



April 23, 2013

Via email: Bay_Delta@waterStateWaterBoards.ca.gov

Members of the State Water Resources Control State Water Board
Attn: Ms. Jeanine Townsend, Clerk to the State Water Board
P.O. Box 100
Sacramento, CA 96812-0100

Re: Comments on April 9, 2013 Bay-Delta Informational Item

Dear State Water Board Members:

The San Luis & Delta-Mendota Water Authority¹ ("Water Authority") appreciates this opportunity to provide additional comments on the April 9, 2013 Bay-Delta Informational Item. The Water Authority has participated in all of the Phase 2 technical workshops and State Water Resources Control State Water Board ("State Water Board") proceedings pertaining to the Comprehensive Review of the Bay-Delta Water Quality Control Plan, including the meeting on April 9th.

We appreciate the deliberate manner in which the State Water Board is proceeding with the Comprehensive Review. There is much at stake and therefore much call for action. But there is also great debate about what is the best path forward. Many of the questions the State Water Board is wrestling with are also being considered in other forums, both from science, policy, and management perspectives. It is the State Water Board's responsibility when making such significant decisions to not only carefully consider the available information but also how those decisions will affect the other, numerous efforts currently underway intended to address the same or related issues.

The Water Authority was pleased that Dr. Peter Goodwin, Lead Scientist for the Delta Science Program, participated in the April 9th meeting and discussed the Program's effort to develop a collaborative science process intended to close the gaps of uncertainty and disagreement that adversely affect the reliability of the scientific information upon which policy and management decisions are currently being made. The approach to solving today's science challenges through collaboration is so broadly supported that such processes are also being developed for use in implementing the proposed Bay Delta Conservation Plan and correcting the remanded biological opinions on operations of the State and federal water projects. In fact, with regard to the remand, submittals to the federal court by State and federal agencies involved in the litigation regarding new science collaboration efforts on issues that have been embroiled in litigation for years were so compelling that, in large part, they served as reason for the federal court to allow both the United States Fish and Wildlife Service

¹ See attachment 1 for a description of the Authority.

842 SIXTH STREET

SUITE 7

P.O. BOX 2157

LOS BANOS

CALIFORNIA

93635

(209) 826-9696

OFFICE

(209) 826-9698

FAX

and National Marine Fisheries Service more time to respond to its previous remand orders. Whether in the end there is a single collaborative process or multiple, the approach of establishing such an effort is essential to successful and enduring outcomes.

Fostering collaborative processes is consistent with previous State Water Board approaches, when in the past the State Water Board has encouraged parties to get together to resolve scientific and management issues to better inform State Water Board decision making. Examples include the 4 Agency Fish Agreement that served as a basis for many of the objectives in the 1978 Bay-Delta Plan and Water Right Decision 1485. Another is the 1994 Bay-Delta Accord that served as the basis for many of the changes contained in 1995 Bay-Delta Plan and Water Right D1641. The success and durability of these previous decisions are in large part due to the time dedicated to resolving the issues beforehand.

In order for a collaboration to be effective it should start with the development of the process. The Water Authority believes that the attributes for such a collaborative process should include:

- Identify and address the major underlying science questions related to the policy and management issue;
- Deal exclusively with science, not with policy or management decisions;
- Avoid duplicating other ongoing, collaborative science efforts focused on the same subjects; rather, associate with them so the results are complimentary and cohesive;
- Address science information provided by all interested parties so that the full breadth of hypotheses are considered;
- Make use of outside science experts on focused topics, as appropriate; and
- Conduct the process in such a way that participants are treated with respect and equality.

With a process established, a properly functioning and meaningful collaboration will should be provided the policy and management issues important to the State Water Board. In order to determine which policy and management issues require further scientific investigation, the State Water Board should consider asking a key set of questions:

- What does the State Water Board want to accomplish within its legal Water Authority;
- What objectives can achieve or contribute to the desired biological or ecological function(s);
- To what extent does the identified biological or ecological function(s) benefit targeted species;
- What is the full range of actions available to achieve the desired function(s);
- How certain is the predicted outcome of each action alternative; and
- What is the adaptive management approach to address the uncertainty?

Once the State Water Board has established a clear picture of its objective(s), the relevant areas of collaborative scientific investigation are more easily determined. The State Water

Board cannot study the entire universe of issues; rather, it must focus on those issues relevant to the objective(s) the State Water Board is trying to achieve within its legal authorities.

Because of the importance of meaningful collaborative science, the Water Authority is less enthusiastic to hear a proposal to conduct yet another independent scientific review of the issues. Since 2005, there have been no less than 10 separate independent scientific reviews of factors affecting the Delta ecosystem². While each review has had value in terms of providing a snapshot of the current understanding of the science issues, they have done little to close the gaps of uncertainty and disagreement. In fact, because of the way various factions have used selected quotes from many of these independent reviews, it could be argued that they have resulted in hampering progress by creating positions about the science as opposed to promoting collaborative exploration. The Water Authority would not attempt to dissuade the Delta Science Program from conducting another review but would encourage the State Water Board not to let it become a distraction from a concerted and coordinated effort that begins to drill in on the known science questions critical to beneficial policy and management decisions. The Water Authority believes the essential question for the State Water Board to consider at this time is how it can best cooperate with and facilitate the collaborative efforts currently being developed or underway.

One other area of concern that arose on April 9 was the suggestion that, in light of the current scientific uncertainty and disagreement, State Water Board staff proceed with developing revised water quality objectives by incorporating adaptive management. Adaptive management is an essential tool; however, it is one that can and has been exercised, at least in part, in many forms, some beneficial, some not. Adaptive management provides a means for carrying out and assessing alternative management actions in the face of uncertainty. The adaptive management process, when appropriately implemented, should facilitate testing of management alternatives, evaluation of outcomes, iterative modifications of management actions, and learning. However, it cannot compensate for a lack of knowledge, the complexity of ecological systems, or underestimating sources of uncertainty including socio-political uncertainty. In our October 26, 2012 submittal for the Analytical Tools Workshop (#3), the Water Authority and State Water Contractors provided a background and requisites for a successful adaptive management program. In the end, structuring and implementing an adaptive management program is a major undertaking that requires institutional support and sufficient time. Decision-makers must recognize the complexity, limitations, and experimental nature of adaptive management prior to making policy and management decisions about such a program.

It is necessary to reiterate that the Comprehensive Review is of critical importance. The decisions made will affect California's people and environment for years and so a thoughtful and purposeful process is warranted. Despite claims to the contrary, science does not have all of the answers; there remains much uncertainty and disagreement about hypotheses of factors potentially affecting the ecosystem. The State Water Board has taken a significant and

² See attachment 2 for a listing of independent science reviews.

valuable step by conducting the science information workshops in 2012. As Dr. Goodwin stated on April 9, the workshops have established the scientific foundation for moving forward. The question now is "how?" In the Bay Delta Conservation Plan development process, the State and federal fish agencies have been wrestling with issues also being considered by the State Water Board, such as spring and fall outflow, and have concluded that there currently is not enough information to make a determination about what standard are appropriate. Instead, they have agreed to pursue better information through a structured, time bound, science, policy, and management decision making process called Decision Tree.

Lastly, some interested parties are clamoring for the State Water Board to make a quick decision. But the State Water Board should consider a significant amount of complex information in order to establish water quality objectives which will "attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved." (Water Code § 130000). Historically, to accomplish this task, the State Water Board has dedicated a substantial amount of time to allow the State Water Board, its staff, and interested parties to present, synthesize, and consider the scientific information prior to making a policy or management decision. For example, before adopting the 1978 Bay-Delta Plan, the State Water Board conducted **32 days** of hearings over approximately one year (from November 15, 1976 to October 7, 1977). For the 1991 Bay-Delta Plan, the State Water Board dedicated **60 days** of hearings over almost three years before adopting revised standards (from July 7, 1987 to August 23, 1990). More recently the trend seems to be toward fewer workshop days (the 2006 Bay-Delta Plan was informed by at least **16 days** of workshops between October 27, 2004 and March 22, 2005) despite the decisions and consequences becoming increasingly more complex. With so much at stake, we want to take this opportunity to praise the State Water Board for the science based path that it has been embarked upon and encourage continued progress toward better information. Only through examination of the full breadth of scientific information can the policy and management choices made result in amenable and beneficial outcomes for California.

The Water Authority appreciates this opportunity to provide additional comments and look forward to further participation in the development of new Water Quality Control Plan objectives. Please feel free to contact me for further information or with any questions you or your staff might have.

Sincerely Yours,



Daniel G. Nelson
Executive Director
San Luis & Delta-Mendota Water Authority

cc: Members of the State Water Resources Control State Water Board

Attachment 1

The Water Authority is a joint powers authority, established under California's Joint Exercise of Powers Act. (Gov. Code, § 6500 *et seq.*) The Water Authority is comprised of 29 member agencies, 27 of which hold contractual rights to water from the federal Central Valley Project ("CVP"). The Water Authority member agencies have historically received up to 3,100,000 acre-feet annually of CVP water for the irrigation of highly productive farm land primarily along the San Joaquin Valley's Westside, for municipal and industrial uses, including within California's Silicon Valley, and for publicly and privately managed wetlands situated in the Pacific Flyway. The areas served by the Water Authority's member agencies span portions of seven counties encompassing about 3,300 square miles, an area roughly the size of Rhode Island and Delaware combined. The Water Authority's members are: Banta-Carbona Irrigation District; Broadview Water District; Byron Bethany Irrigation District (CVPSA); Central California Irrigation District; City of Tracy; Columbia Canal Company (a Friend); Del Puerto Water District; Eagle Field Water District; Firebaugh Canal Water District; Fresno Slough Water District; Grassland Water District; Henry Miller Reclamation District #2131; James Irrigation District; Laguna Water District; Mercy Springs Water District; Oro Loma Water District; Pacheco Water District; Pajaro Valley Water Management Agency; Panoche Water District; Patterson Irrigation District; Pleasant Valley Water District; Reclamation District 1606; San Benito County Water District; San Luis Water District; Santa Clara Valley Water District; Tranquillity Irrigation District; Turner Island Water District; West Side Irrigation District; West Stanislaus Irrigation District; and Westlands Water District.

Attachment 2

Anderson JJ, Gore JA, Kneib RT, Lorang M, Van Sickle J. 2011. Report of the 2011 Independent Review Panel (IRP) on the Reasonable and Prudent Alternative (RPA) actions affecting the operations Criteria And Plan (OCAP) for State/Federal water project operations. Report prepared for Delta Stewardship Council, Delta Science Program dated 12/9/2011.

California Hatchery Scientific Review Group (California HSRG). 2012. California Hatchery Review Report. Prepared for the US Fish and Wildlife Service and Pacific States Marine Fisheries Commission. June 2012. 100 pgs.

Dauble D, Hankin D, Pizzimenti JJ, Smith P. 2010. The Vernalis Adaptive Management Program (VAMP): Report of the 2010 Review Panel. Prepared for the Delta Science Program. Dated 5/13/2010.

Gaines S, Luoma S, Monismith S, Simenstad S, Sogard S. 2006. Interagency Ecological Program Science Advisory Group report on the 2005-2006 programmatic review of IEP's delta smelt program.

Huggett RJ, Anderson JJ, Campana ME, Dunne T, Giorgi AE, Glibert PM, Klein CA, Luoma SN, McGuire MJ, Miller T, Obeysekera J, Pfeffer MJ, Reed DJ, Rose KA, Tullos DD. 2010. A Scientific Assessment of Alternatives for Reducing Water Management Effects on Threatened and Endangered Fishes in California's Bay Delta. National Academies Press. Washington, D.C. 94 pp.

Huggett RJ, Anderson JJ, Campana ME, Dunne T, Gilbert J, Giorgi AE, Klein CA, Luoma SN, Miller T, Monismith SG, Obeysekera J, Paerl HW, Pfeffer MJ, Reed DJ, Rose KA, Tullos DD, Vaux Jr HJ. 2012. Sustainable water and environmental management in California Bay-Delta. National Academies Press.

Kimmerer WJ, Brown R. 2006. A summary of the June 22-23, 2005 predation workshop, including the expert panel final report. CALFED Bay-Delta Program and Department of Water Resources.

Reed D, Goodwin P, Paerl HW, Peebles EB, Sobczak WV, Taylor EB. 2011. Review panel summary report: Draft plan for adaptive management of fall outflow for delta smelt protection and water supply reliability. Delta Science Program, July 1, 2011.

Rose KA, Kimmerer WJ, Leidy GR, Durand J. 2008. Independent peer review of USFWS's draft effects analysis for the operations criteria and plan's biological opinion. Report prepared for U.S. Fish and Wildlife Service dated 10/23/2008.

US Department of Commerce. 2005. The NMFS review process for the California Central Valley and State Water Projects' biological opinion deviated from the Region's normal practice. Final audit report no. STL-17242-5-0001 dated July 2005.

Vaux Jr HJ, Campana ME, Gilbert JB, Giorgi AE, Huggett RJ, Klein CA, Luoma SN, Miller T, Monismith SG, Obeysekera J, Paerl HW, Pfeffer MJ, Tullos DD. 2011. A review of the use of science and adaptive management in California's Bay Delta Conservation Plan. National Academies Press, Washington, D.C.