Public Comment
LA River Metals TMDL
Deadline: 9/30/15 by 12:00 noon

September 30, 2015

Chair Felicia Marcus and Board Members
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Sent via electronic mail to: commentletters@waterboards.ca.gov

Re: Comment Letter – LA River Metals TMDL

Dear Chair Marcus and State Water Board Members,

On behalf of Heal the Bay, Los Angeles Waterkeeper, and Natural Resources Defense Council (collectively, Environmental Groups) we submit the following comments on the *Proposed Approval of an Amendment to the Water Quality Control Plan for the Los Angeles Region (Basin Plan) to Adopt Site Specific Objectives for Lead and Copper in the Los Angeles River Watershed and to Revise the Total Maximum Daily Load (TMDL) for Metals in the Los Angeles River and Tributaries* ("Proposed Amendment"). Heal the Bay is an environmental organization with over 15,000 members dedicated to improving water quality in Santa Monica Bay and Southern California coastal water for people and marine life. Los Angeles Waterkeeper has been working to protect the Santa Monica Bay, San Pedro Bay and inland waterways of Los Angeles County through volunteer-based water quality monitoring, advocacy, and enforcement. NRDC is a non-profit environment organization, with approximately 72,000 members in California, dedicated to protecting the quality of Los Angeles County's aquatic resources as well as the health of beachgoers and other users. We appreciate this opportunity to provide comments on the Proposed Amendment.

I. Introduction

The Proposed Amendment would revise water quality objectives ("WQOs") for copper and lead in the Los Angeles River Watershed through the use of site-specific objectives ("SSOs"). We understand and acknowledge the amount of effort and resources the Los Angeles Regional Water Quality Control Board ("Regional Board") and stakeholders have put into the Proposed Amendment. However, we believe the SSOs proposed in the Proposed Amendment are premature and require further data collection and analyses to justify their incorporation in the Los Angeles River and Tributaries Metals Total Maximum Daily Load ("TMDL") and Los Angeles Region Water Quality Control Plan ("Basin Plan"). Specifically, we believe Attachment A – Final Report Copper Water-Effect Ratio Study to Support Implementation of the Los Angeles River and Tributaries Metal TMDL ("Copper WER Study") and Attachment B – Final Lead Recalculation Report to Support the Implementation of the Los Angeles River and Tributaries Metals TMDL ("Lead Recalculation Report") have serious limitations and thus should not be used at this time to justify any Basin Plan Amendments. Though we continue to have concerns over the proposed Lead Recalculation, specifically with regards to the use of national rather than site-specific datasets, and the use of surrogate

instead of native species, our comments here focus on the Copper WER Study, which we believe has the most significant limitations.

Environmental Groups have several concerns with the Copper WER Study – specifically, we are concerned that because of the spatial and temporal limitations of the data collection efforts, the study does not adequately characterize the critical condition for the copper WER and does not consider downstream effects. Further, we are very concerned over the lack of a defined process by which to evaluate the protectiveness of the SSOs and to adjust SSOs based on results of this evaluation, an issue which became clear at the Regional Board hearing on this issue.

We acknowledge that the study proponents met the minimum number of samples required by the EPA guidance[1], however we believe this simply highlights the critical need for development of regionally specific guidance on SSO development. EPA guidelines were developed as a national guide, likely with the goal of not imposing overly burdensome requirements on potentially very small watersheds. The LA River Watershed however is likely one of the most complex systems in the nation, and therefore we believe the EPA guidance should be regarded as a minimum starting point rather than an appropriate standard.

In general, we strongly believe SSOs should be applied with caution, and if they are used, that they are well-supported by data, and are accompanied by a concrete evaluation process. It is essential that data used fully characterize the watershed conditions in which they apply. Robust datasets for water chemistry, ecological function, native species, precipitation, etc. are necessary to ensure changes to WQOs will protect designated beneficial uses over a range of watershed conditions. Further, a clear process must be in place to evaluate SSOs and set thresholds at which SSOs will be altered. This is all especially critical for the proposed copper SSOs, which would raise water quality standards to levels that, based on historic data, would negate all copper exceedances in the River. Below we discuss specific comments in further detail.

Sampling Data Is Not Representative of Range of Watershed Conditions

The Los Angeles River Watershed receives flow from approximately 843 square miles originating in both the San Gabriel Mountains in the northeast and Santa Monica Mountains in the northwest. The watershed includes both heavily urbanized and rural landscapes, and is home to millions of people and thousands of businesses. Because of the geographic scope of the Proposed Amendment, it is critical to establish that the Copper WER Study thoroughly examined the most critical conditions in the watershed, when copper would be most bioavailable and thus most toxic.

The implications of not capturing the range of environmental conditions in the watershed are clear: if proposed WERs in the Copper WER Study were adopted, WQO concentrations for copper in reaches 1 through 4 of the Los Angeles River would nearly quadruple. For soft bottom tributaries of the Rio Hondo

[1] USEPA, 2001, *Streamlined Water-Effect Ratio Procedure for Discharges of Copper*; and USEPA, 1994*, Interim Guidance on Determination and Use of Water-Effect Ratios for Metals*

and Tujunga Wash, WQOs would increase by factors of 9.691 and 8.279, respectively. Based on historic data in the River, these SSOs translate to no exceedances for copper in the River. We therefore urge the Regional Board to take a conservative approach in considering the Proposed Amendment.

The Copper WER Study broadly identifies dry weather, regardless of season, as the critical condition in the Los Angeles River Watershed.[2] Critical condition is defined as the condition with the lowest WER or the condition in a waterbody when aquatic life is most threatened.[3] We agree with this approach. However due to the very limited dataset that the Copper WER Study is based on as well as the relatively short timeframe over which the study was conducted, we believe the Copper WER Study cannot ensure that critical conditions were captured. Six dry weather samples were used to calculate final WERs for each reach of the Los Angeles River and tributaries (expect for Rio Hondo where only five sample results were used), with the intention of capturing the critical condition. Further, the study was conducted over a period of only 17 months, March 2011 to August 2012, covering just one wet season. This is concerning as 2011-2012 had below average rainfall and does not represent average (or wetter than average) conditions in the Los Angeles River Watershed – annual rainfall was 6.29 inches below average.[4] Though we agree that dry weather in general is likely the critical condition, we are concerned that the full range of WERs that would be observed over time during dry weather (based on season, proximity to a rain event, or simply the natural variability inherent in a watershed) was not characterized. The proposed WER must be protective during average as well as wetter than average years – can the study proponents really guarantee this with any level of confidence?

Though we understand that this study represented a significant effort on the part of the study proponents, the fact is that these are standards are at least doubling (in one case raising by nearly an order of magnitude) standards which have been in place for decades, and are proposed to apply more or less in perpetuity. For this reason, it is absolutely critical that the study fully investigates the range of conditions that may occur in the watershed. We recommend that data collection and sampling continue over a five year study period to develop a WER that is well supported and protective of beneficial uses. This would ensure that samples are collected over a wide range of chemical and flow conditions which influence bioavailability of copper.

Sampling Locations and Frequencies in the Copper WER Report are too Limited to Characterize Watershed Conditions

Fourteen sampling sites were used to represent four reaches and six tributaries of the Los Angeles River Watershed (roughly 154 stream miles; 50 miles in the main stem). Given the geographic extent and varied land use of Los Angeles River and its tributaries, 14 dry weather sites and 10 wet weather sites are unlikely to be representative of all watershed conditions. For many of the tributaries, only one sampling location

[2] Copper WER Report at ES-3.
[3] Copper WER Report at 8.
[4] We acknowledge that additional data was collected between 2005 and 2006 for a 2008 report, however, this study period also represents drier than average conditions.

was used in the study despite having tremendous variability in land use, substrate and other conditions. Vegetation in waterbodies can also greatly influence water chemistry, flow dynamics, the binding of copper to sediments, etc., potentially having great influence on WER calculations. Thus, it is inappropriate to use a single sample location for tributaries because it cannot adequately characterize water chemistry for an entire reach. In addition, less than 100 data points were used to conduct the watershed wide SSO; this is simply not enough data to characterize an entire watershed and change WQOs. The California Toxics Rule (40 CFR §131.38) allows SSOs because every waterbody has slightly different conditions influencing toxicity. However, in identifying site-specific objectives, it is essential that robust data is collected in multiple locations for each reach to capture variability. The severely limited sampling regimes used in the Copper WER Study fails to use enough data to account for watershed variability.

Lack of a Process to Evaluate the Effectiveness of the WER and Adjust Accordingly

Perhaps most concerning in the Proposed Amendment is an issue which became clear at the Regional Board hearing, which is that monitoring is proposed to be a backstop to address issues with data limitations that were noted above. We assert that rigorous monitoring should be conducted beforehand and then an appropriate WER should be established based on this data, rather than the current process of establishing a WER based on limited data and then confirming that it is adequately protective.

Using monitoring as a backstop is particularly unacceptable here since the Proposed Amendment contains no guidance on how monitoring results will be used to inform or adjust the SSO. What will be done if toxicity is observed at the higher standard? What is the threshold that must be met to reconsider the WER? When will a formal evaluation be conducted? At the very least, if the Proposed Amendment is accepted, this process should be clearly defined and regular reopeners should be scheduled during which the appropriateness of the WER is reevaluated.

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Changing a water quality threshold is a very serious action and should be approached cautiously. Since SSOs may allow for higher concentrations of metals than what the California Toxic Rule qualifies as toxic to freshwater aquatic life there are major implications of their application. Moreover, if SSOs are developed using inappropriate methods, data, and reasoning, TMDLs will prove ineffective in addressing water impairments. Almost all of Los Angeles' waterbodies are impaired. It is critical that the region work to improve water quality in these waterbodies to protect their many beneficial uses. The Proposed Amendment would dramatically alter one of the most important TMDLs in Los Angeles County. It is imperative that robust datasets and analysis support any changes to regional WQOs. We urge the Regional Board to address our above comments and seriously reconsider the Proposed Amendment. We believe it is premature to move forward with adopting SSOs for metals in the Los Angeles River Watershed at this time as there are clear data gaps in the Copper WER Study and Lead Recalculation Report. We are particularly concerned that accepting these SSOs for metals in the Los Angeles River Watershed will set a harmful precedent for the future SSOs. At the very least, a clear process needs to be put in place to evaluate and if necessary alter or remove the WERs.

Thank you for your consideration of these comments. Please contact us if you have any questions.

Sincerely,

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