# State Water Resources Control Board

## Executive Office

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**Edmund G. Brown Jr.**
*Governor*


April 19, 2011

Gerald H. Meral, Ph.D.
Deputy Secretary
Bay Delta Conservation Plan
California Natural Resources Agency
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Dr. Meral:

ENVIRONMENTAL ANALYSES IN SUPPORT OF THE BAY DELTA CONSERVATION PLAN

This letter is concerning environmental analyses being prepared in support of the Bay Delta Conservation Plan (BDCP). The State Water Resources Control Board (State Water Board) is a responsible agency for this Project pursuant to the California Environmental Quality Act (CEQA). In addition, the State Water Board has also been in discussions with the Department of Water Resources (DWR) concerning environmental documentation needed in order for the State Water Board to consider changes to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan).

Implementation of the BDCP will likely result in new water conveyance and habitat restoration measures that require approval by the State Water Board. In addition to changes in water right terms and conditions to facilitate these measures, the State Water Board may need to consider changes to the Bay-Delta Plan and to water rights implementing that plan to ensure that beneficial uses are protected in light of those measures. Due to the interrelated nature of the BDCP and the State Water Board's review of the Bay-Delta Plan, DWR agreed to conduct analyses necessary for the State Water Board planned comprehensive review of the Bay-Delta Plan in conjunction with environmental review for the BDCP. The State Water Board previously provided comments on DWR's March 17, 2008 and February 14, 2009 CEQA Notices of Preparation (NOP) regarding the scope and content of the environmental analyses for the BDCP and the State Water Board's review of the Bay-Delta Plan by letters dated May 30, 2008 and May 15, 2009. This memo provides additional follow-up and clarifying information concerning those comments.

The primary concern expressed in the NOP comments were that in order for the State Water Board to consider any water quality and water right applications or petitions for the BDCP, environmental documentation prepared for the project must identify a reasonable range of interim and long-term alternatives that would reduce or avoid the potential significant environmental effects of the proposed project and discuss the significant effects of the alternatives. Similarly, any environmental analysis associated with changes to the Bay-Delta Plan must evaluate the significant environmental impacts of any such changes and identify a

reasonable range of potentially feasible alternatives to such changes. Since our May 15, 2009 letter, the State Water Board developed additional technical information that can be used to inform the development of a reasonable range of alternatives.
Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, the State Water Board prepared a report with flow criteria for the Sacramento-San Joaquin Delta Ecosystem that can be used to aid in the development of alternatives for Delta outflows, including the reduced export alternative referenced in the State Water Board's previous NOP comments. The State Water Board's Delta Flow Criteria Report includes determinations of flow criteria for the Delta ecosystem to protect public trust resources. The report makes clear that the flow criteria do not consider the balancing of public trust resource protection with public interest needs for water. The flow criteria also did not consider other public trust resource needs such as the need to manage cold-water resources in reservoirs tributary to the Delta. Nonetheless, the flow determinations contained in the Delta Flow Criteria Report, together with recent scientific conclusions of other State and federal agencies, including the Department of Fish and Game, National Marine Fisheries Service, and the Interagency Ecological Program provide a useful guide to establish one side of a reasonable range of alternatives.

State Water Board staff suggests that a reasonable range of alternatives may be established by making changes to the operational criteria already being evaluated in one or several of the alternatives considered by the BDCP per the September 1, 2010 Table 1: Modified Array of Alternatives. The changes should be made to address two of the summary determinations in the Delta Flow Criteria Report: 1) provide additional spring Delta outflow in all years to promote increased abundance and improved productivity for longfin smelt and other estuarine species; and 2) provide flows that promote a more natural hydrograph at all times.

As discussed in the Delta Flow Criteria Report, it is likely impossible to determine exactly what flow is needed to protect fish and wildlife. Such a determination would also depend on numerous factors, many of which are not known at this time, therefore necessitating the need for adaptive management. This uncertainty reinforces the value of analyzing a sufficiently broad range of alternatives. The range of alternatives should bracket the range of potential environmental impacts, and also the economic and social effects that may result from any decision the State Water Board will have to make regarding the balancing of beneficial uses within and upstream of the Delta related to the BDCP and the State Water Board's water quality control planning efforts. Evaluation of such a range will also provide information to inform the Delta Stewardship Council's Delta Plan vision to achieve the coequal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem."

State Water Board staff suggests establishing this reasonable range of alternatives by modifying CALSIM model alternatives that have already been developed. One or more alternatives should be modified to supplement Delta outflow by a fixed quantity that is apportioned proportional to unimpaired flows for all water year types except wet years. Model runs for these revised alternatives should be made in an iterative fashion to ascertain the maximum additional fixed quantity of additional Delta outflow that would provide useful information to evaluate balancing of the beneficial uses of water and achieving the coequal goals. As a starting point, staff suggests adding 1.5 million acre-feet per year to Delta outflow.

No other changes should be made that would affect cold-water pool storage or temperature control in Delta tributaries. State Water Board staff recommends that these constraints be applied to Alternative 4 from the September 1, 2010 BDCP "Modified Array of Alternatives" in order to inform the State Water Board's decisions regarding BDCP project operations. Additional runs should also be applied to the no-project alternative 1 to inform the State Water Board's water quality control planning efforts for the interim period before any new facilities are implemented. State Water staff is particularly interested in the environmental, social, and economic effects that an enhanced ecosystem alternative could have on the project export area.

As stated previously in our NOP comments, the State Water Board is not advocating for any specific alternative and is not suggesting that such an enhanced ecosystem protection alternative would necessarily be implemented. Such information, however, is necessary to inform the State Water Board's future balancing decisions. State Water Board staff would be happy to meet with DWR and other lead and responsible agency staff to refine this suggested approach. Initial model results, for example, may demonstrate that something other than 1.5 million acre-feet per year would provide information that is more useful.

In addition to the export and Delta outflow issues discussed above, the State Water Board would also like to coordinate on the remaining environmental analyses necessary for the State Water Board to consider other comprehensive changes to the Bay-Delta Plan. The State Water Board's project to comprehensively review the Bay-Delta Plan may extend beyond the purpose and needs of the BDCP process. The State Water Board would appreciate DWR's assistance in preparing environmental documentation to address these matters.

Please contact me at (916) 341-5615, or Mr. Les Grober at lgrober@waterboards.ca.gov or (916) 341-5428 to discuss this matter further.

Sincerely,

Thomas Howard

Thomas Howard
Executive Director

cc: Mr. Mark Cowin, Director
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