



CVCWA

Central Valley Clean Water Association

Representing Over Fifty Wastewater Agencies

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June 18, 2013

Via Electronically Only

Dr. Peter Goodwin
Lead Scientist
Delta Science Program
Delta Stewardship Council
980 K Street
Sacramento, CA 95814
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Re: Comments on *First Draft Delta Science Plan* Dated June 18, 2013

Dear Dr. Goodwin:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to provide comments on the *First Draft Delta Science Plan* released on June 18, 2013 (Draft Plan). CVCWA is a nonprofit association of Publicly Owned Treatment Works (POTWs) throughout the Central Valley whose primary mission is to represent wastewater agencies in regulatory matters while balancing environmental and economic interests. CVCWA members have a deep commitment to the protection of beneficial uses in the waters of the Central Valley, and have a special interest in the recovery of the Delta ecosystem. Many of CVCWA's members will be directly impacted by regulatory initiatives and policies developed to protect and restore the Delta. The agencies have a significant interest in the development and implementation of a robust and effective Delta Science Plan that will improve our scientific understanding of the Delta ecosystem and our understanding of the effectiveness of alternative management measures.

In its 2012 review of Delta science, the National Research Council cited the lack of an integrated, unified approach to science as a primary reason for the failure to understand and effectively

manage the multiple stressors that affect the Delta ecosystem. CVCWA supports this finding and appreciates the intent expressed in the Draft Plan to address this issue.

CVCWA has reviewed the comments on the Draft Plan provided by the Delta Independent Science Board (DISB) and is in general agreement with those comments (attached). CVCWA agrees with the DISB that bold, innovative changes beyond those expressed in the Draft Plan are needed to change the culture of Delta Science and to provide a significant upgrade in our ability to resolve science conflicts. The Delta Science Plan provides a new opportunity to define this change and to establish a framework that breaks from the failures of the past. CVCWA believes that the Delta Science Program should take advantage of this opportunity and provide leadership that will elevate the quality and effectiveness of Delta Science efforts in the future. CVCWA believes that an important component of the Delta Science Plan should be the development of an effective structure and process for linking policy, management, and science in the Delta.

CVCWA has several major comments on the Draft Plan that are organized under the following headings, as requested on Page ii of the Draft Plan:

- Major Elements to Add
- Funding Recommendations
- Organizational Structures

Major Elements to Add

The plan should describe examples of recent policy-science-management efforts in the Central Valley that have been successful (or are working) and those processes that should be emulated in the structure of the Delta Science Plan. CVCWA points to the Central Valley Drinking Water Policy Work Group and the CV-SALTS effort as examples of successful, stakeholder-led processes that address policy, science, and management issues through the involvement of the right mix of regulators, the regulated community, and groups interested in the protection of beneficial uses.

Funding Recommendations

Funding priority should be given to science and tools that enable prediction of the effectiveness of alternative management measures in addressing identified problems. (See Draft Plan at p. 6, ll. 28-30.) This emphasis is needed to foster better decision making in the regulatory and policy arena and will facilitate implementation of effective management solutions. A working example of this approach exists in the 2012 Nutrient Management Strategy for San Francisco Bay and affiliated activities in the Bay area.

Funding and research priority should also be given system-wide synthesis of science using innovative new approaches and tools. The Delta Science Program should endorse the

improvement and use of available modeling tools in the short-term and the long-term investment in the development of more sophisticated modeling tools that will improve synthesis and integration of Delta Science.

Organizational Structures

The proposed Policy Science Team, first described on page 3, line 4 of the Draft Plan, needs to be modified to be a Policy-Science-Management (PSM) Team. The composition of the PSM Team needs to be modified to include the right mix of participants, including representatives from the regulated community. The functioning of the PSM Team needs to ensure transparency and effective stakeholder involvement. Science priorities (and associated funding) need to focus on key policy and management issues developed by the PSM Team.

The proposed Science Synthesis Team (SST) described on page 13, lines 24-25, and Focuses Science Synthesis Teams (FSST), described on page 14, line 1, should be modified to include a connection to policy and management issues and to provide a proper balance of interests and expertise.

Additionally, to change the existing culture, Delta science needs strong new leadership, a process for ensuring that science principles are followed, and a forum for addressing and resolving complex scientific issues. The Delta Science Plan needs to identify the leadership that is responsible and accountable for ensuring that an effective science process is implemented in the Delta. Valid options to fill that leadership role include either the Lead Scientist and the Delta Science Program or a joint powers authority, modeled after either the Southern California Coastal Water Research Program (SCCWRP) or the Aquatic Science Center (ASC). The Delta Science Plan should describe the reasons behind the successes of SCCWRP and ASC and should, at a minimum, incorporate the positive structural and operational elements from these entities.

Again, CVCWA appreciates the opportunity to provide these comments and will continue to work with the Delta Science Program to improve the development and implementation of an improved Delta science framework.

Sincerely,



Debbie Webster,
Executive Officer

Attachment

DISB comments on the first draft of the Delta Science Plan

The DISB applauds the overall approach taken by the Stewardship Council's Delta Science Program in developing the first Delta Science Plan (hereinafter, the Science Plan). The Science Plan is one of three components of a proposed overall Delta Science Strategy, the other parts being a Science Action Agenda and the State of Bay-Delta Science. The Science Plan is a first concrete step toward a science framework that brings together a wide array of past, present, and future science activities. An effective Delta Science Plan is needed for managing the Delta to meet the co-equal goals in a 'science-informed' manner. We advise making the Science Plan more boldly transformative. The draft outlines activities to better unify the Delta science community and improve the interface between science, policy, and management¹.

However, the changes proposed are incremental and fall short of the larger transformation of the organization and culture of Delta science needed for effective adaptive management and the achievement of the co-equal goals.

Additional general comments:

1. The Science Plan should be more explicit about the overarching problem being addressed by the plan, and bring that problem statement to the beginning of the document, rather than nine pages into the document. The problem statement should be at the beginning of the Executive Summary, as well as at the beginning of the Introduction. If the problem statement is clearly articulated, together with the ineffective attempts to remedy the situation over past decades, this charge will argue for more substantive structural change for Delta science than is currently envisioned in the Plan. Be bold in proposing large initiatives—although the changes proposed in this first draft are achievable, they should probably be a fallback position. Propose a grander plan to address the Delta's long-term challenges.
2. Summarize the major purposes of the plan up front—these include science synthesis and integration, building a comprehensive and readily accessible knowledge base, improving science quality, aligning science activities with current and future needs, streamlined data repository, and improved science communication. The Plan should advance a scientific culture of open debate and discussion of scientific issues and how they intersect management and policy decisions and actions.
3. The need for science synthesis and integration is called out as “the central challenge”, and deserves stronger emphasis. The plan should work to make science synthesis *systemic* in the Delta—the current focus on a Science Synthesis Team is good, but the charge for that group should be broadened. That is, it shouldn't appear that all needed syntheses are done by or even under the auspices of that team—rather the SST should work to inculcate science synthesis among agencies and institutions involved in conducting Delta science. Synthesis understandably receives a lot of attention in the Plan, but coordination and integration and execution of science are equally important. The Plan needs to be more explicit about

¹ Note that, for the purposes of the Science Plan, “science” should be considered broadly, to include not only biological and physical sciences but Earth, engineering, and social sciences.

how the proposed structures will support and enhance these activities. (Perhaps some parenthetical examples could help in this regard.)

4. The Executive Summary and Plan say very little about scientific conflict resolution. The Science Program has played a role in that by providing venues where scientific debate can occur. It is important that those venues continue to be provided. That activity should be specifically called out and included in the Plan and Executive Summary, perhaps as part of building the infrastructure. I think it is important to emphasize that dialogue over honest scientific disagreements (outside the courtroom) is a part of good science and is intended to be fostered in this Plan.

5. Propose ways of being more nimble and responsive in providing science information, because of the pressing timeframe in which policy and management decisions are being (and will be) made. As one example, the State of Bay-Delta Science should be a living document, readily available online, rather than being published on a 4+ year cycle. Being nimble and responsive requires shared and accessible data and documents. Scientific documents and data across all scientific activities should be more available using a data and document-management system and coordination of data analyses.

6. The Plan recognizes the central importance of Adaptive Management in meshing science with management and policy, and the need to develop a framework for actually *doing* it rather than talking about it. Achieving real Adaptive Management at the scale of the Delta and the environmental and water issues will require leadership and coordination. How these will be accomplished within the proposed science structure should be defined in detail. The Plan should also highlight the need to develop a framework for determining when Adaptive Management will and will not be appropriate and effective. (Perhaps a decision tree would be a way to do this.)

7. More “grand challenges” to science-based management and policy in the Delta will evolve with future conditions and the attendant uncertainty, and addressing them will require a common foundation of data and fundamental studies of physical, chemical, geomorphological, biological, economic, and sociological processes. The Plan should consider more explicitly how tools such as modeling and risk analysis can be developed, deployed, and maintained.

8. The DSC's Delta Plan sets expectations for science that cannot be met with the current, fragmented science capacity. This reality should be emphasized if future decisions are to be based on science. The Science Plan should include at least a rough outline of funding needs and plans (as mentioned in the introduction but not addressed subsequently), and the nature of the partnerships with agencies and other entities that will be needed to meet them.

9. To receive the attention it deserves, the Science Plan must be clear, concise, and compelling. Think about removing some of the clutter the boxes create. And make sure that objectives, actions, and outcomes are clearly expressed, logically related, and stated using active verbs. Whenever possible, avoid repetitions.