COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

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September 8, 2009

IN REPLY PLEASE
REFER TO FILE: WM-9

Ms. Tracy Egoscue, Executive Officer
California Regional Water Quality
Control Board – Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013-2343

Attention Ms. Thanhloan Nguyen

Dear Ms. Egoscue:

COMMENTS ON THE PROPOSED TOTAL MAXIMUM DAILY LOAD FOR ORGANOCHLORINE PESTICIDES, POLYCHLORINATED BIPHENYLS, SEDIMENT TOXICITY, POLYCYCLIC AROMATIC HYDROCARBONS, AND METALS FOR COLORADO LAGOON

Thank you for the opportunity to comment on the proposed basin plan amendment to the Water Quality Control Plan for the Los Angeles Region to incorporate the Total Maximum Daily Load for Organochlorine Pesticides, Polychlorinated Biphenyls, Sediment Toxicity, Polycyclic Aromatic Hydrocarbons, and Metals for Colorado Lagoon Watershed. On behalf of the Los Angeles County Flood Control District, enclosed are our comments.

We look forward to your consideration of our comments. If you have any questions, please contact me or your staff may contact Mr Hector Bordas at (626) 458-5947 or hbordas@dpw.lacounty.gov

Very truly yours,

GAIL FARBER
Director of Public Works

GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

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Enc.

COMMENTS OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT ON THE PROPOSED TOTAL MAXIMUM DAILY LOAD FOR COLORADO LAGOON

1. Inappropriateness of Naming the Los Angeles County Flood Control District as a Responsible Party

The proposed Basin Plan Amendment (BPA) inappropriately names the Los Angeles County Flood Control District (LACFCD) as a responsible party Land areas that drain to the single LACFCD storm drain that empties into Colorado Lagoon are under the jurisdiction of the City of Long Beach (City). The LACFCD drain functions simply as a conveyance for urban runoff and stormwater from the City and does not generate any of the pollutants of concern at issue in the TMDL. Further, the LACFCD cannot control land uses within the City and, therefore, does not have the authority to reduce the amount of constituents of concern entering its facilities, water bodies, and ultimately the ocean. Page 67 of the Draft Staff Report notes that since "Colorado Lagoon is located completely in the City of Long Beach and land area serviced by storm drain systems that currently discharge stormwater to the lagoon is under the jurisdiction of the City of Long Beach, the Waste Load Allocations (WLAs) are assigned primarily to the City of Long Beach." Therefore, the LACFCD should not be responsible for pollutants generated in the tributary watershed, since it has no jurisdiction or authority over the activities of landowners in the City We request that the LACFCD be removed from the list of responsible parties for the proposed TMDL.

2. Inappropriateness of Joint Responsibility for TMDL Compliance

The proposed BPA purports to make the LACFCD jointly responsible for the actions, or inactions, of other responsible jurisdictions, such as the City and California Department of Transportation (Caltrans). The LACFCD has no authority to compel the City or Caltrans to come into compliance Thus, under the proposed BPA, the LACFCD could meet its assigned WLAs, and yet, still be out of compliance with the TMDL. For these reasons, the LACFCD cannot accept such a role in this TMDL. We request that the responsibility of the responsible jurisdictions be clearly distinguished and specified in the proposed BPA.

3. Need for Reevaluation of Sediment Impairment

In evaluating the sediment impairment in Colorado Lagoon, the Regional Board utilized sediment quality guidelines and numeric objectives established by the National Oceanic and Atmospheric Administration (NOAA). As described in Long et al. (1995)[1], the NOAA guidelines and objectives were developed based on a single-line-of-evidence sediment chemistry data, and were intended to be used as screening tool for identifying and prioritizing the greatest biological risk areas, but were never intended to be used as numeric targets for TMDLs. The use of the effects-range-low (ERL) numeric targets for individual pollutants as a measure of

[1] Long et al., 1995: Incidence of adverse biological effects within ranges of chemical and concentrations in marine and estuarine sediments. *Environmental Management*, 19(1), 81-97.

toxicity in sediments is wholly unsupported by the scientific literature, as several studies (e.g., Chapman et al., 2001[2]; Bay et al., 2007[3]) have noted the lack of association between the ERL values and impacts in sediments. The characterization of sediment toxicity is more complex than can be discerned using the ERL single numeric target for individual pollutants. The fact that a chemical in sediment exceeds the ERL value neither justifies impairment nor establishes the causes for the impairment.

The State Water Resources Control Board (State Water Board) on September 16, 2008, adopted Sediment Quality Objectives (SQO) for Enclosed Bays and Estuaries[4] Colorado Lagoon is one of the water bodies to which the State SQO applies. The State SQO was established based on the most recent scientific information available and, hence, is a more robust and scientifically sound approach to determine sediment impairment than the ERL values. For the purpose of assessing sediment impairment, the State SQO utilizes the multiple-line-of-evidence (MLOE) approach. Given that the State SQO supersedes the NOAA criteria, the State SQO must be used for evaluation of sediment impairment in Colorado Lagoon. The TMDL should utilize the MLOE approach, which incorporates biological effects as well as exposure end points. Because staff did not evaluate the sediment in Colorado Lagoon using the State's SQO MLOE approach, reassessment is required for the evidence of the existence of sediment impairment in Colorado Lagoon. Until that reassessment has been completed using the State's SQO MLOE approach, further development of the TMDL for sediment toxicity is inappropriate.

We urge the Regional Board to take the following steps.

- Using the State's SQO MLOE approach, examine whether sediment impairment in Colorado Lagoon is justified;
- If impairment is justified based on MLOE, identify water quality constituents that are responsible for the impairment; and
- Apply SQO to set the TMDL targets for the identified responsible constituents and to evaluate TMDL compliance.

4. Unclear WLAs for Stormwater Discharges

The TMDL specifies two different approaches for the WLAs for stormwater discharges: (i) mass-based and (ii) concentration-based, as indicated on page 5 of the proposed BPA and Section 6.2.1 of the Draft Staff Report. Having two different allocations for the same discharge is unreasonable and impractical, as they demand different implementation measures. Unless the two approaches are provided as options to choose from, we request that the mass-based WLAs be used for municipal stormwater discharges. Accordingly, we request that the

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[2] Chapman et al., 2001: Assessing sediment contamination in estuaries. Environmental Toxicology and Chemistry, 20(1), 3-22.

[3] Bay et al.. 2007: Comparison of national and regional sediment quality guidelines for classifying sediment toxicity in California. *Technical Report*, Southern California Coastal Water Research Project.

[4] State Water Board, 2008: Adoption of water quality control plan for enclosed bays and estuaries – Part 1 Sediment Quality *Resol. No. 2008-0070.*

concentration-based WLAs for stormwater discharges, Subsection 1(B) under the WLAs Section on page 5 of the BPA, be removed

Further, we request that the last sentence of the paragraph under the mass-based WLAs for stormwater discharges, Subsection 1(A) on page 5 of the BPA, be corrected as follows

> "Mass-based WLAs are applied as annual limits, and compliance with the mass-based WLAs for sediment will be determined by pollutant mass at the storm drain outfalls to the lagoon "

5. Need to Assign Load Allocations to Runoff from Surrounding Parks and Recreational Areas

The Draft Staff Report identifies two nonpoint sources of pollution for Colorado Lagoon (i) sheet flow near the shores of the lagoon and (ii) direct atmospheric deposition onto the lagoon water surface In the BPA, the only load allocation established is for direct atmospheric deposition It is unclear why there is no load allocation established for the runoff from recreational parks and other lands surrounding the lagoon Not assigning load allocations for these sources could potentially result in continued impairment of the lagoon even after all point-source contributions have been contained or have met their WLAs. We request that load allocations be specified for the runoff from the nearby surrounding lands and appropriate measures be implemented to help meet the established target for Colorado Lagoon

6. High Uncertainty in Water Quality Modeling

As discussed in Sections 5 and 9 of the Draft Staff Report, water quality modeling was used to simulate the relationship between the pollutant loadings and the numeric targets and to evaluate the water quality condition in Colorado Lagoon under different proposed implementation scenarios. The use of modeling to conduct such analysis is a common practice. However, our review of the modeling exercise reveals that there were insufficient historical flow and water quality data available for developing, calibrating, and validating the model. Consequently, the modeling exercise required numerous assumptions, resulting in a high degree of uncertainty in the model's output and the resulting conclusions drawn thereof

For example, it was concluded that the calibration results for the pollutants of concern in the sediment bed and water column showed a good correlation between modeled and observed values, though we know that only a single discrete data point was available for most of the sites during the course of the water quality model calibration[5] Further, no uncertainty analysis was conducted for the model parameters It is important that the limitations of the model be acknowledged as appropriate and the conclusions be drawn accordingly

[5] See Figs. 5-4 to 5-16 in the Draft Staff Report.

7. Natural Sources and Atmospheric Deposition Loadings Were Not Properly Accounted for in the Allocations

Several studies (e.g., Stein et al., 2007[6]) show that significant portions of pollutant loadings to receiving waters originate from natural background (i.e., nonanthropogenic sources). These natural sources could be attributed to both overlying land cover and underlying geologic formations. For example, trace metals occur naturally in soil environment and could leach to water bodies during weathering and hydrologic processes. Further, wildfires are common in Southern California and are known to contribute significant pollutant loadings to water bodies (e.g , Stein et al., 2008[7]). Even though Colorado Lagoon Watershed is located some distance from typical burn areas in the region, the ash materials left behind at the burn location can be transported through the air, creating atmospherically transported pollutants to the watershed. Atmospherically deposited pollutants also emerge from other sources, such as emissions from different industries in the region (USEPA, 2007[8]). Pollutant load contributions from these natural sources and atmospheric deposition are often high and, at times, even exceed established water quality standards. Despite such high contributions from natural and atmospheric sources, the proposed TMDL is making municipal agencies solely responsible for addressing contributions from such sources. The control of such sources of pollution is beyond the authority of the municipal agencies, and it is inappropriate to make local municipalities accountable for pollutants that emerge from such sources. The Regional Board should work with the State Water Board, the Air Resources Board, and the U.S. Environmental Protection Agency (USEPA) to address such sources. We request that the proposed TMDL acknowledge such sources and that studies be conducted to make appropriate adjustments to the WLAs in the future.

8. Insufficient Time for Developing Monitoring Plan and Achieving Final WLAs

As noted above, the LACFCD objects to the requirement in the proposed BPA that requires preparation of a joint monitoring plan. Moreover, based on experience with previous TMDLs, it is not possible to develop a sound monitoring plan in a six-month time frame. This is so because the development of monitoring plans often requires the involvement of experts in the field as well as coordination with other agencies. Therefore, we request that the time frame in Table 7-30.2 of the BPA for the development of the monitoring plan be extended from six months to one year to allow for interagency coordination and to identify and address the new challenges posed by both sediment- and water-focused monitoring

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[6] Stein et al., 2007: Assessment of water quality concentrations and loads from natural landscapes. *Technical Report*, Southern California Coastal Water Research project.

[7] Stein et al., 2008: Direct and indirect effects of Southern California wildfires on stormwater runoff *Proceeding*, CASQA Conference.

[8] USEPA, 2007: Survey of new findings in scientific literature related to atmospheric deposition to the Great Waters. *Technical Report*.

Further, the proposed BPA does not provide adequate time for the responsible jurisdictions to attain the final WLAs. The Draft Staff Report provides no evidence as to how the responsible jurisdictions are to meet the seven-year compliance schedule provided in the proposed BPA. There should be sufficient time for the responsible parties to conduct the necessary monitoring and research needed during the course of implementation of the TMDL Collaboration and integration with other adjacent regional water resources management programs is also necessary. We, therefore, request that the seven-year implementation schedule proposed in Table 7-30 2 of the BPA be extended to 15 years

9. Need Schedule for Reopener

During the development of any TMDL, it is common that there are always uncertainties associated with the identification of pollutant sources, the quantification of loading capacity and allocations, the water quality standards used, and the implementation schedules. These uncertainties arise from the lack of sufficient data and scientific information needed for the development of the TMDL. This leads to making assumptions or basing decision on limited information wherever there is a data gap The Colorado Lagoon TMDL cannot claim to be perfect as these uncertainties are well imbedded in it.

Knowledge about a TMDL is gained over time as more data and results of special studies are available Therefore, we request that a schedule for a reopener be incorporated into Table 7-30.2 of the proposed BPA so that appropriate data collection and research are conducted and WLAs and implementation schedules be reevaluated as new knowledge and data are available. We recommend reopening this TMDL six years from the effective date of the TMDL, with the final compliance date set to 15 years as noted above under comment No. 8.

10. The California Ocean Plan Criteria Is Not Applicable

As stated in the Draft Staff Report and the proposed BPA, the numeric target for Polycyclic Aromatic Hydrocarbons (PAHs) is based on the California Ocean Plan (Ocean Plan) criteria However, it is clearly stated in the Introduction, Section (c) of the Ocean Plan, that the Ocean Plan water quality objectives are applicable only to direct measurements in the ocean water The Ocean Plan criteria thus cannot apply to enclosed bays, estuaries, or in-land water bodies such as Colorado Lagoon Colorado Lagoon is an in-land water body and reflects different water quality and ecological characteristics compared to the ocean Therefore, it is inappropriate to use the Ocean Plan criteria for setting water quality targets in Colorado Lagoon

11 Inappropriate Target for Polychlorinated Biphenyls

The proposed BPA is based on a water quality target of 0.00007 µg/L for Polychlorinated Biphenyls (PCBs) This is overly conservative and inconsistent with other similar TMDLs developed in the region, such as the Marina del Rey Toxic Pollutants TMDL, which has used the California Toxics Rule (CTR) human

health criteria of 0 00017 µg/L for PCBs. Further, currently available analytical methods do not have the ability to detect PCB concentrations at this very low level Therefore, it is unnecessary and illogical to set the PCB target to such an undetectable low level

12. **Unnecessary and Expensive Sampling Requirements**

The proposed TMDL requires quarterly sampling of water column and suspended solids. Such frequent sampling is unnecessary and expensive. We request that the sampling frequency for water column and suspended solids be changed from quarterly to semiannually Sampling twice per year, one during dry season and one during wet season, should suffice to evaluate the progress of water quality improvement in the lagoon.

13. **The Proposed TMDL Does Not Comply With the Requirements of the Water Code**

Because it is adopting a BPA, the Regional Board is required to consider the impact of the proposed TMDL in light of Water Code, Section 13000, and the factors set forth in Section 13241 These sections require the Regional Board to review the effects of the TMDL on the local economy, the development of housing, and other societal impacts. To the extent that such factors were allegedly considered, as set forth in the proposed Regional Board's resolution, the analysis is conclusory and without reference to evidence in the record

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