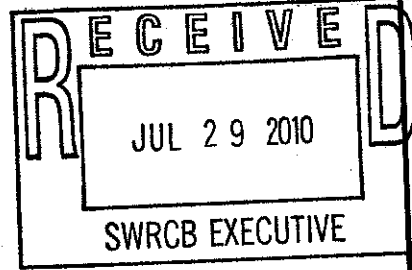


SFCWA

State & Federal Contractors Water Agency

1121 L Street, Suite 1045, Sacramento, CA 95814



July 29, 2010

By Electronic Mail: commentletters@waterboards.ca.gov
and U.S. Mail

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Re: **COMMENT LETTER – DRAFT DELTA FLOW CRITERIA REPORT**

Ms. Townsend:

The State and Federal Contractors Water Agency (SFCWA) welcomes the opportunity to submit comments to the State Water Resource Control Board on its Draft Report on the Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem ("Draft Flow Report").

SFCWA is a joint powers authority representing more than 50 entities that contract for State Water Project and Central Valley Project water conveyed through the San Francisco Bay/Sacramento-San Joaquin River Delta ("Delta"). Collectively, the members of the SFCWA deliver water to more than 25 million people and approximately 3 million acres of highly productive farm land.

The SFCWA appreciates the State Water Board's efforts to satisfy the mandate imposed on it by the California Legislature – development and adoption of a report that identifies criteria for the Delta ecosystem necessary to protect public trust resources. The results are very instructive.

The Draft Flow Report demonstrates that a flow-centric approach will not meet the co-equal goals for management of the Delta, established by the Sacramento-San Joaquin Delta Reform Act of 2009. The Report shows that even with devastating impacts to water supply and frequent loss of reservoir cold water pool necessary to protect spawning salmon, the flow recommendations cannot be consistently achieved. Such conclusions show that a flow-centric approach is infeasible, given the demands being made and to be made on Delta and upstream waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

The Draft Flow Report is deficient in that it does not comply with the Legislative mandate that the State Water Board prepare the report "pursuant to its public trust obligations." (Water

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Code, § 85086(c)(1).) The significance of the Legislature's reference to the "public trust obligations" when ordering the State Water Board to develop flow criteria is that the references demand that the State Water Board develop criteria after balancing the needs served by the appropriation of water against the needs of public trust resources. (*National Audubon Society, et al. v. Superior Court*, 33 Cal.3d 419 (1983).) We recognize, however, that performing such a balancing of needs would have made it impossible for the Water Board to meet the Legislature's nine-month deadline for transmittal of this report.

Limitations of the Draft Report

The Draft Flow Report answers (without the balancing process noted above) the Legislature's hypothetical question:

Under existing conditions, how much flow might be needed to protect public trust resources if no effort was made to comprehensive address all of the factors that stress public trust resources?

The State Water Board answers that question by proposing numeric and non-numeric measures. (Draft Report, p. 98.) As discussed below, the SFCWA disagrees with the substantive answer provided by the State Water Board. Indeed we believe it was the wrong question for the Legislature to have asked. A less abstract and more useful one would have been: *How much flow might be needed to reasonably protect public trust resources within a comprehensively approach addressing all important ecosystem stressors on public trust resources?* Nonetheless, the SFCWA commends the State Water Board for recognizing and documenting the limitations of its answer to the question as stated.

Specifically, the State Water Board recognizes that, from a scientific standpoint, "[t]he performance of native and desirable fish populations in the Delta requires much more than fresh water flows." (Draft Report, p. 1.) Underlying the State Water Board's position is the comprehensive description of the existing, substantially altered physical setting within the Delta. (Draft Report, p. 25 *et seq.*) There, the State Water Board explains the Delta is an estuary substantially impaired by multiple factors, including hydraulic mining, land reclamation and the resulting channelization of the waterways, water quality degradation, and water diversion. (Draft Report, pp. 4, 25, 35-36, 38, 40, 93).

The State Water Board also recognizes that, from a regulatory perspective, the "artificially" limited process adopted by the State Water Board; that the State Water Board did not follow the "comprehensive review" required when considering adoption of objectives that have regulatory effect. (Draft Report, p. 2.) The State Water Board explains that, unlike the process that it followed for preparing the Draft Report, a comprehensive review would involve consideration of "other public trust resources" and "a broad range of public interest matters, including economics, power production, human health and welfare requirements, and the effects of flow measures on non-aquatic resources (such as habitat for terrestrial species)." (Draft Report, p. 2).

As a result, the State Water Board appropriately culminates its discussion of the limitations of the Draft Report with the following conclusion:

The water supply costs of the flows identified in this report illustrate to the State Water Board the need for an integrated approach to management of the Delta. Best available science supports that it is important to directly address the negative effects of other stressors, including habitat, water quality, and invasive

species, that contribute to higher demands for water to protect public trust resources. The flow criteria highlight the continued need for the BDCP to develop an integrated set of solutions and to implement non flow measures to protect public trust resources. (Draft Report, pp. 3-4 (emphasis added).)

Unsubstantiated Science and Outdated Research¹

The Draft Flow Report asserts that it contains "best available scientific information." (Draft Flow Report, p. 2). While the State Water Board may have considered the "best available scientific information, the Draft Flow Report does not contain a rigorous evaluation of the existing scientific literature. The Draft Flow Report makes no effort to adhere to fundamental concepts of basic scientific review by failing to acknowledge: mathematical and conceptual errors in the research; substantial disagreement amongst the scientific community; significant areas of scientific uncertainty; and the inherent limitations of the data gathered during the public process. And, the Draft Flow Report is devoid of citations supporting many important scientific assumptions, and it gives undue weight to highly speculative, errant and unsubstantiated analysis.

The Draft Flow Report primarily relies on circumstantial evidence to provide the cause and effect linking changes in fish abundance with changes in the hydrograph. (Draft Flow Report, p. 31 ["the evidence that flow stability reduces native fish abundance in the upper estuary (incl. Delta) is circumstantial"].) In light of the complexity of the Delta environment, and the litany of factors that have been changing the Delta during this period of time, this approach to causation is too simplistic and not scientifically justifiable.

The scientific justification for the Draft Flow Report's recommendation of 75% unimpaired Sacramento River inflow relies in part on the life history of fall-run Chinook salmon. (Draft Flow Report, pp. 114-116, 53-55.) The recommendation is based on the profoundly outdated and inconclusive Chinook salmon studies that were prepared for the Department of Fish and Game nearly 25 years ago. (Draft Flow Report, pp. 114-116, 53-55; See, Water Contractors Closing Statements, pp. 23-24.) The Flow Report fails to acknowledge that the state of the science has vastly improved since Kjelson (1987) and the Water Board's draft Decision 1630. It fails to acknowledge the importance of ocean conditions for salmonids and ignores the availability of updated statistical analyses and an improved understanding of salmon migration pathways and survival based on advancements in the use of acoustical tag technologies. There have also been profound changes in the manner in which the CVP and SWP are operated.

The scientific justification for the Delta outflow recommendation relies on statistical relationships with longfin smelt abundance. Rpt. at p. 98-100. The 75% unimpaired outflow target appears to be based on The Bay Institute's submittal indicating that approximately this volume of flow is needed if longfin abundance is to increase in about half the years in the future. The Bay Institute hypothesized that if longfin abundance increases half the time and decreases half the time, the population will be stable. The report further reasons that any flow that is good enough for longfin is probably good enough for the other important species as well. This assumption is not supported by the science.

The longfin FMWT/flow statistical relationship is shifting rapidly over time, with the same volume of water generating fewer and fewer longfin. Based on the current statistical

¹ The SFCWA is preparing and will provide the State Water Board with a technical analysis of the final report, which will expand on the concerns raised in this letter subsequent to the August 3 hearing on the Draft Report

relationships, even if all Delta outflow was dedicated exclusively to longfin smelt, this magnitude of flow would not be expected to provide any long term increases in abundance. Therefore, attempting to set flow targets for longfin smelt based on degrading statistical relationships is scientifically unjustified. The Flow Report makes no effort to understand the underlying biological mechanisms that may have been previously driving the statistical relationships. Clearly, something besides outflow is affecting longfin smelt abundance.

It would be arbitrary to conclude that a flow regime that cannot reasonably be expected to support the abundance of the longfin as the indicator species would provide any secondary benefits for other important Delta species. Evidence that delta smelt abundance may be significantly correlated with Delta outflow disappeared some time ago, suggesting that delta smelt abundance never was significantly correlated with Delta outflow, which ultimately became apparent once more data was available. This is true for many Delta species, as any statistically significant relationship between species abundance and flow that might have existed has either disappeared or is significantly degraded. See, Water Contractors Closing Statements at p. 12; Water Contractors Written Testimony at pp. 2-3.

Draft Report Recommendations Harm Other Public Trust Resources

According to the modeling results in Appendix B, the Flow Report's inflow criteria on the Sacramento River will significantly impact winter-run Chinook salmon on the mainstem of the Sacramento River by depleting the cold water pool at Shasta Reservoir. In addition, there does not appear to be any consideration or modeling of impacts to terrestrial species by reduced deliveries to refuges and managed wetlands within the Delta or elsewhere.

Biological Opinions Changing

The Draft Flow Report describes the current RPAs in the Fish and Wildlife Service and National Marine Fisheries Service biological opinions for CVP and SWP operations without also identifying the profound debate within the scientific community regarding the analytical underpinnings to those measures. It fails to consider the serious deficiencies in the specific implementation of the RPAs which have been identified by the U.S. District Court and the fact that both of those biological opinions will have to be revised as a result of the court's rulings. Nationally renowned experts have testified to fundamental mathematical errors in the agency's analysis, ill conceived and difficult to understand assumptions and conceptual approaches to the RPAs. There is extensive disagreement within the scientific community as to the extent that flows in Old and Middle Rivers affect entrainment in the water project facilities, and more broadly, whether historic and current entrainment is biologically meaningful to the population.

The debate regarding the scientific justification for the RPAs extends to the Fall X2 action for delta smelt, which even the FWS was sufficiently uncertain about to couch in terms of a study, although the Feyrer study that the FWS relied on has been so widely criticized that even the concept of a Fall X2 action is difficult to justify. (See e.g., Water Contractors Closing Statements, pp. 19-20.)

Conclusion

The Draft Flow Report demonstrates that the flow centric approach which some have advocated for decades provides no effective nor sustainable solution. It is incompatible with California's co-equal goals for management of the Delta. It will jeopardize protections for public trust resources and the water supply of California. The Draft Flow Report demonstrates that in

order to achieve sustainable protections for public trust resources, a comprehensive program must be developed and implemented, one that attempts to address all the important factors adversely affecting public trust resources in the context of the co-equal goals. Thank you for your consideration of the SFCWA's comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Byron M. Buck". The signature is fluid and cursive, with a long horizontal stroke at the end.

Byron M. Buck
Executive Director