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## State Water Resources Control Board

October 30, 2015

BDCP/California WaterFix Comments  
P.O. Box 1919  
Sacramento, CA 95812  
BDCPComments@icfi.com

### **Comments on the Bay Delta Conservation Plan/California WaterFix Partially Recirculated Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS)**

The State Water Resources Control Board (State Water Board) and the Central Valley and San Francisco Bay Regional Water Quality Control Boards (Regional Water Boards) (collectively Water Boards) appreciate the opportunity to comment on the public draft of the Bay Delta Conservation Plan/California WaterFix (BDCP/Cal WaterFix) Partially Recirculated Draft Environmental Impact Report/Environmental Impact Statement (RDEIR/EIS).

The mission of the Water Boards is to preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The State Water Board administers water rights in California including water rights for the Department of Water Resources' (DWR) State Water Project (SWP) and the U.S. Bureau of Reclamation's (USBR) Central Valley Project (CVP). The Water Boards also have primary authority over the protection of California's water quality. The BDCP/Cal WaterFix will require both water right and water quality approvals from the Water Boards. Accordingly, the Water Boards are responsible agencies for the project pursuant to the California Environmental Quality Act (CEQA). Specifically, activities that may require approval by the Water Boards include, changes to the SWP's and CVP's points of diversion of water and other provisions of their water rights, water quality certifications pursuant to Clean Water Act section 401, National Pollutant Discharge Elimination System permits, and potentially other water quality approvals. The State Water Board has received and is currently processing the water right change petition and the water quality certification for the Cal WaterFix, the current preferred project. The RDEIR/EIS and Final EIR/EIS will inform these processes.

In our role as responsible agencies, the Water Boards previously reviewed and provided comments on the Notices of Preparation, administrative and public draft EIR/EISs, and provided other written and oral input over the course of the BDCP/Cal WaterFix development process. To the extent that previous comments from the Water Boards have not been fully addressed, they are incorporated by reference in this comment letter and are not reiterated. In addition, as discussed in the Water Boards' previous comment letters, additional information may be needed to support Water Board approvals beyond what is included in the above documents. Following are specific comments on the RDEIR/EIS.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

### Optimization of Alternatives

As noted previously, only the preferred alternative for this project has been optimized to enhance the performance of the alternative for environmental and water supply purposes. The lack of optimization of the other alternatives should be noted and where possible addressed. For example, only Alternative 4A is modeled using the current Emmaton salinity compliance point while the other alternatives use a Threemile Slough compliance point. Additionally, while Cal WaterFix-specific alternatives 2D and 5A represent high and low levels of construction and infrastructure impacts, no alternative was proposed that would optimize operational conditions for environmental purposes. To illustrate that there is additional potential for providing environmental benefits without impacting cold water pool resources and compliance with water quality requirements, the State Water Board requested that a scenario that increases Delta outflows without impacting cold water pools be evaluated. This scenario illustrates that more outflow can be provided without impacting cold water pools. However, given the limited time for this scenario analysis, it was also not optimized or developed into an alternative.

### Continued Involvement of the Water Boards

The descriptions of the various alternatives provides that flow requirements and other operational requirements may be set and modified during interim operations under the decision tree process, during initial operations after the north Delta diversions begin, during the Real-Time Operational Decision-Making Process, during ad hoc adaptive management actions, and within the context of a formal Adaptive Management and Monitoring Program. The document does not describe a role for the State Water Board, but the State Water Board will have a role in these decision-making processes, and may establish additional requirements through its water right authorities.

Water Transfer Assumptions The assumptions for potential water transfers that may occur due to the BDCP/Cal WaterFix should be reconsidered in the context of the current drought. The analysis should consider that the magnitude of transfers and other water exchanges that did or could have occurred in the drought would occur more often if there were more pumping capacity under the BDCP/Cal WaterFix.

### Assumptions for Water Demand and Reliability

The Cal WaterFix baseline No Action Alternative (NAA)-2025 assumes increased north of Delta diversions of approximately 483 thousand acre-feet (TAF)/year and maximum contract amounts for SWP south of Delta municipal and industrial demands regardless of hydrological conditions without the project. The magnitude of those assumed demands is unlikely to be realized by 2025, and to some degree may occur because of the additional water supply reliability provided by the Cal WaterFix. To the extent that the magnitude of these factors is caused by the Cal WaterFix or the assumptions are simply too large, the effects of action alternative such as Alternative 4A will be underestimated and masked. These assumptions should be revisited.

### Uncertainty and Scenario Analysis vs. Prediction of Outcome

The level of uncertainty associated with the modeling should be clearly articulated in the impacts analysis. There is a large degree of uncertainty regarding the exact effects of the project due to a number of factors. However, this is not always clear in the RDEIR/EIS. The effects analysis frequently does not follow the guidelines for use of output from physical and biological models. Generally, those issues arise either when a particular analysis fails to distinguish between modeling as a decision support tool versus modeling to establish predictive

point values or when the analysis rescales physical model output from a monthly time step to a daily or hourly time step for input to biological models. The comparative analysis approach should have been applied for every analysis.

#### Downstream Water Quality, Noncovered Fish, and Natural Communities

Downstream effects of the alternatives on Suisun Bay, Carquinez Straight, San Pablo Bay, and San Francisco Bay should be further analyzed and the methods used in the analyses should be consistent with accepted methods that have been used to model and measure the effects of changing water export timing, volume, and rate on salinity, water quality, and aquatic and terrestrial biological resources throughout the entire Bay-Delta ecosystem. The effects analysis conclusion that the change in Delta outflow under either Alternative 4 or Alternative 4A would have no measureable effect on San Francisco Bay salinity because the change would be two to three orders of magnitude lower than the tidal flow mischaracterizes the bidirectional flow of the tides and the unidirectional Delta outflow. Neither quantitative nor qualitative model results were provided to support the conclusion. The UnTrim model was developed specifically to conduct this type of analysis and was extensively used in the BDCP/Cal Water Fix analyses of water quality and X2.

#### Stockton Ship Channel Aeration Continued Funding

The staff report for the low dissolved oxygen Total Maximum Daily Load (TMDL) in the Stockton Ship Channel identified three causes for the impairment. One of these was the magnitude of San Joaquin River flow entering the channel. Alternative 4, the original preferred BDCP alternative, included Conservation Measure 14. Conservation Measure 14 committed to contribute funding to maintain and operate the experimental aeration device as mitigation for altering San Joaquin River flow. Alternatives 4A, 2D and 5A, while continuing to manipulate channel flow in a manner similar to Alternative 4, no longer includes a commitment to share in the cost of aeration. The RDEIR/EIS justifies this decision by noting that the impact of the project is less than significant because of the aerator. The aerator is being funded on a voluntary basis by others and may not be present in the future should they decide to stop contributing funds. If this occurs, then the lack of oxygen in the channel could again block the fall return of upstream migrating adult chinook salmon. We recommend that all alternatives commit to contributing funding for continued aeration or other measures to address any impacts of the project on dissolved oxygen conditions.

#### Cache Creek Settling Basin Improvements

The Water Boards understand that the BDCP Alternative 4 that includes habitat conservation measures beyond the mitigation needed for the Cal WaterFix is no longer the preferred project in the RDEIR/EIS. However, to the extent that this and other BDCP alternatives are still evaluated and may carry over into the EcoRestore effort, the Water Boards recommend that commitments to improve the Cache Creek Settling Basin be made to mitigate for expected increases in mercury fish tissue concentrations from restoration efforts. The Delta Methyl Mercury TMDL report estimated that 56 percent of all inorganic mercury loads entering the Delta came from the Cache Creek drainage. Half of this load is trapped in the Cache Creek Settling Basin while the rest is exported to the Yolo Bypass and downstream Delta. The Methyl Mercury TMDL Control Program recommended that improvements be made to the Cache Creek Settling Basin to increase the trapping efficiency and decrease mercury exports.

Thank you for the opportunity to comment on the RDEIR/EIS. If you have any questions concerning this matter, please contact me at [diane.riddle@waterboards.ca.gov](mailto:diane.riddle@waterboards.ca.gov) or (916) 341-5297.

Sincerely,

*ORIGINAL SIGNED BY*

Diane Riddle  
Environmental Program Manager