

November 9, 2017

Felicia Marcus, Chair
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

Comments submitted via email to bay-delta@waterboards.ca.gov

SUBJECT: Comments to Inform the Phase II Update of the Bay-Delta Plan

Dear Ms. Marcus and Staff,

On behalf of several organizations involved in water quality monitoring throughout the San Francisco Estuary, please accept these comments in response to the October 4, 2017 *Opportunity to Provide Input to Inform the Development of the Program of Implementation for the Phase II Update of the Bay-Delta Plan*. We value this opportunity to identify opportunities to modernize monitoring efforts, reduce redundancies, and ensure more efficient and effective water quality monitoring throughout the Estuary. These comments focus in particular on question 3 of the October 4 solicitation: “3. *What improvements should be made to measure compliance with the existing Delta outflow objectives (that are intended to be retained), and with the proposed new inflow-based Delta outflow objectives?*”

Measuring compliance with Delta outflow objectives will require a significant upgrade to the current water quality monitoring program mandated in Water Rights Decisions 1641 and 1485 and the Bay-Delta Plan. The state mandates for water quality monitoring in the Bay-Delta were last updated in 1999. In our opinion, water quality management of the Bay-Delta is more complicated now and new monitoring tools, such as in-situ sensors and remote sensing, are available. Therefore, as part of the Phase II Delta flow objectives decision, the State Water Board should establish a new mandate for a modern water quality monitoring design. We support the tenets for monitoring and assessment of water quality outlined in Section 4.3 of SWRCB (2017)¹ but offer the following additional suggestions.

The updated monitoring design should cover the whole Bay-Delta and measure a wider range of parameters beyond the basic water quality parameters identified in Water Rights Decisions 1641 and 1485. Critical data pertaining to nutrients and nutrient-related effects are needed, for instance,

¹ Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows. State Water Resources Control Board, Sacramento, CA. October 2017. Published online: https://www.waterboards.ca.gov/water_issues/programs/peer_review/docs/scientific_basis_phase_ii/201710_bdphasell_sciencereport.pdf.

data on harmful algae and associated toxins. Data on other contaminants (e.g., selenium and current use pesticides) may also be warranted. The overall objective should be to monitor the Estuary as a complete system for those constituents posing the greatest risk to beneficial uses and using a design that will document the influence of water resource management decisions².

In addition to establishing a monitoring mandate, the State Board should also advocate for an expansion of state and other resources for program implementation. Local municipalities and other organizations already provide considerable funding to the Interagency Ecological Program, Bay and Delta Regional Monitoring Programs, and the Nutrient Management Strategy for San Francisco Bay. State resources, either in the form of direct contributions or in-kind services, are needed to fill in the remaining gaps. State action to encourage more organizations to contribute to these regional programs would also be appropriate.

An *ad hoc* team is forming to integrate the existing water quality monitoring programs in the Bay-Delta as much as possible. Participants include the Interagency Ecological Program, the Regional Monitoring Program for Water Quality in San Francisco Bay, the Delta Regional Monitoring Program, the Delta Science Program, and the Nutrient Management Strategy for San Francisco Bay. The initial goals for this group are to make data from different programs comparable and to optimize an overall monitoring design across the various programs. In addition, the Delta Independent Science Board (ISB) has begun to review the Monitoring Enterprise. We hope that the State Board will be receptive to input from the *ad hoc* team as well as the Delta ISB group during future hearings on the Phase II objectives.

Thank you for your consideration of this input. If you have any questions, please contact Philip Trowbridge at the San Francisco Estuary Institute-Aquatic Science Center at (510) 746-7345 or philt@sfei.org.

Sincerely,

Philip Trowbridge, Manager
Regional Monitoring Program for Water Quality in San Francisco Bay

David Senn, Lead Scientist
Nutrient Management Strategy for San Francisco Bay

² Achieving this objective would complete Delta Science Plan Action 4.2.2 “Build a comprehensive Delta monitoring strategy for an integrated program” (Delta Science Program, 2013). See: <http://deltacouncil.ca.gov/sites/default/files/documents/files/Delta-Science-Plan-12-30-2013.pdf>.