

October 17, 2016

Mr. Kurt Berchtold, Executive Officer
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Subject: Comments on Proposed Basin Plan Amendments to Incorporate Total Maximum Daily Loads for Copper and Non-TMDL Action Plans for Other Metals in Newport Bay

Dear Mr. Berchtold:

The County of Orange (County) has reviewed the following documents:

- Draft Basin Plan Amendments titled *Attachment A to Resolution No. R8-2016-0059 - Amendments to the Water Quality Control Plan –Santa Ana Region to incorporate the Newport Bay Copper (Cu) TMDLs, and Non-TMDL Action Plans for Zinc (Zn), Mercury (Hg), Arsenic (As) and Chromium (Cr)* (Draft BPA)
- *Staff Report -Basin Plan Amendments for Copper TMDLs and Non-TMDL Metals Action Plans for Zinc, Mercury, Arsenic, and Chromium in Newport Bay, California* (Staff Report)
- *Draft Substitute Environmental Document for Proposed Basin Plan Amendments for the Newport Bay Copper (Cu) TMDLs and Non-TMDL Action Plans for Zinc, Mercury, Arsenic and Chromium* (Draft SED)

We appreciate the opportunity to offer comments on these documents and look forward to working with your staff to develop an appropriate approach for metals that is protective of the resources in Newport Bay. Below are our general comments, specific comments are included as an attachment.

The cities within the Newport Bay watershed (watershed) were involved in the development of these comments and the City of Tustin and Irvine Company have directed that they be recognized as concurring entities on this letter.

General Comments

- 1) The County generally supports delisting Newport Bay for the general 303(d) category of “Metals” and replacing the *Total Maximum Daily Loads for Toxic Pollutants – San Diego and Newport Bay, California*, promulgated in 2002 by the US Environmental Protection Agency (EPA). Numerous improvements have been implemented in Newport Bay and its watershed since 2002 (see 3) below) and both of these documents are now outdated and not reflective of current conditions.
- 2) The Draft BPA and Staff Report are inherently in conflict with the recent actions taken by the Department of Pesticide Regulation (DPR) to reduce copper leaching rates from boat paints to 9.5 ug/cm²/day. The Regional Board, based on calculations in Appendix 6.1.3 and Section 5.6.3.1.2, concludes that this leach rate “will not meet the leach rates needed to meet the Cu allocation for boats in Cu TMDLs in southern California, even with the use of BMPs and reduced cleaning frequency”. Given the paucity of current data in the staff report (see 3) below), the current early implementation phase of the new DPR paint requirements, the lack of peer review of the Regional Board calculations (peer review by USEPA in 2002 is discussed in Section 9.1, but USEPA’s responsiveness summary (<https://www3.epa.gov/region9/water/tmdl/nbay/tsdi0602.pdf>) indicates that no formal peer review process took place for the Metals TMDL promulgated by USEPA), and the potential significant economic and other impacts to the

boating community in Newport Bay, it would be prudent for the Draft BPA not to move forward at the present time without significant updating and revision as discussed in several of the sections below. Engagement of stakeholders in this process is also important since many aspects of future implementation will depend on community support.

- 3) Data used in the impairment assessment (Staff Report Section 4.0) was collected from 2000-11 reflecting, in some cases, conditions almost 17 years ago. It is unclear why more recent data have not been utilized nor why the assessment was not restricted to the post-Upper Newport Bay Ecosystem Restoration Project period (2010 to the present) for the Upper Bay and to the post-Lower Bay dredging period (2013 to the present), which are more reflective of current conditions. The following illustrates the range of projects implemented that have impacted conditions in Newport Bay and its watershed since 2000 and the consequential need for the impairment assessment to use current data:
- In addition to the Upper Newport Bay Ecosystem Restoration Project (over 2 million cubic yards), there have a number of smaller dredging projects in the Lower Bay (including 600,000 cubic yards in 2012-13) that have removed historic contamination and several storm drains have been diverted to the sanitary sewer reducing inputs of metals from other sources.
 - At a watershed scale, large scale diversions to the sanitary sewer have been enacted, the San Joaquin Marsh has been enhanced, the Natural Treatment System has been implemented, and land use changes are stabilizing the flows that previously were frequently driven by agricultural and nursery runoff. Input flows (and loadings) to the Bay from the watershed are at the lowest levels in many years and reflect a long term change not just a drought response. The report entitled *Newport Bay Fecal Coliform TMDL 2016 Summary of Management Activities; County of Orange* provides details of many of these watershed changes and is incorporated into these comments by reference.
 - At a statewide scale, California Senate Bill No. 346 (Kehoe) approved in 2010 laid out a schedule to drastically reduce the copper content in brake pads, which are responsible for more than half of the copper in urban runoff. A report entitled *Estimated Urban Runoff Copper Reductions Resulting from Brake Pad Copper Restrictions, CASQA 2016* concludes that newly manufactured brake pads contain significantly less copper than they did in the early 2010s and that on-road copper content is dropping. The report is incorporated into these comments by reference.
- 4) The assessment of sediment impairment should be based on the California State Sediment Quality Objectives – Part I policy (SQOs), adopted by the State Water Resources Control Board in 2008. The SQOs are a comprehensive and scientifically rigorous way to evaluate sediment quality in enclosed bays and estuaries. In developing the SQOs it was recognized that sediment chemistry alone was a poor measure of sediment quality, even coupled with sediment toxicity. A sediment chemistry exposure category is used instead, which is composed of two chemical index scores based on the concentrations of a wide range of chemicals. The sediment chemistry category is combined with two other lines of evidence – benthic community index and toxicity – to make a determination on the overall sediment quality.

The impairment assessment, in contrast, uses sediment quality guidelines that are now widely recognized as scientifically unsound or inappropriate for this application and data that in some instance appears questionable. The following examples illustrate these concerns:

- The Staff Report makes extensive use of effect range low (ERL) and effect range medium (ERM) guidelines, both of which were originally intended only as screening levels for sediments. SQOs represent the latest science and have been shown to correlate with actual sediment quality better than other parameters, including ERM, which has an especially poor correlation with toxicity for data collected in California. Use of ERL is not appropriate in the context of a TMDL regulatory document.
- There is no basis for use of median international standards (MIS) in any kind of impairment assessment. Their scientific validity is highly questionable, since there has not been any attempt to our knowledge to verify their

Comments on Proposed Basin Plan Amendments to Incorporate Total Maximum Daily Loads for copper and Non-TMDL Action Plans for Other Metals in Newport Bay

October 17, 2016

Page 3 of 9

connection to adverse effects in humans or ecological receptors. Furthermore, it is speculative to assume that those numbers have any connection to adverse health effects in humans in Newport Bay even if they were valid in the countries from which they were derived, because such factors as differences in fish consumption, other dietary contaminant sources, or differences in susceptibility are not considered. For lead and zinc, it is especially arbitrary to pick MIS guidelines that were "closest to the Toxics TMDLs guidelines" when the basis of those guidelines is completely unknown, as is stated in the staff report.

- The metals data from the 2007 Marina Study has significant QA/QC issues. The method blank samples yielded the highest metals concentrations among all samples, including actual water samples.

The reason given in the Staff Report for not using the SQO approach is that SQO data were not available. However, SQO data have been collected in Newport Bay by the County since 2009 and reported in the County Unified Annual Progress Reports to the Regional Board.

SQO results since that time have shown both a reduction in toxic pollutants and a reduction in sediment toxicity. In the most recent year for which data were available (2014), all sites throughout the Bay were nontoxic, and most sites have shown very little sediment toxicity since 2010, the year the dredging was completed in Upper Newport Bay.

The data analysis in the impairment assessment needs to be updated to include recent County data and be based on the SQOs.

- 5) Dissolved copper loads in tributary runoff (freshwater) were estimated from total copper in stormwater samples using a dissolved/total metal translator. This approach is not appropriate since actual monitoring data are available, which should be used. Using the mean dissolved/total ratio of 0.8 increases the load calculation by at least 40% compared to using actual dissolved copper data.
- 6) Dischargers/responsible parties listed for the Non-TMDL Action Plans are required to submit an Action Plan and schedule within 3 months from the date of USEPA Basin Plan Amendment. A 3-month period is insufficient to complete this task.
- 7) The implementation plans for both the copper TMDL and non-TMDL metals list out dischargers/responsible parties that will be difficult to regulate, for example boat owners of transient vessels. It is unclear how they will be required to comply with the requirements contained in this TMDL.
- 8) As discussed in 3) above, California Senate Bill No. 346 (Kehoe), approved in 2010, lays out a schedule to drastically reduce the copper content in brake pads, which are responsible for more than half of the copper in urban runoff. After the milestones of 2021 and 2025, brake pads will no longer be a significant source of copper in the environment in California. These requirements are more than sufficient to reduce the urban runoff allocation and there should be no additional requirements for the MS4 discharges in the TMDL implementation plan.

Thank you for the opportunity to provide comments. Please direct any questions to Chris Crompton at (714) 955-0630 or Jian Peng at (714) 955-0650.

Sincerely,



Amanda Carr
Deputy Director
OC Environmental Resources

**Comments on Proposed Basin Plan Amendments to Incorporate Total Maximum Daily Loads for copper and Non-TMDL
Action Plans for Other Metals in Newport Bay**

October 17, 2016

Page 4 of 9

CC: Joanne Schneider
Terri Reeder
Linda Candelaria
Newport Bay Watershed TMDL Funding Partners

Attachment 1 – Specific comments on documents

Attachment 2 – Summary of BMP Activities in the Newport Bay Watershed

Attachment 3 – Technical Report, Estimated Urban Runoff Copper Reductions Requesting from Brake Pad Copper
Restrictions, CASQA, 2016

Attachment – Specific Comments

Specific Comments on Staff Report:

- 1) Section 3.2, last paragraph, page 13 – The terminology should be clarified: Should bioconcentration be bioaccumulation and should bioaccumulate be biomagnify?
- 2) Section 3.3, second to the last paragraph, page 14 - If a delist decision for general metals is warranted, the reasons for State Board staff not delisting the Upper Bay should be further clarified.
- 3) Section 4.2.1, page 23 under “Water data”- Chronic objectives should not be used for this assessment. Samples collected are typically grab samples, representing only a moment in time, and cannot necessarily be assumed to represent long term water quality.

The Regional Board should evaluate water column exceedances of copper using either the water effect ratio (WER) or the Biotic Ligand Model (BLM; pending USEPA’s final rule) for marine and estuarine waters, which was recently released as a draft [81 FR 49982 (July 29, 2016)] instead of California Toxics Rule (CTR) criteria. CTR marine criteria do not account for bioavailability, which often results in overly protective criteria. The BLM provides a robust, scientifically based method for estimating the potential toxicity of metals, with the understanding that the availability of binding ligands and competition from other cations in natural waters reduce the bioavailability of toxic metals. The water column impairment assessment should be deferred until the BLM is finalized and re-assessed using that approach.

- 4) Section 4.2.1, page 23 under “Sediment data”- Organics data are available for Newport Bay and Sediment Quality Objectives (SQOs) analyses have been performed since 2009. The impairment analysis should use the SQO policy rather than the sediment quality guidelines (SQGs) from Long et al.

It is not appropriate to perform an ambient sediment impairment analysis for only metals, or any other single class of pollutant, since there is a possibility of the presence of other contaminants in the sediment. Just because the Staff Report is analyzing the effects of the metals does not mean the effects of other contaminants go away.

It is also not appropriate to say Effects Range Medians (ERMs) represent values above which adverse effects are expected. That is not how these were calculated. ERMs represent the median of the observed effects range for the studies selected for inclusion by Long et al. (1995), and do not necessarily have any predictive value at all. They do not take into account such factors as natural geology or natural biotic assemblage, which may strongly influence the toxicity of some pollutants, especially metals that are elevated due to local geology.

- 5) Section 4.2.1, page 24 under “Toxicity data”- Toxicity data used are from 2002-10. Current data should be used instead. Significant recent dredging projects have been conducted throughout Newport Bay that have significantly reduced Bay sediment toxicity (see also the General Comments) and recent data would be more reflective of current conditions.
- 6) Section 4.2.1, page 25 under “Fish/Mussel Tissue data” 3rd paragraph: The 200 ng/g ww guideline for methyl mercury from Looker & Johnson (2006) should not be used for impairment assessment. This is calculated specifically for fish consumption rates in San Francisco Bay, to be protective of San Francisco Bay anglers. There are no known data to suggest fish consumption rates in Newport Bay are similar to those in San Francisco. It is reasonable to assume consumption rates are lower in Newport Bay. The fishing culture is much more developed in San Francisco Bay, where there is still an extant commercial fishery and the bulk of northern California’s commercial fishing fleet is based. Therefore, lower fish consumption can be reasonably assumed in Newport, and the Looker & Johnson (2006) guideline would be overprotective. It should also be specified that human health guidelines should be for fillet only, the higher wildlife guideline should be for larger whole fish composites, and the lower wildlife guideline should be for composites of whole fish less than 5 cm in length.

- 7) On page 25 5th paragraph, last paragraph and elsewhere - The specific pages from the publications that were the source of cadmium, chromium, and other fish tissue guidelines for wildlife protection derived from Eisler should be cited. We are unable to verify the fish tissue guidelines for wildlife protection from Eisler in any of his synopses. The only tissue guidelines apparent in the references are for protection of human health. At least one guideline, the guideline for chromium, appears to derive from a single study on black ducks, which do not occur on the Pacific coast. Use of such a guideline would not be appropriate.
- 8) Section 4.2.2 (Data Analysis) - The data review should include the most current data. Otherwise the review does not accurately characterize conditions in Newport Bay, but rather characterizes a historical condition. This wastes public resources examining impairments that perhaps no longer exist, and for stakeholders to respond and perhaps implement activities to correct impairments that have already been corrected.

It was argued earlier in the Staff Report that SQO data were not available, resulting instead in the review of sediment toxicity and chemistry using SQGs from Long et al., which are widely recognized as a far inferior approach, including by the State Board. SQO data have been available for Newport Bay since 2009. Therefore, evaluation of sediment quality using SQO policy is not only possible, but is the necessary approach. It is especially important to use recent data because several dredging projects have since been completed in the Bay that dramatically improved sediment quality (see General Comments). Recent data shows a virtual absence of sediment toxicity in recent years at the County's Bay monitoring stations.
- 9) Section 4.2.2.1, page 30 4th paragraph - It is incorrect to characterize samples from the Marina Study as being from "Upper and Lower Bay." These samples were collected from marinas and adjacent to marinas and are representative of those areas only.
- 10) Section 4.2.2.1, page 30 5th paragraph - SQGs should not be used for impairment assessment, even as a line of evidence, despite their use as targets in other regions. In the manner in which they were developed, they are scientifically indefensible for use as targets, or arguably, even for use as screening levels, which was their original purpose. The state SQO Policy has been adopted, and it should be applied for impairment assessment. In addition, SQO data are more recent than those used in the Regional Board staff assessment, and are more reflective of current conditions in Newport Bay.
- 11) Section 4.2.2.1, page 30 under "Sediment toxicity" - There are only 6, not 60 toxicity monitoring sites in Newport Bay. The data discussion likely references numbers of samples, not sites. Also, a major dredging project was in progress in Upper Newport Bay from 2006-10, which could have affected both sediment toxicity and benthic infauna samples.
- 12) Section 4.2.2.1, page 31 2nd paragraph, last sentence - The burden for future routine monitoring of marinas appears to be placed on the County. This is not appropriate since the County has limited ownership within Newport Bay and its marina is operated through a lease.
- 13) Section 4.2.2.3, page 33 - There is much extraneous material in this discussion that is not related to impairment assessment.
- 14) Section 4.2.2.4, page 34 - These data should not be used in the impairment assessment since the samples for this study were sediment cores and not surficial sediments. There is no evidence that any detected toxic pollutants were bioavailable and represent a current impairment. Instead, they likely represent a historical condition, and it is likely that contaminated cores have since been covered with cleaner sediments, rendering toxic contaminants unavailable for biological uptake. Consequently, the entire section should be deleted.
- 15) Section 4.2.2.5, page 35 - Allen's study of food web transfer of contaminants in fish tissue also represents old data and should not be used for this impairment assessment. This report is also not available on the SCCWRP website, or anywhere else online, and consequently the information contained in the report cannot be independently verified.

- 16) Section 4.2.2.6, page 39 - As with other data used in this section, these data are old and should not be used for the impairment assessment, especially when California Department of Fish and Wildlife have continued to collect data in Newport Bay up to the present.
- 17) Section 4.2.2.8, page 42 - These sediment toxicity studies, like other studies cited in this section, contain very old data that should not be used in the impairment assessment. It is worth noting, however, that while sediment from Upper Newport Bay was determined to be toxic to amphipods, use of a cation exchange resin did not remove toxicity, indicating metals were not the likely cause of the toxicity. Only the addition of coconut charcoal was effective at removing sediment toxicity, suggesting instead that unmeasured nonpolar organic chemicals were the likely cause of toxicity. At the same time, there were copper, zinc, and cadmium exceedances of their relative ERLs. This clearly shows that ERL exceedances are not evidence of metal toxicity and should not be used in the impairment assessment. As noted previously, sediment dredging in Upper Newport Bay after this study was conducted has removed the vast majority of toxic constituents and associated toxicity. The current condition of Upper Newport Bay sediments, as determined through routine monitoring by the County, is that it is primarily nontoxic.
- 18) Section 4.2.2.10, page 44 – It is unclear why this 2014 study from OC Coastkeeper was included in the impairment assessment but recent County and SCCWRP Bight data from Newport Bay were not. With respect to this study, it is worth noting that it showed copper, zinc, and mercury ERM exceedances, which are supposed to be indicative of likely toxicity, and yet sediments were found to be nontoxic. This is further evidence that SQGs are not associated with toxicity and exceedances of SQGs cannot be used as evidence of impairment.
- 19) Section 4.2.4, page 49 5th paragraph under “Water and Sediment Impairment” - There are many instances of data in the impairment assessment that show exceedances of SQGs but no toxicity. This again indicates that sediment SQG exceedances are not evidence of impairment at all. Thus, the zinc and mercury impairments are not supported and they should not be 303(d) listed.
- 20) Table 4-13 and Table 4-14, pages 50 to 55 - New 303(d) listings are not justified by existing data. Many listings rely on median international standards (MIS) for tissue and SQGs for sediment. MIS are not only very old, but the data on which they were based is of unknown provenance. SQGs, as discussed previously, were developed as screening levels and not sediment targets, and despite their wide use, have no direct connection to sediment toxicity. Exceedances of MIS and SQGs are not reliable as indicators of impairment, and therefore listings based on such exceedances are not appropriate.
- 21) Section 5.1, page 59 - The problem statement as it relates to sediments should be edited. As discussed previously, SQGs should not be used for impairment assessment. Sediment toxicity should also be updated, since most recent data do not show sediment toxicity in either Upper or Lower Newport Bay. Moreover, recent SQO data do not support the listing for copper in sediment.
- 22) Section 5.3.6, page 63 - There is no evidence that macroalgae in Newport Bay are a substantial part of the diet of any significant wildlife populations, even though many might consume algae as part of their diets. Examination of copper in algae is not appropriate and this section should be deleted.
- 23) Page 69, 4th paragraph item 1.3 - The County has limited ownership within Newport Bay and any marina activities are developed and managed through a lease. The County should not be named as a discharger in this section.
- 24) Section 5.6.2.1, page 85 4th paragraph - The County does not manage any marinas in Newport Bay (see #23) above).
- 25) Section 5.6.2.2, page 88 and Section 5.6.3.2, page 97 - The requirement to investigate and identify sediment impairment in areas with limited or no current data is ambiguous and could be an onerous burden on responsible parties. It could take years to robustly characterize Newport Bay sediments, even to characterize general areas within the Bay.

It would also be a very costly endeavor. Sediment toxicity and chemistry testing currently cost a minimum of \$521 per sample. Sediment sampling is also very labor intensive and requires significant boat travel time. In a full work day, a team of two County employees can collect a maximum of only four sediment samples. The process is time-consuming because sediment sampling requires repeated use of a Petite Ponar dredge to collect sufficient sample for toxicity testing and is often complicated by the fact that the presence of rocks and shells can make sediment collection difficult in many areas.

Such monitoring would also be wasteful of resources since SQO results in 2014 (the last year for which data are available) have shown sediments are nontoxic at County monitoring stations, which are throughout the Bay, including Rhine Channel and the Turning Basin.

The requirement to investigate and identify areas of potential sediment impairment should be removed.

- 26) Section 5.6.3.1.2.2, page 95 – The implementation tasks should be coordinated and prioritized in an adaptive framework, rather than through a prescriptive list. Many of the strategies/tasks may not be required unless monitoring results, particularly after initiation of implementation efforts, show that other copper sources need to be addressed, as described in the following points (see additional comments below).
- 27) Sections 5.6.3.4 and 5.6.3.5, page 99 - A requirement to evaluate local impacts from storm drain copper discharges is unnecessary. The majority of copper conveyed by storm drains results from brake pad dust, which will be abated by the phase out of copper in brake pads by SB 346. There is no need to create and implement a plan for a problem that will largely cease to exist within the next few years, especially considering that copper discharges from storm drains are so small relative to marine anti-fouling paints (this is noted in the draft Staff Report).

In addition, many storm drains only discharge during storms. MS4 permit required wet weather monitoring already consumes a great deal of resources, including personnel and equipment. Wet weather storm drain monitoring is especially time-consuming and difficult to do and would compete with other required monitoring during the short wet weather periods.

- 28) Section 5.6.3.5, page 100 – Fish and shellfish tissue monitoring in Newport Bay has historically been conducted by the state Department of Fish and Wildlife. The County does not have the current capability to conduct such monitoring, without hiring consultants.
- 29) Section 5.6.3.6.1, page 100 - Determination of copper load from Newport Bay sediments would be an extremely challenging investigation, far beyond the normal capabilities of MS4 permittees and more suitable for specialized academic investigation. This requirement should be removed. If it is not removed, it should only be included as part of an adaptive management framework and pursued only if it is determined that this data are needed to achieve TMDL goals.
- 30) Section 5.6.3.6.2, page 101 - Copper load from algae is likely minimal relative to the load from anti-fouling paints. This is especially likely considering the decline in macroalgae in Newport Bay since the Newport Nutrient TMDL was established. There has not been a major algae bloom in the Bay in nearly a decade. As with sediments, investigation of algal copper load should only be included as part of an adaptive management plan and pursued only if it is determined this data is needed to achieve TMDL goals.
- 31) Section 5.6.3.7, Page 106 - There is no implementation task 1.2.2.8, it should be 1.2.2.5.
- 32) Section 9.1 Peer Review, page 130 - USEPA did not conduct a peer review in 2002 for the Metals TMDLs. Per the response to comment L.14 on p. 8 of USEPA's responsiveness summary <https://www3.epa.gov/region9/water/tmdl/nbay/tsdi0602.pdf> USEPA writes, "While these TMDLs have not been subject to a formal peer review process, they have been subject to comprehensive public review, including workshops during and after development of the draft TMDL and the formal public comment period." A peer review should be conducted (see also Specific Comment #33)

Comments on Proposed Basin Plan Amendments to Incorporate Total Maximum Daily Loads for copper and Non-TMDL Action Plans for Other Metals in Newport Bay

October 17, 2016

Page 9 of 9

- 33) Appendix 6.1.3, page 160 - The method used to calculate copper loading for recreational boats has not been peer-reviewed. Given the importance of this calculation to the overall TMDL, peer review should be conducted. See also General Comment #2 on letter and Specific Comment #32.
- 34) Appendix 6.2, page 162 - The date range for County data used in Tables 6-2.1 and 6-2.2 is inconsistent. Moreover, dissolved copper loads were calculated from total copper even though dissolved copper data are available. Recalculations using actual dissolved copper concentrations yield lower loads than reported in the Staff Report. See also General Comment #5.

Specific Comments on Draft BPA:

- 1) Table 6.1 Cu-1, page 3, under "Source Analysis for Cu"- Dissolved copper loads in tributary runoff (freshwater) were estimated from total copper in storm water samples using a dissolved/total metal translator. Actual monitoring data are available and should be used instead. See General Comment #5.
- 2) Table 6.1 Cu-1, page 5, under "TMDLs, Waste Load Allocations, and Margin of Safety for Cu"- For freshwater discharges, the mean copper discharge from San Diego Creek and Santa Ana Delhi for wet years from the County's calculation using actual data came out to approximately 1,880 pounds of dissolved copper per year vs 3005 pounds of dissolved copper per year using the translator.
- 3) Table 6.1. Cu-1, page 7, under "Implementation Plan", tasks 1.2.1(1), 2.1(1), 3.2(1), 3.2(2), 4.1(1), 4.1(3) and 5(1) - Responsible parties are required to submit plan(s) and schedule(s) within 3 months from the date of USEPA Basin Plan Amendment. A 3-month period is insufficient to complete this task (see also General Comment #6).
- 4) Table 6.1. Cu-1, page 7, under "Implementation Plan" – A number of the responsible parties listed will be difficult to regulate. It is unclear how they will be required to comply with the requirements contained in this TMDL (see also General Comment #7).
- 5) Table 6.1. Cu-1, page 13, under "Conduct Special Studies"- Copper load from algae is likely minimal relative to the load from anti-fouling paints. Investigation of algal copper load should only be included as part of an adaptive management framework and pursued only if it is determined this data is needed to achieve TMDL goals (see also Specific Comments #22 and #30).
- 6) Table 6.1. Zn, Hg, As, , Cr-1, page 16 - SQGs from studies like Looker and Johnson, or standards like MIS should not be used as numeric targets (see Specific Comments #6 and #20).
- 7) Table 6.1. Zn, Hg, As, Cr-1, under "Implementation Plan", tasks 1.1(1) and 2.1(1) page 18 - Responsible parties are required to submit plan(s) and schedule(s) within 3 months from the date of USEPA Basin Plan Amendment. A 3-month period is insufficient to complete this task (see also General Comment #6).
- 8) Table 6.1. Zn, Hg, As, Cr-1, under "Implementation Plan" page 18 - A number of the responsible parties listed will be difficult to regulate. It is unclear how they will be required to comply with the requirements contained in this TMDL (see also General Comment #7).

Specific Comments on Draft SED:

- 1) Page 8 and 9 – Zinc and mercury impairments are not justified by exceedances of SQGs alone (see prior comments)
- 2) Page 9 - The depromulgation of USEPA's TMDLs for Cu and Zn is discussed if the proposed TMDL and Action Plans are approved. The mechanism for this should be described.
- 3) Page 9, (2) Numeric targets for Cu in sediment – ERL should not be used (see prior comments).
- 4) Page 9, (1) Numeric targets for Zn, Hg, As and Cr in water – No impairment was found in the water column for these constituents. It is unclear why targets are needed.
- 5) Page 9, (2) Numeric targets for Zn, Hg, As and Cr in sediment – ERL should not be used (see prior comments).

**Comments on Proposed Basin Plan Amendments to Incorporate Total Maximum Daily Loads for copper and Non-TMDL
Action Plans for Other Metals in Newport Bay**

October 17, 2016

Page 10 of 9

- 6) Page 10, (3) Numeric targets for Zn, Hg, As and Cr in fish tissue – MIS and SQGs from Looker and Johnson should not be used (see prior comments).
- 7) Page 12, under “Upper Newport Bay”– Last sediment dredging in Upper Newport Bay was in 2010 not 2005.
- 8) Page 19, under “(3) Continue monitoring in marinas, channels and Bay waters” – see Specific Comments on Staff Report #12.
- 9) Page 20, section 4.1.1.2 – see Specific Comments on Staff Report #25.
- 10) Page 21, section 4.1.1.4 – see Specific Comments on Staff Report #27.
- 11) Page 22, section 4.1.1.5, (3) Storm drain monitoring - see Specific Comments on Staff Report #27.
- 12) Page 23, (4) Fish/Shellfish tissue monitoring - see Specific Comments on Staff Report #28.
- 13) Page 24, (2) Continued monitoring – see Specific Comments on Staff Report #28 on fish and mussel monitoring.