



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

DONALD L. WOLFE, Director

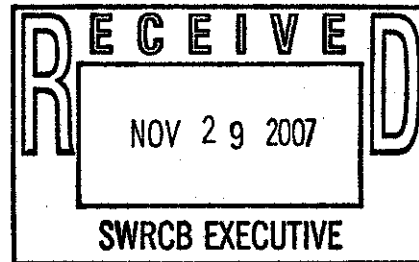
ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

November 29, 2007

IN REPLY PLEASE
REFER TO FILE:

WM-9

Ms. Jeanine Townsend
Acting Clerk of the Board
Executive Office
California State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100



Dear Ms. Townsend:

WATER QUALITY CONTROL PLAN FOR ENCLOSED BAYS AND ESTUARIES COMMENTS ON THE PROPOSED SEDIMENT QUALITY OBJECTIVES

We submit these comments on behalf of the County of Los Angeles and the Los Angeles County Flood Control District. As one of the agencies leading the efforts to assure that water quality and sediment quality standards are met throughout the County of Los Angeles, the Department of Public Works appreciates the opportunity to comment on the proposed Sediment Quality Objectives for Enclosed Bays and Estuaries. Our comments are enclosed. Furthermore, we are also in support of comments submitted by the California Stormwater Quality Association.

If you have questions, please contact Mr. Scott Schales at (626) 458-4325 or sschales@dpw.lacounty.gov or Mr. Frank Wu at (626) 458-4358 or fwu@dpw.lacounty.gov.

Very truly yours,

DONALD L. WOLFE
Director of Public Works

MARK PESTRELLA
Assistant Deputy Director
Watershed Management Division

GA:sw
P:\wmpub\Secretarial\Letters\water quality.doc\07413

Enc.

Post-It* Fax Note	7671	Date	11/29/07	# of pages	▶
To: Jeanine Townsend		From: Scott Schales			
Co./Dept: Water Resources		LA Co Pub Work			
Phone #		Phone #			
(916) 341-5620		(626) 458-3534			

COMMENTS ON THE PROPOSED SEDIMENT QUALITY CONTROL PLAN FOR ENCLOSED BAYS AND ESTUARIES

The Los Angeles County Department of Public Works on behalf of the County of Los Angeles and Los Angeles County Flood Control District provides the following comments on the Proposed Sediment Quality Control Plan for enclosed bays and estuaries: Part 1. Sediment Quality, dated September 2007.

1. The existing 303(d) listing includes sediment impairment for bays and estuaries. For some of these water bodies, Total Maximum Daily Loads (TMDLs) for metals and toxics have already been promulgated. It is not clear how the proposed Sediment Quality Objective (SQO) Plan affects the existing 303(d) listings and eventually the associated TMDLs. For instance, if the assessment of sediment quality at a site under the proposed plan leads to a delisting of sediment impairment for the site, but if there is a TMDL already in place based on a previous 303(d) listing, what will be the appropriate management action? A clear description on this issue needs to be provided in the plan.
2. The thickness of biologically active sediment layer could vary both spatially and temporally depending on the aquatic organisms, climate of the area, sediment composition, flow dynamics, etc. Literature sets the thickness of this biologically active layer at 5 to 20 cm (see Section 2 of the staff report). The available or proposed methodology for quantifying this biologically active thickness (if any) for a given bay or estuary needs to be provided in the plan in order to avoid methodological inconsistency across regions, as knowing this thickness is critical if remedial actions need to be considered.
3. The plan proposes to sample only the top 2 cm of the ambient sediment for chemical and toxicity analysis (see Section 5.2.2 of the staff report and Section V.D of Appendix A). Given that the thickness of the biologically active layer is in the order of 5 to 20 cm, the consideration of the upper 2 cm of sediment alone does not seem reasonable. Technically, sampling this thin layer of sediment may not be easy if not impossible. We should note that the upper 2 cm layer of sediment is often unstable as it is highly influenced by sedimentation, resuspension, and aquatic life dynamics over time. In particular, this could be the case in regions that are characterized by high temporal variability in runoff (intermittent rivers and flash floods) such as Southern California.
4. The mobile nature of fish (as opposed to benthic invertebrates that live in the sediment) could preclude one from figuring out whether the pollutants that accumulate within the fish (which eventually affects human health via the food chain) are actually coming from sediments of the bay or estuary, from the overlying water column, or from sediments of the adjacent water body (ocean, river, etc.). Another major concern is whether all levels of pollutant bioavailability always lead to bioaccumulation in aquatic life. In other words, what fraction of pollutant gets into

fish and, once in the fish, what fraction will bioaccumulate and impact human health? Intuitively, one may expect that certain quantity of pollutants taken in by the fish will be used for metabolic process and will not get the chance to accumulate in the body of the fish.

5. It is stated that the proposed SQOs plan does not apply to dredge materials (see Section 5.7.2 of the staff report and Section VII.A of Appendix A). Note that most bays and estuaries are affected by dredging activities for navigation purposes. Under such activities, sediments that are dredged from one part of the bay or estuary might be deposited in another part, provided that it satisfies the national testing guidance procedures for dredged material disposal. Under such circumstances, it is not clear whether the deposited sediments are considered "in-place sediment" (also called "ambient sediment") and protected by the SQOs plan, or still being protected under the 1992 USACE and EPA regulation for dredged material. The plan should provide clear definition of ambient/in-place sediment to avoid interpretational controversies.
6. For sediment toxicity testing, acceptable test organisms have already been set in the plan (see Section 5.5.2.2 of the staff report). But, there could be a possibility that these organisms might not be indigenous to or available at the actual site where the sediment sampling is conducted. Moreover, despite its toxicity to the test organisms, the sediment could be nontoxic to the species at the actual site. This could lead to erroneous assessment of the sediment quality at the given site.
7. We agree to staff's proposal for using "narrative objectives" for sediment quality impairments (see Section IV of Appendix A), but we have concerns on the methodologies and thresholds proposed for evaluating the individual line of evidences (LOEs; see Sections 5.5.2 to 5.5.4 of the staff report and Sections V.F to V.H of Appendix A). First, while regional differences (between Southern and Northern California) have been observed in setting the thresholds for chemical and benthic analyses, it seems no such investigation was conducted in setting the toxicity thresholds. Instead, one threshold for Statewide use is reported, which implies that the response of test organisms to sediment toxicity is regionally independent, i.e., one-size-fits-all approach. Second, while the "average" of assessment techniques is used for categorization of sediment chemistry and benthic community LOEs into their classes, "median" is used for categorizing sediment toxicity LOE. As it stands now, there seems to be methodological inconsistency. Third, given limitations in the data and methodologies used in arriving at the thresholds, the accuracy of the numerical values proposed for the thresholds is questionable.
8. With regard to integration of multistation assessment of sediment impairment for a water body, the SQO plan proposes to conduct individual station assessments using the MLOE approach, and then to integrate the results of the individual stations using "tests of exceedance" statistical approach (see Section 5.7.3 of the staff report). Given the high cost associated with assessing sediment quality of individual

sampling stations, this method of water body assessment for sediment quality is less practical. Instead, a more cost-effective approach for such cases would be the use of a "composite" sampling approach, where samples from several of the individual stations are composited into one sample for analysis using the MLOE approach.

GA:sv

P:\wmpub\Secretarial\Reports\Comments_Draft for Dr. Amenu.doc