April 25, 2012

Charles Hoppin, Chair
c/o Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

RE: COMMENTS ON BAY-DELTA PLAN SUPPLEMENTAL NOP – COMPREHENSIVE REVIEW

Sent via U.S. Mail and emailed to: commentletters@waterboards.ca.gov

Dear Chairman Hoppin,

This letter is submitted as the comments of the Bay Institute, Natural Resources Defense Council, Defenders of Wildlife, and Environmental Defense Fund regarding the Supplemental Notice of Preparation and Notice of Scoping Meeting (Supplemental NOP) for Environmental Documentation for the Update and Implementation of the Water Quality Control Plan (WQCP) for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: Comprehensive Review.

There is an urgent and critical need for more flow of a more natural pattern during the winter and spring period, and for flow enhancements at other times of the year, in order to maintain and protect fish and wildlife beneficial uses and Public Trust resources in the Bay-Delta estuary. As you know, the State Water Resources Control Board has compiled an extensive record documenting the drastic alteration of the estuary's natural hydrograph, the effects of that alteration on estuarine habitat and the abundance and viability of native fisheries, and the overwhelming scientific evidence supporting the need to restore more natural hydrologic patterns. Based on this record, the Board issued a

Staff Report for the Periodic Review of the 2006 Bay-Delta Plan in 2009, recommending review and revision of specific WQCP objectives, and adopted a Staff Report on Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem in 2010 (Delta Flow Report), identifying flows needed to fully protect public trust resources. The specific flow recommendations in that report were not part of a water rights proceeding and therefore did not weigh public trust resource requirements against other considerations. However, the Board explicitly found that those flow recommendations were based on the best available science and that "The best available science suggests that current flows are insufficient to protect public trust resources" (p. 2).

In order to provide improved flow conditions, we strongly endorse using a percentage of unimpaired flows approach to setting winter/spring inflow and outflow requirements. In the Delta Flow Report, the Board developed an approach to providing more flow of a more natural pattern based on dedicating a designated percentage of unimpaired runoff in the Bay-Delta watershed to Sacramento and San Joaquin River inflows and Delta outflows in the winter and spring period, and setting that percentage at a level significantly greater than the amounts required under the existing objectives in the 2006 WQCP. This approach aggregates the well-documented flow needs of numerous aquatic species into one overarching estuarine habitat standard. It has been endorsed as scientifically justified and more protective of ecological values by the scientific peer reviewers of the Board's 2011 Technical Report on the Scientific Basis for Alternative San Joaquin River Flow and Southern Delta Salinity Objectives, which proposed the adoption of such a standard for San Joaquin River inflows to the Delta. It has also been endorsed by the National Research Council's Committee on Sustainable Water and Environmental Management in the California Bay-Delta, which stated in its 2012 report that:

> … if the goal is to sustain an ecosystem that resembles the one that appeared to be functional up to the 1986-93 drought, exports of all types will necessarily need to be limited in dry years, to some fraction of unimpaired flows that remains to be determined. Setting this level, as well as flow constraints for wetter years, … is best done by the SWRCB, which is charged with protecting both water rights holders and the public trust.

(NRC, p. 105). We agree with the NRC panel's characterization of the Board's responsibility in reviewing and revising the 2006 WQCP.

In addition to establishing new objectives relating to increased Delta inflow and outflow requirements, the Board should update the existing WQCP objectives and develop new objectives for Old and Middle River reverse flows, summer and fall outflows, and floodplain habitat flows. With respect to these flow requirements, we strongly urge the Board to adopt numeric objectives, rather than narrative objectives, while allowing for adaptive management through the program of implementation. Substantial evidence indicates that salmon survival through the Delta is low and export-related mortality

significant in some years. Therefore, during this proceeding the Board should also consider replacing or augmenting the narrative objective for salmon protection with numeric criteria for salmon survival through the Delta.

The Board's 2010 Delta Flow Report represents the best available science on the flows necessary to fully discharge its Clean Water Act and Public Trust responsibilities to protect fish and wildlife uses of the estuary. The Board should supplement the analysis in the Delta Flow Report by incorporating more recent research and scientific reviews, including the 2012 National Research Council Report and the forthcoming results from the 2011 Fall X2 adaptive management program. As it uses the 2010 flow criteria to inform its review of the WQCP objectives and attempts to balance between competing uses, the Board should also consider the following.

First, in the words of that report, "… flow and physical habitat interact in many ways, but they are not interchangeable" (p. 1). There is no reason to believe – and no responsible party is seriously proposing – that manipulating any one factor alone, whether flow or some other parameter, can fully restore the Bay-Delta ecosystem. But there is absolutely no evidence to support the view that restoring physical habitat – or changing the system for conveying water through the Delta – or any other combination of management measures can substitute for the known and significant ecological benefits associated with adequate flow regimes. The fact is that restoring a more natural hydrograph; restoring a more natural habitat mosaic; improving the water supply conveyance and storage system; and ensuring that water management practices are reasonable and efficient; are all necessary and interdependent parts of solving the resource management conflicts of the Bay-Delta estuary. The need to make improvements in all these areas should not prevent the Board from taking appropriate and timely action to substantially improve flow conditions, along with other measures within its authority.

Second, in order to provide an adequate analytical framework for adoption of new water quality objectives, the Board must evaluate potential effects upstream, including river flows, water temperatures, and reservoir storage levels. Recent work by SWRCB staff and consultants in the BDCP process demonstrates that increasing Delta outflow need not adversely affect upstream reservoir storage. The Board should build on that CALSIM modeling work and analyze a range of inflow, outflow, and in-Delta flow alternatives. The analysis should also examine the effects of various alternatives on achieving existing Delta salinity and water quality requirements. However, due to persistent and unresolved problems with the scientific inadequacy of the BDCP effects analysis (as documented by the National Research Council's 2011 review and the numerous comments on the inadequacy of the environmental documents by DFG, NMFS, USBR, and FWS, including the so called "Red Flag" documents), the SWRCB should not rely on the BDCP effects analysis in this process.

Third, the Board should acknowledge that aquatic life is the least flexible use of the Bay-Delta's waters. The establishment and maintenance of sustainable fish and wildlife

populations, habitats and ecological processes is highly dependent on maintaining adequate flow, temperature, and water quality conditions in the estuary. The natural resilience of Bay-Delta populations and ecosystems has long been overwhelmed as a result of decades of hydrologic and geomorphic alteration. Other important beneficial uses of water have greater flexibility as a result of being able to implement a broad suite of management actions to more efficiently divert, store, and apply water supplies; secure water supplies from alternative sources; and/or switch to different activities to maintain economic viability. The Substitute Environmental Document should analyze expansion of these alternative water supply tools and options, such as the Board's numeric objective for increased water recycling, and the Board should take this flexibility into account when considering whether and to what degree the 2010 flow criteria should be adopted. The Board should also consider providing incentives and requirements for water rights holders to employ this flexibility to the maximum extent feasible, in the form of water conservation requirements, volumetric water use fees, and other mechanisms.

Finally, we strongly urge the Board to complete the process of establishing and implementing new flow objectives expeditiously, and no later than June 2, 2014, per the Delta Stewardship Council's draft Delta Plan. The Board has recognized that current flows are inadequate to protect Public Trust resources, and it is time for the Board to ensure that sufficient flows are provided to do so. The fact that so many Bay-Delta species are listed as endangered under federal or state law, and the commercial salmon fishery has been closed in a number of recent years, underscores the urgency with which the Board should act.

Thank you for the opportunity to provide comments on the Supplemental NOP. We look forward to working with you to provide much needed improvements in protections for the imperiled fish and wildlife beneficial uses and Public Trust resources of the Bay-Delta estuary.

Sincerely,

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The Bay Institute

Doug Obegi
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Kelly Catlett
Defenders of Wildlife

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Environmental Defense Fund