff Report indicate the box model was run with 2024 data, first by incorporating the site-specific objective (SSO) change and then by incorporating both the SSO and	A reporting error was included in Table 6-2 of the Staff report due to a copy/paste error in a formatted version of the results

	salinity changes. In reviewing Table 6-2, the new salinity data appears to be utilized as inputs for both runs while the dispersion coefficient is 6.92 in the second run. Is there a potential reporting error such that the first run included only the new salinity data (rather than the new salinity data) and the second run utilized the new salinity data as well as a revised dispersion coefficient as a means to incorporate the SSO?	for the Staff Report. The inputs were correct in the model itself. Following submission of the WER Study results and accompanying salinity data, the model was re-run utilizing several scenarios. The first scenario updated the model with just the numeric target adjusted with the proposed WER. The second scenario run of the model utilized the expanded salinity set. The third scenario included both the updated salinity and proposed numeric target. Additional language has been added to Section 6.2 of the Staff Report to clarify what was included in the model runs and the table has been corrected to include the values from the models runs.
12.13	Please consider this decision in the larger context of the TMDL program.	This decision, as with all Los Angeles Water Board decisions, is considered in context of the TMDL program.
12.14	Minimal progress has been achieved over the ten years since the adoption of the TMDL for dissolved copper in Marina del Rey Harbor. Implementation options are available and achievable to enable the current dissolved copper water quality standard to be attained in Marina del Rey Harbor. Rather than focusing on restoring water quality through reducing the discharge of pollutants, the proposed site-specific objective for dissolved copper will result in the MdRH Toxics TMDL having created a path for permanent under-protection of aquatic life.	While progress toward attaining the TMDL has been slow, and there has been uneven application of identified management practices, many actions have been completed in the last ten years. Adoption of the proposed Basin Plan amendment with the copper WER for Marina del Rey Harbor and the other proposed TMDL revisions does not create a permanent path to anything as the Los Angeles Water Board can revise

		or rescind a WER based on new information.
12.15	As the TMDL appears to be the impetus for development of the site-specific objective, this TMDL may do more harm than good as, without development of the TMDL, there remained the possibility that Marina del Rey Harbor would eventually be protected.	The current TMDL remains protective of Marina del Rey Harbor. See response to comments 12.1 and 12.5.
12.16	There are additional options that warrant consideration by the Los Angeles Water Board that could preserve the integrity of the TMDL. The Los Angeles Water Board is empowered to: 1.Determine that adoption of a WER is not timely. The potential basis for such a decision could include: a. The ongoing implementation of other TMDLs in Marina del Rey Harbor is creating changes to water quality and likely affecting the toxicity of dissolved copper. b. The requirements upon which the conditional approval by the Los Angeles Water Board to begin a site-specific study were based have not yet been met. The requirements and actions competed by the discharger thus far are documented in the "State Implementation Policy Justification Report Site-Specific Objective for Dissolved Copper to Support Implementation of the Marina del Rey Toxics Total Maximum Daily Load" and the Staff Report for this item. 2. Request a WER be calculated using only dry weather data. This would be the most protective option utilizing the data from the current study. 3. Adopt a WER based on the weather-weighted geometric mean. This option was preferred by a majority of the technical advisors for this study over the WER currently being considered.	While the commentor clearly disagrees with the proposed WER, there has been no evidence presented that the integrity of the TMDL has been compromised. The proposed TMDL revisions (including the WER) are based on the historical context of the waterbody-impairment combination, the past TMDL actions, the most current data, a robust scientific study that followed federal guidelines and previous peer-reviewed works, the scientific expertise of the members of the TAC, and the context of the Regional TMDL program as a whole, and maintains multiple conservative assumptions to build in a margin of safety. The timeliness of the WER was considered and evaluated during the development of the current TMDL revisions and found to be valid. Notably, State Board Resolution 20014-0049 directs the Executive Officer to bring a TMDL as appropriate or necessary to the Board 18 months after receiving results of special studies. Regarding ongoing implementation of other TMDLs in Marina del Rey Harbor, the TAC found

		implementing the TMDL portions focused on sediment impairments was unlikely to affect the WER. An evaluation of the results of the requirements and actions included in the Justification Report found that while not all components were successfully implemented, the County of Los Angeles had implemented other practices beyond what was required in the Justification Report. Furthermore, some barriers to implementation were the result of world-wide market and service disruptions that were not foreseeable when the conditional approval was granted. The commentor appears to be advocating for a condition not supported by the scientific experts nor by the 1994 U.S. EPA WER Guidance document in requesting a dry-weather only WER be calculated. See response to comments 5.3 and 12.3 regarding TAC recommendations. See response to comment 10-2 regarding changes to the Staff Report and TMDL documents, updating the proposed changes to include the weather-weighted WER.
13	**Recreational Boaters of California**	

13.1	Recreational Boaters of California [RBOC] supports the concerns and reservations expressed by the May comment letter filed with you by the Marina del Rey Lessees Association, regarding both the impossibility of feasible responses to the proposed TMDL measurements cited above and the continuing unresolved issue regarding the relevance and applicability of those measurements (or any actual threat) to actually present local marine life.	The responses to the comments included in the letter from the Marina del Rey Lessees Association can be found below in 14.1 through 14.E.1. The presence of "actually present local marine life" is irrelevant to the current TMDL reconsideration effort. The designated beneficial uses for the harbor require meeting the numeric targets for the protection of aquatic life. This is not an unresolved issue and is clearly laid out in the staff reports for the 2014 and current reconsideration efforts. Furthermore, it is expected that marine life numbers and diversity will improve through addressing the water quality impairments due to the leaching of copper from AFPs on boats.
13.2	A proposed rule that (as the MDR Association says) offers no solutions, no storage, no remediation, no paint or coating substitutes, no haulage and no alternatives … is not a solution.	Discharging of wastes into California waters is a privilege not a right. Boaters who utilize copper AFPs are dischargers (even if they do not think they are) and as such must discharge within the confines of the law. Because the water quality in Marina del Rey Harbor is impaired for dissolved copper in the water column, the Los Angeles Water Board is required by federal and state law to establish a TMDL (the proposed rule referred to by the commentor) to address the water quality impairment. As part of this process, boats

		were identified as a source of the copper discharge. A regulatory mechanism will be developed to implement the TMDL. The Los Angeles Water Board cannot dictate the way in which a discharger satisfies its regulatory requirements. The boaters will need to decide how to address their discharges to meet the legal requirements and follow-through implementation of management practices. A variety of management practices were included in the staff report for the 2014 TMDL Reconsideration and have been proposed by Los Angeles County (Microsoft Word - Mitigation Measures Status Update Report_2021.08.16_clean (lacounty.gov). While these management practices are not universally supported by boaters, they are options for addressing the copper discharges from boats. Furthermore, as a regulatory mechanism is developed, work will continue on identifying additional management practices to augment the ones already included in the efforts to address the Marina del Rey Harbor Toxics TMDL.
13.3	Shutting down all boating in Marina del Rey other than woven Chumash canoes is not the right answer, Please expand your search for feasible and realistic alternatives to protect both marine life and access by Californians and visitors to recreation on the water.	While it is clear the commentor intended to be hyperbolic referring to the possible outcome of a TMDL, at no time has shutting down boating been a suggested

		or recommended compliance pathway for the Marina del Rey Harbor Toxics TMDL. While it is understandable that the boating community is concerned and frustrated over the regulatory procedures, by the simple nature of applying AFPs to the hulls of boats that are berthed in the harbor, they are the dischargers causing or contributing to the impairment and must be active participants in the process of addressing those impairments.
14	**Debra Fixen, President, Marina del Rey Lessees Association**	
14.1	We look forward to working with all other stakeholders in the future as we collectively chart a sound path to improved water quality without compromise of our mission to provide accessible and affordable recreational boating.	Comment noted.
14.2	Because of our actual experience and expertise, we remain skeptical that it will be practical or even possible to meet the water quality standards included in the TMDL, and we remain skeptical that a reasonable plan could be put in place in the next two years as proposed. We say this because, at this time, there are no practical steps which could lead to compliance with the TMDL in the near future: no agreed-upon paint(s) (or list thereof); no cost-effective boat storage apparatus; no additional dry stack storage facility; no alternative, environmentally-sound approach to improving water quality; no mitigation measure regarding the design of the Marina; and insufficient capacity of boat yards to service the amount of work contemplated to re-paint the projected number of boats.	See response to comments 1.10 and 4.3.
14.3	As we want to be part of the solution, we urge a longer extension of at least five years to develop a workable plan, and we urge that the Water Board and the County of Los Angeles and other stakeholders commit to study the following issues and suggestions to come up with a viable plan… Studies should be conducted to identify the efficacy of specific non-biocide and alternative biocide paints that work and are economically viable. The	See response to comment 1.2, 1.8, and 4.3.

	Port of Seattle's study that found the use of non-biocide paints to not be viable should be reviewed in conjunction with other scientific studies on bottom paints. Alternative paint solutions must be explored. County bottom paint studies to date have not identified a viable alternative to copper-based biocide paints. The Water Board should commit to study and provide a list of acceptable paints that properly function to reduce copper in the water column, and in addition, be willing to share with lessees, anchorages, boat repair yards, and boating organizations any alternative biocide paint studies	
14.4	The proposed compliance option was changed from initially requiring "copper free hull paints" to "non-biocide paints." This change eliminates all potential biocides which may exist or be developed in the future that could reduce copper in the water column. This TMDL must focus on the identified toxicants and not serve as a basis for restricting alternative compliance technologies without adequate scientific rationale.	See response to comment 8.3
14.5	Alternative technology needs to be explored. The use of oyster shells that pull heavy metals like copper and zinc out of the water should be considered. The Port of Seattle has used oysters to filter water for that purpose. Oyster farming has been used in other jurisdictions as well, including Chesapeake Bay and foreign countries. Oyster farming should be studied and evaluated based on scientific research.	Alternative technologies are always encouraged to address TMDLs, provided they address the impairments and do not cause other unintended environmental consequences. Ideally, these alternatives are cost effective, scientifically valid and suitable for the particular waterbody being addressed. Dating back to the 2014 reconsideration, alternative technologies have been included in the discussion on how to address the dissolved copper impairments in the water column in Marina del Rey Harbor. The Port of Seattle has employed oyster shell filter systems in pilot studies to filter

		metals from storm water (https://www.portseattle.org/sites/default/files/ 2022-05/T-102_OysterHandout_FIN.pdf and https://www.portseattle.org/blog/four-ways-oysters-help-protect-environment). The logistics of treating storm water are very different than treating widespread copper contamination from the leaching of AFPs spread throughout the harbor. Oyster farming has long been documented as providing environmental benefits to the waters where the farming occurs. In particular, oyster farms are very efficient at capturing and sequestering carbon and nutrients and filtering sediment and algae, but not metal capture.
14.6	In addition to considering the use of oysters, the Water Board should explore the use of aquatic plants such as water hyacinth (Eichhornia crassipes), water lettuce (Pistia stratiotes) and duck weed (Lemna minor), along with other plants that are prominent metal accumulator plants for the remediation of heavy-metal polluted water.	Alternative approaches to addressing the water column metal impairment are encouraged, provided they will address the problem and not lead to additional environmental concerns. Phytoremediation is most often used in circumstances of contaminated soil and groundwater and less frequency freshwater ponds. The aquatic plants mentioned in the comment are all freshwater species and more than one is considered an invasive species so they would not be appropriate to use in Marina del Rey Harbor.

14.7	In its May 8th presentation on the County's Copper Reduction Program, the County's paint studies' indication that there was no clear paint solution and that a study would benefit from additional testing of cleaning strategies and longevity demonstrates the need for consideration of alternative technologies to be studied.	See response to comments 1.2 and 1.8.
14.8	The County's pursuit of testing the use of boat lifts and in-water dry docks was well-intentioned but proved to be problematic. This setback indicates the need for consideration of more alternative technologies that the Water Board should more fully review and study.	See response to comment 1.4.
14.9	The proposed two-year extension does not reflect progress made in the past decade by Marina lessees who manage anchorages under long-term leases with the County. Given the downward trend in copper concentrations and in light of the revised standards for acute and chronic copper concentration thresholds more time will be needed in order to achieve satisfactory compliance. Beyond the five years to develop a plan, thought should be given to a 6–10-year implementation period thereafter before any regulatory enforcement measures become effective.	The two-year extension reflects the amount of time that is necessary to develop a regulatory mechanism to implement the TMDL and is not dependent on the past progress by Marina Lessees or other stakeholders.
14.10	The compliance proposal would require 54% of the boats in Marina to be repainted with non-biocide paints. Even if these paints were successful, the ability of two boatyards to strip and paint boats in the Marina would take approximately 10-12 years to complete. In addition, new paints will require more frequent application due to reduced biocide content further stretching boat yard capacity.	One of the compliance proposals would require the painting of 57% of the boats with non-biocide paints. There are other compliance paths included in the proposed Basin Plan amendment.
14.11	The original design of the entry to the Marina was designed by the Army Corps of Engineers at a time when biocide concentrations were not a consideration. The Water Board should engage the federal government to do a study of modifying the design of the harbor entrance to address the major concern about the lack of natural flushing of the harbor.	The water quality objectives for dissolved copper in the harbor must be met, regardless of the Marina design and lack of flushing. As water column concentrations remain significantly above the objective and the water quality remains impaired, the discharges from antifouling paint must be addressed through the TMDL. See response to comment 1.14.

14.12	There is a fundamental flaw in the basin plan in attempting to protect beneficial uses that are not permitted or desired by the public, including commercial fishing, shellfish gathering, and swimming (with the possible exception of Mother's Beach). The primary focus of the basin must be on recreational boating.	Whether certain members of the public desire certain beneficial uses in waters is immaterial to whether protections must be maintained for those uses. The basin plan follows state and federal law by including existing and potential beneficial uses for waterbodies and objectives for those uses. Designated beneficial uses are based on law, historical and current use and possible future uses. As a matter of procedure, these are also periodically reviewed. The Basin Plan does not prioritize standing among designated beneficial uses. While certain stakeholders may primarily focus on boating, in the eyes of the Basin Plan, and more importantly state and federal law, all beneficial uses must be protected.
14.13	How would the Water Board address the lack of affordable paint solutions being punitive to low and even moderate-income boaters, resulting in an inequitable and unfair situation for those who wish to enjoy a public amenity that is favored by the Coastal Act?	See comments 14.17 – 14.20 for further discussion of the TMDL and the Coastal Act.
14.14	Lessees in Marina del Rey and their anchorages are not responsible parties for the conditions of water quality in Marina del Rey Harbor.	Similar assertions were made during the public comment periods for the Shelter Island Dissolved Copper TMDL, the 2014 Marina del Rey Harbor Toxics TMDL reconsideration and the Newport Harbor Copper TMDL. As documented in the responses during each of those regulatory actions, lessees, anchorages and the city and counties overseeing

		those facilities are responsible parties. This has been affirmed repeatedly. The specific response included in the Response to Comments document for the 2014 Reconsideration (response for comment 68.4), "*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* [2014] *Marina del Rey Toxics TMDL Staff Report.*"
14.15	Of the 23 anchorages in Marina del Rey Harbor, 14 anchorages are current as certified Clean Marine anchorages.	The Los Angeles Water Board encourages anchorages to improve their environmental impacts, and attainment of Clean Marine certification helps demonstrate those improvements.

		However, while Clean Marine certification carries many environmental benefits, it has limited impact on reducing water column copper concentrations from AFP leaching.
14.16	The Hull Cleaning ordinance, which the Association vigorously supported, was finally adopted by the Board of Supervisors and became effective on July 12, 2018… While the County Code provides for fines for violation of Chapter 19.12, better enforcement measures need to be enacted by the County. The Department of Beaches and Harbors should create a County Harbor Safety Enforcement Task Force that would enforce the Diver BMP Training and Commercial Services IDs for marine workers. Although there are certain companies which are known for training their divers appropriately, marina managers are not equipped to monitor and control the divers who actually are contracted by individual boat owners.	See response to comment 4.2 and comment 8.4.
14.17	**Applicability of the Coastal Act of 1976 to preserve water-oriented recreational uses** Thus, the state law recognizes the importance of both the natural environment and economic development that is dependent upon the resources of the coast. Economic development includes the numerous anchorages and boat slips in the Marina del Rey Harbor that provide recreational facilities favored by the Coastal Act. Recreational boating in Marina del Rey Harbor requires coastal-dependent development of anchorages with boat slips, boat repair yards and fueling stations, all of which have been developed under the provisions of long-term leases with the County of Los Angeles. Not only should water-oriented recreational activities be protected, the Coastal Act in Section 30224 encourages recreational boating… Supporting protection for recreational use and development related to water-oriented activities, Section 30221 stipulates that "Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or	See response to comment 1.13 for a discussion of compatibility of the TMDL with the Coastal Act.

	commercial recreational activities that could be accommodated on the property is already adequately provided for in the area." Section 30255 entitled "Priority of coastal-dependent developments" highlights the primacy of recreational boating-oriented developments, such as anchorages and boat slips, located on and/or adjacent to the water…	
14.18	On July 12, 2022, the Board of Supervisors instructed the Department of Beaches and Harbors, in collaboration with several County departments, to develop recommendations for completion of a comprehensive plan for the best and highest use of real estate and water assets in Marina del Rey in light of the County's guiding principles of equity and inclusion. The plan is known as "MdR for All" and it proposes a welcoming and accessible access to the Marina's many recreational and environmental assets. The County's vision is to align with the "twin objectives of encouraging the economic vitality of the Marina and creation of a more equitable, diverse resource for the people of Los Angeles County."	See response to comment 1.13 for discussion of compatibility of the TMDL with "MdRH for All" plan.
14.19	To be consistent with Coastal Act policies that prioritize recreation in the water, the Regional Water Board should consider the progress that has been made to diminish the amount of copper in the water column as well as the overall improvement of water quality to allow sufficient time to continue the efforts of all parties to attain a realistically achievable Water Effects Ratio for the discharge of copper in the water column of Marina del Rey Harbor.	The current progress was considered during development of the Staff Report and the proposed Basin Plan amendment. Also, as consistent with the Coastal Act and other laws, the condition of the waters in Marina del Rey Harbor was also considered and it was determined water quality, in particular copper concentrations, are not close to meeting water quality objectives. See, also, response to comment 1.13.
14.20	The Marina del Rey Land Use Plan is a component of the Los Angeles County Local Coastal Program that was certified by the California Coastal Commission on February 8, 2012.	Comment noted. It is also important to note the Marina del Rey Land Use Plan (LUP) has three major sections, 1. Coastal Access and Recreation Policy (of which Recreational

		Boating is a sub-section), 2. Marina and Land Resources and 3. New Development.
14.21	**Recreational Boating a Top Priority.** "Recreational boating shall be emphasized as a priority use throughout the planning and operation of the Marina…" **Policy Framework for Phase II Development** "Under County guidance over the past 40 plus years, Marina del Rey has developed into one of the largest man-made multi-use recreational small craft harbor facilities in the world. During this time period, the County of Los Angeles has evolved broad policies for the use of Marina waters and land areas. In terms of use, the first priority of the Marina is to maximize public boating facilities; the second priority is to provide boating-related facilities and services for the boating public and for traditional boating organizations. The water areas are reserved for boating uses, and recreational activities which require a water surface, such as swimming and wind surfing..." The LCP establishes principles regarding future development in the existing Marina portion of the LCP Area. The Phase II development will offer, among other things, "increased boating opportunities." The "Land Use Plan" chapter notes: "In the final analysis, future development in the existing Marina can be viewed as an evolutionary process which builds upon a successful base, and creates opportunity for selective reconstruction at higher intensities, while enhancing visitor-serving, public access and coastal view opportunities within the Marina." It is also noted that intensified uses under Phase II development are not intended to "detract from the main function of the Marina, which is recreational boating and visitor-serving commercial facilities." Under the policies and actions of the "Land Use Plan" chapter, the following priority objective clearly states that maintaining the Marina del Rey Harbor for its original purpose is of paramount importance:	See response to comments 1.13 and 3.9

	Preservation of the Small Craft Harbor facility a Priority. • The primary purpose of the Land Use Plan shall be to maintain Marina del Rey as a Small Craft harbor for recreational purposes. A secondary purpose shall be to promote and provide visitor-serving facilities. • Development shall not detract from, nor interfere with the use of existing or planned boating facilities, nor the ancillary uses which support these facilities.	
14.22	The Water category of the Specific Plan is intended as "a category for recreational use, docking and fueling of boats, flood control, and light marine commercial." The principal permitted use of the Water category is "water-oriented recreational activities, including boating, fishing, rowing, sightseeing, wind surfing." Permitted uses include boat docks; piers; schools for boating, sailing and other marine-related activities in which teaching is done on the water; and wet slips.	The permitted uses of the marina are irrelevant to the TMDL. The designated beneficial uses, as specified in the Basin Plan, determine the numeric targets a water body must meet.
14.23	The Marina del Rey Land Use Plan, certified by the California Coastal Commission and implemented by the Marina del Rey Specific Plan, is unmistakable in that Marina del Rey was developed as a small craft harbor and that the primary purpose of the Marina is to provide recreational boating opportunities. As noted in the "Recreational Boating" chapter as a policy, recreational boating is emphasized as the priority use throughout the planning and operation of the Marina. To be consistent with the Coastal Act of 1976 and the Marina del Rey Land Use Plan, maintaining Marina del Rey Harbor for its primary purpose requires that adequate time must be allowed for compliance with the TMDL mandate, which on the trajectory of copper in the water column having been reduced over the past ten years indicates that a four-year extension, as opposed to the proposed two years, is needed to surmount challenges to an acceptable target level.	Regardless of the original reason for the development of Marina del Rey Harbor, it is a water of the United States and water of the State and must meet the water quality objectives for the beneficial uses designated for it in the Basin Plan. The 2014 TMDL reconsideration included a 10-year timeline. Copper concentrations were observed to actually increase after adoption of the 2014 Basin Plan amendment. More recent data does reflect a slow downward trend of concentration levels, but many water samples remain much higher than the numeric target and additional work is needed to drive concentrations down far enough to meet the targets.

		The proposed 2-year extension is enough time to develop a regulatory mechanism that will encompass the many additional actions needed to restore beneficial uses. See response to comment 1.10 and comment 2.2 for further discussion of the implementation schedule extension.
14.24	On July 12, 2022, the Los Angeles County Board of Supervisors instructed the Department of Beaches and Harbors, in collaboration with several County departments and stakeholder groups, to provide recommendations for the completion of a comprehensive plan for the best and highest use of real estate and water assets in Marina del Rey, in light of the Board's adopted priorities for equity and inclusion… The"MdR for All" 180-Day Report, delivered to the Board of Supervisors on November 20, 2023, noted that within the Marina, "DBH can start focusing on building a public recreational facility to service community boating and water-based groups, continuing to increase no- and low-cost access to the water for all County residents."… The County of Los Angeles is committed to a process of equity and inclusion to making Marina del Rey, including its water and landside visitor-serving amenities accessible to all citizens of Los Angeles County. The County places emphasis with its several urgent needs for boating-related activities that would be available for underserved youth. Sailing programs, among other in-water recreational activities, would be compromised and curtailed should a four-year extension for compliance with the TMDL mandate be unattainable.	See response to comment 1.14
15	**Lori Vincere**	
15.1	However, the impending requirement for discharge permits under TMDL enforcement poses significant financial challenges for individuals like me.	See response to comment 4.1
15.2	While I understand the importance of transitioning to less toxic boat paint options, the current market offerings do not provide viable solutions for small boat owners. Alternatives such as noncopper paints require frequent haul-outs and significant investments, making them impractical for recreational boaters like myself.	See response to comment 4.3

15.3	Additionally, the lack of transparency in hull cleaning practices by dive service providers further complicates matters. While assurances are given regarding proper hull cleaning techniques, the absence of oversight leaves me uncertain about the effectiveness of these services.	See response to comment 4.2
15.4	Extending the TMDL deadline would allow for the development of more affordable and practical solutions in the boat paint market.	See response to comment 4.3
15.5	Moreover, initiatives to enhance transparency and accountability in hull cleaning practices would benefit the entire boating community.	See response to comment 4.2
15.6	In conclusion, I remain committed to responsible boating practices and environmental stewardship. However, I seek your support in addressing the financial burdens imposed by TMDL compliance, ensuring that all boaters can continue to enjoy our cherished maritime activities.	Comment noted.
16	**Steve Austin, International Paint, LLC**	
16.1	I'm a bit confused on how accurate this WER study thing is?	The WER study is based on U.S. EPA guidance and previous peer-reviewed studies conducted in California. This included the San Francisco Bay copper and nickel WER, the San Diego Bay copper bioavailability and toxicity studies and the Los Angeles River and tributaries copper WER study (which resulted in a copper WER for the Los Angeles River). In addition, a TAC was established incorporating three academic experts and staff from the Southern California Coastal Water Research Project were engaged to conduct the field and lab work. Public engagement in the process was continued throughout the project, including two public workshops. Prior to conducting the main WER study, a Site Characterization Study was conducted to analyze field condition variability that could affect the WER study itself.

		Additionally, where the U.S. EPA guidance recommends a minimum of three sampling events, six successful sampling events were completed for this WER study. This WER method is the accepted method for adjusting copper criteria to reflect site-specific conditions of a waterbody.
16.2	We all know there are many contributing factors of copper getting into our waters, marinas ect. and its not just boats, and or their anti foulings. I believe you can take all the boats out, do a test similar time frames to previous with boats and you might be surprised as to how much copper remains in the marinas.	The data collected to date, and the previous work conducted for the 2014 TMDL reconsideration indicate that while copper in waters (including marinas) may come from a number of sources, the dissolved copper in Marina del Rey Harbor water column is linked to copper leaching from antifouling paints. Many of the other sources of copper found in waters are in the particulate form which is not what is impairing the water column and not what is being addressed in the current reconsideration effort.
16.3	Certain marinas have more water movement and or water circulation which helps considerably where as others that don't have much movement will obviously show lots more sediments, copper, and whatever else.	Water circulation can affect water quality. Marina del Rey Harbor is documented to have reduced circulation and flushing compared to other waterbodies, which is part of the reason copper leaching from anti-fouling paints has resulted in the waterbody designated as impaired. See also response to comment 1.15
16.4	The brake dust from all our automobiles	See response to comment 16.2.

	brake systems ends up in our waters due to mother nature of rain and such. Many more automobile brake residue will be found in the waters, marinas ect than the antifouling on boats leaching out.	
16.5	I do agree we have a very long road ahead, I just hope the people involved running these studies and those that just simply say ban copper in anti fouling paints think we will be saving our marinas , I just don't simply believe that and they shouldn't either as there are many many factors to consider.	Comment noted. For additional clarification, the WER study did not evaluate the source of dissolved copper in the water column of Marina del Rey Harbor, rather it looked at how the physical and chemical properties of water from the harbor alters the effects of copper on marine life compared to other waters.
16.6	Certain biocides can help reduce the amount of copper in anti fouling paints but they won't keep the copper linings of automobile brake sediments from entering our waters at a much higher rate than what the boat bottoms are supposedly doing.	See response to comment 16.2.
17	**Joey Vermeulen**	
17.1	Is it safe to swim in the MDR harbor, lets say if you fall off of your paddle board? How about the harbor entrance, waters just beyond the opening to the ocean? How about at mothers beach?	The Marina del Rey Harbor Toxics TMDL is intended to address the impacts of toxic pollutants to aquatic life. There is nothing in the Marina del Rey Harbor Toxics TMDL to indicate it is not safe to swim or paddle board in the harbor. The TMDL is rather the path by which the waters can meet the numeric targets required to support aquatic life, which may be affected by the current pollution levels (because they are more sensitive). By protecting the most sensitive use (in this case aquatic life), other less sensitive uses (like human life) are also protected. There is also a 2003 TMDL addressing bacteria impairments at Mother's Beach

		due to a history of measured bacteria levels being high enough to result in impairments to recreational beneficial uses, such as swimming. Los Angeles County is responsible for monitoring the safety of local waters for swimming and recreation and are tasked with posting safety warnings when contaminants are too high (http://publichealth.lacounty.gov/phcommon /public/eh/water_quality/beach_grades.cfm/). Heal the Bay also provides beach report cards at https://brc.healthebay.org/33.980314999999999/-118.4576385/17 to help make decisions about the safety of swimming based on the most recent data.