



T e c h n i c a l a n d S c i e n t i f i c i n f o r m a t i o n b a l a n c e w i t h n a t u r e

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September 14, 2012

Dr. Brock Bernstein  
Workshops Facilitator  
State Water Resources Control Board  
P.O. Box 100  
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Submitted electronically to [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov),  
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**Subject: Written Materials for Comprehensive (Phase 2) Review and Update to the Bay-Delta Plan, Workshop 2: Bay-Delta Fishery Resources, October 1-3, 2012**

Dear Dr. Bernstein:

The Sacramento Regional County Sanitation District (SRCSD) appreciates the opportunity to provide written information, responding to questions listed in the June 22, 2012, "Notice of Public Workshops and Request for Information; Comprehensive (Phase 2) Review and Update to the Bay-Delta Plan" (Notice). SRCSD champions the use of sound science for decision making and by the technical memos referenced below provides important current scientific information relevant to water quality and pelagic fishes and salmonids.

**Board of Directors**  
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SRCSD's understanding is that these workshops will focus on review and update of water quality objectives in the current Bay-Delta Plan that pertain to flow and salinity and similar issues, and that nutrients would be addressed through existing Water Board processes, such as the development of nutrient numeric endpoints. However, hypotheses regarding nutrients in general, and ammonium, specifically, have been advanced by some stakeholders as matters requiring the State Water Resources Control Board's (State Board) attention during the process of updating the Bay-Delta Plan in this phase. Therefore, SRCSD submitted information on direct and indirect effects of ammonia, as prepared by Dr. Diana Engle of Larry Walker Associates Inc. for Workshop 1 and is including it for Workshop 2 by reference.

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- Ruben Robles  
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As a follow up item to Workshop 1, SRCSD would like to acknowledge the Board's interest in establishing a Regional Monitoring Program in the Delta as a current action that can be taken while the Bay-Delta Plan is updated. We encourage stakeholder involvement in the development of the framework described in the written and presentation materials provided by Dr. Michael Bryan of Robertson-Bryan, Inc., for Workshop 1 and in the paragraph below. An effective program of implementation for the new flow objectives will need to rely on current and expanded Delta monitoring programs to provide the State Board with the data it needs to judge whether the flow objectives are producing the desired environmental conditions. Although a number of good Delta monitoring programs currently exist and should continue, information produced by individual monitoring programs has not been effectively organized or integrated. From a scientific perspective, an overarching framework is necessary to ensure the programs are collectively gathering all the necessary types, frequency, and

quality of data needed to answer the key questions that regulators and stakeholders need to have answered relative to Delta conditions and beneficial use protection, and the role flow objectives will play therein.

A comprehensive, scientific monitoring framework is needed that provides overall direction and defines appropriate measures of Delta ecological health and how they are affected by flow, water quality, and species interactions (including those of invasive species). Such a framework would bring an overall “Delta function perspective” to determine how best to coordinate and integrate existing monitoring programs (e.g., Surface Water Ambient Monitoring Program (SWAMP)); Interagency Ecological Program (IEP), the Department of Water Resources’ Municipal Water Quality Investigations (MWQI) program, California Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Geological Survey, National Marine Fisheries Service fisheries monitoring programs, and local community monitoring (e.g. Sacramento Coordinated Monitoring Program).

An overarching framework would bring a scientific perspective to how data from these individual programs could be collected and analyzed to address well-defined scientific and regulatory questions that are not being posed by individual programs. Such a framework would enable the State Board to pose key questions that would provide guidance to monitoring programs, thereby encouraging data to be collected in a manner to specifically address those questions. Coordination of monitoring without a comprehensive, scientific Delta monitoring framework to direct such coordination – one that integrates ecological, hydrologic, and water quality data in search of fundamental relationships – will fall short of what is needed, as evidenced by Johnson et al. (2010) (*Evaluation of Chemical, Toxicological, and Histopathologic Data to Determine Their Role in the Pelagic Organism Decline*). The framework being called for here will serve as the framework that makes adaptive management of the flow standards work effectively and efficiently over time. Hence, efforts to develop this unifying framework should move forward now in coordination with the Central Valley Regional Water Quality Control Board’s development of a Regional Monitoring Program for the Delta.

Additional SRCSD comments submitted for Workshop 1, as prepared by Cameron Irvine of CH2M HILL, were aimed at reducing uncertainty to produce data of high quality that inform adaptive management plans and can be used in policy decisions with confidence. These comments are equally applicable to the State Board’s request for information on Bay-Delta Fishery Resources, associated uncertainties, and potential effects associated with non-flow related factors.

We again thank you for the opportunity to provide scientific and technical input to inform and prepare the Board members to make science-based decisions when updating the Bay-Delta Plan. If you need further information, please contact me at 916-876-6030 or [dornl@sacsewer.com](mailto:dornl@sacsewer.com).

Sincerely,



Linda Dorn  
Environmental Program Manager

cc: Stan Dean, District Engineer  
Prabhakar Somavarapu, Director of Policy and Planning  
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Kurt Ohlinger, Chief Scientist  
Ken Landau, Central Valley Regional Water Quality Control Board