



February 29, 2008

Chair Karl Longley and Members of the Board
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114
Attn: Karen Larsen

Subject: Central Valley Water Board Actions to Protect Beneficial Uses of the Sacramento-San Joaquin Delta

Dear Chair Longley and Members of the Board:

California Urban Water Agencies (CUWA) commends the Central Valley Regional Water Quality Control Board (Central Valley Water Board) for moving forward with actions to address the pelagic organism decline (POD) in the Sacramento-San Joaquin Delta (Delta). The Central Valley Water Board has recognized that there are multiple stressors in the Delta, including diversions (municipal, agricultural, and power plant), contaminants, and food shortage that must be addressed to protect beneficial uses in the Delta.

CUWA is comprised of eleven public water agencies that provide drinking water to two-thirds of California's population. CUWA's members rely on the Delta and its tributaries for a large portion of their drinking water supplies. CUWA has supported a number of studies on contaminants, salmonid modeling and tracking, an expert panel report on biomarkers, and most recently, assessment of Delta smelt abundance indices and toxicity tests with Delta smelt. We are keenly interested in determining the causes of the POD and working with the Central Valley Water Board and other interested parties to improve the Delta ecosystem and protect all beneficial uses of the Delta.

Comprehensive Regional Monitoring Program

CUWA commends the Central Valley Water Board and State Water Resources Control Board (State Water Board) for contracting with UC Davis to compile and assess existing data on toxicity and contaminants. This is a critical step to inform a two-pronged approach to monitoring that includes immediate, focused monitoring to address the role of contaminants in the POD species decline and longer-term development of a comprehensive program. The most critical element of the monitoring program is to conduct the focused studies needed to determine the role of contaminants in the decline of POD species. CUWA recommends that this be a top priority of the Water Boards.

State Water Board Resolution 2007-0079 identifies the need for a comprehensive contaminants monitoring program that includes routine data synthesis and assessment. This is a laudable goal. However, in the last ten years there have been several attempts to

develop comprehensive monitoring programs and, despite general consensus among the scientists and stakeholders in the watershed that comprehensive monitoring is needed, all attempts have failed. A comprehensive monitoring program that addresses all beneficial uses, a data management system that provides timely public access to the data, and annual assessments of the data throughout the watershed are needed. CUWA recommends that the Water Boards not follow the failed pattern of past attempts, wherein many staff and stakeholder hours were spent designing monitoring programs that were ultimately too costly to fund. We recommend that the Water Boards first survey the existing monitoring programs and determine what steps could be taken to better coordinate the efforts and standardize the reporting. Then, the focus should shift to making the data collected by the various monitoring programs, including discharger monitoring, accessible to the public in a timely manner. This should be followed by an assessment of available funding so that the comprehensive program is designed to fit the level of funding that is available.

Advantages of Regional Monitoring – A regional monitoring program, such as the San Francisco Bay Regional Monitoring Program, allows for a single comprehensive assessment of water quality in the watershed rather than multiple reports from independent studies with potentially contradictory findings. Regional monitoring can provide the basis and direction for more focused special studies designed to protect all beneficial uses. Regional monitoring also provides a forum for dealing with issues collectively.

Geographic Scope – CUWA recommends that the focus initially be placed on the Delta and the watershed areas that are immediately upstream of the Delta because fish species that inhabit the Delta are in decline and the restrictions placed on the exporters are greatly reducing the reliability of water supplies for millions of California residents. In addition, water agencies treating Delta water quality face greater challenges than upstream water agencies due to the presence of high levels of organic carbon, bromide, salinity and nutrients in the Delta.

Management Framework – As stated previously, the initial focus should be on compilation of existing data and making that data accessible. In the long term, there are existing successful monitoring programs that should be evaluated as potential models for a comprehensive program including the San Francisco Bay Regional Monitoring Program, the Sacramento River Watershed Program, the Sacramento Coordinated Monitoring Program, and the Central Coast Ambient Monitoring Program. Most importantly the management framework needs to be flexible enough to respond to new information and changing priorities.

Goals and Objectives – The initial goal of the monitoring program should be to gain an understanding of the role of contaminants in the POD. The goal of the comprehensive program should be to conduct monitoring that will allow an evaluation of the degree to which all beneficial uses are being protected, to determine sources of contamination, and to facilitate implementation and enforcement of source control measures. While it is critically important to obtain data on contaminants that may be affecting the aquatic environment, information is also needed on drinking water contaminants.

Resources – The staff report states that municipal wastewater, urban stormwater, and agricultural dischargers are funding existing monitoring programs. The drinking water agencies conduct monitoring at several of the Delta pumping plants and the urban State Water Contractor agencies and Contra Costa Water District contribute \$3.1 million per year to fund monitoring and special studies conducted by the Department of Water Resources (DWR) Municipal Water Quality Investigations Program. In addition, the State Water Contractors fund a large portion of the Interagency Ecological Program (IEP) monitoring.

Monitoring to Characterize Discharges from Delta Islands

CUWA recommends that Delta island agricultural and urban discharges be monitored to understand the impacts on the POD, to understand the impacts on drinking water quality, and to improve the island discharge component of Delta models. CUWA also recommends that the monitoring program include diversions to Delta islands to better understand the quantity and timing of diversions.

DWR has determined that there are approximately 1800 agricultural diversions and approximately 260 agricultural discharges in the Delta. The secondary zone of the Delta is rapidly urbanizing, resulting in increasing amounts of wastewater and urban runoff discharged to Delta channels. DWR and the U.S. Geological Survey (USGS) have collected some information on the quality of agricultural discharges in the Delta and DWR has attempted to obtain information on the quantity of agricultural discharges with limited success. In recent years, water quality data have been collected on a few agricultural drains by the Central Valley Water Board and the San Joaquin County and Delta Water Quality Coalition. CUWA recommends that the Central Valley Water Board work with DWR to conduct an assessment of the available data and develop a plan for collecting the information that is needed to better characterize agricultural drainage in the Delta. The Central Valley Water Board should also work with the wastewater and urban runoff dischargers to assess the data that are currently being collected on these discharges and determine if additional information is needed.

Criteria for Monitoring – It would not be economically or logistically possible to monitor all Delta island discharges. Possible criteria to use in determining which discharges to monitor include proximity to Delta pumping plants and prime habitat for POD species, the size of the discharge, pesticide use and cropping patterns, and Delta soil types. Discharges in close proximity to Delta pumping plants and prime POD species habitat have the most potential to adversely impact beneficial uses. Similarly, large volume discharges have more potential to adversely impact beneficial uses. Discharges from islands that are planted with crops that require large amounts of pesticides are more likely to affect aquatic life than discharges from islands with minimal pesticide use. DWR has classified the Delta islands into three categories, based on soil types, for purposes of modeling organic carbon discharges from the islands.

Critical Information – Discharge volume information is needed to better understand the impacts of Delta discharges on beneficial uses. Past efforts to obtain this information have involved review of electrical usage records with limited monitoring of actual discharge volumes. In addition to monitoring for pyrethroid and other pesticides, drinking water constituents (organic carbon, bromide, salinity, nutrients, and indicator bacteria) should be included in island discharge monitoring programs.

Ammonia Toxicity Studies

CUWA commends the Central Valley Water Board and State Water Board for responding so quickly to the recent analysis of ammonia data conducted by DWR staff that identifies the need to better understand the impacts of ammonia on primary productivity inhibition and fish toxicity. CUWA recommends that the Central Valley Water Board ensure that the current studies are designed to collect sufficient data to allow conclusions to be drawn on the impacts of ammonia, conduct an assessment of the current studies, convene a workshop to discuss the results, and then determine a long term course of action based on the findings of the current studies.

Need for Increased Enforcement or Additional Restrictions on Delta Pesticide Use

CUWA recommends that the Water Boards encourage the Department of Pesticide Regulation (DPR) to expedite the pyrethroid pesticide re-registration process so the information on the potential impacts of these pesticides and practices to control them can be obtained in a timely manner. We commend the Central Valley Water Board for your work on toxicity and pesticide monitoring and encourage you to base the need for further pesticide restrictions on the findings of your current monitoring programs. We urge you to consider urban sources of pesticides and toxicity, in addition to the agricultural sources because there have been several studies showing that urban use potentially exceeds agricultural use of pyrethroid pesticides.

Coordination Activities – If the Central Valley Water Board and DPR determine there is a need for additional restrictions on pesticide use in the Delta, the Central Valley Water Board should coordinate with the San Joaquin County and Delta Water Quality Coalition on agricultural control measures and with the California Stormwater Quality Association (CASQA) on urban control measures.

Potential Impacts of Once-Through Cooling at the Contra Costa Power Plant

The staff report notes that studies are underway to support an updated incidental take permit for the Contra Costa Power Plant. Mirant, the owner of the power plant, is participating in the Bay Delta Conservation Plan (BDCP). CUWA recommends that the Central Valley Water Board assess the information that is currently being developed and the recommendations from the BDCP process to determine if there is a need for additional information on the impacts of the power plant on POD species.

CUWA appreciates the opportunity to provide comments on actions the Central Valley Water Board should take to protect Delta beneficial uses. We look forward to working with the State Water Board, Central Valley Water Board, and other stakeholders to develop the strategic work plan. If you have any questions on our comments please contact me at 916-552-2929.

Sincerely

A handwritten signature in cursive script that reads "Elaine M. Archibald".

Elaine Archibald
Executive Director