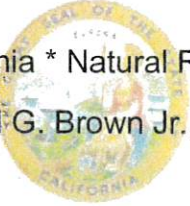


State of California * Natural Resources Agency

Edmund G. Brown Jr., Governor



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July 27, 2018

Felicia Marcus, Chairman
Steven Moore, Vice-Chairman
Tam M. Doduc, Member
Dorene D'Adamo, Member
E. Joaquin Esquivel, Member
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Dear Chairman Marcus, Vice-Chairman Moore, and Members:

Re: Proposed Final Amendments and Final Substitute Environmental Document for Lower San Joaquin River Flow Objectives and Southern Delta Salinity Objectives

The California Department of Fish and Wildlife (CDFW) and California Department of Water Resources (CDWR) submit these comments on the "Proposed Final Amendments and Substitute Environmental Document for the Lower San Joaquin River and Southern Delta" (July 6, 2018) (SED), which updates the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (WQCP). We write in response to the Fact Sheet, which states: "While the revised amendments enhance flexibility, the Board remains interested in receiving potential plan amendment language which would authorize, with the affirmative concurrence from the California Department of Fish and Wildlife, a coordinated control of flows and other, non-flow factors that would achieve benefits comparable to the unimpaired flow requirements." We submit such alternative language in the enclosure to this letter.

The Departments support the State Water Board's purpose, in updating the WQCP, to improve protection for anadromous and pelagic fishes in the Delta watershed, where these species are in crisis. Fact Sheet, p. 1. With gratitude, the Departments recognize the extraordinary efforts of the State Water Board to develop this update, including continuing engagement of stakeholders in the update process.

The Departments have commented and participated actively in this process. Since 2016 we have also undertaken negotiations with water agencies and districts, conservation groups, and other stakeholders to develop voluntary settlement agreements, which would be proposed as the Program of Implementation in the San Joaquin Basin, as well as the Sacramento Basin and legal Delta. As you note, "the State Water Board cannot order these collaborative efforts in a regulation, but can accept them as offered." Fact Sheet, p. 4. The enclosure to this letter includes alternative language that would support our continued progress towards reaching such agreements in 2018.

Voluntary Settlement Agreements

The Proposed Final Amendments recognize that voluntary settlement agreements may inform and expedite implementation of water quality objectives in a durable manner. SED, Appendix K ("Revised Water Quality Control Plan"), p. 36. The Departments agree. This letter describes our continuing approach to development of such agreements.

Restoring the viability of anadromous fishes in the Lower San Joaquin River Basin will require improvements in a wide range of baseline conditions that affect habitat availability and quality. These conditions include: elevated water temperatures, passage barriers, lack of floodplain inundation, blockage of substrate transport, and predation by non-native species. In voluntary agreements, CDFW proposes to coordinate functional flows with non-flow actions to substantially improve habitat availability and biological outcomes for the anadromous fishes. Such improvements would begin immediately if the State Water Board accepts the agreements and would continue for the defined term of the agreements, which could be 15 years subject to renewal.

The Proposed Final Amendments provide for future development of biological goals to inform adaptive implementation. Fact Sheet, p. 5; SED Appendix K, pp. 32-33. The Departments support use of goals to improve effectiveness of implementation. CDFW proposes to include outcomes in the voluntary agreements, and specifically, to increase habitat availability sufficient to support doubling of the average adult escapement of anadromous fishes that occurred between 2001-2015 in each of the San Joaquin tributaries. These outcomes would compare favorably with the State Water Board's findings about the benefits of the proposed narrative objective. See SED, Table 19-32, pp. 74-89.

Consistent with the Proposed Final Amendments (SED Appendix K, pp. 34-36), CDFW proposes that the voluntary agreements would include a robust science process to

evaluate effectiveness of implementation. This process would involve continuous monitoring in open-source format, measurable indicators, and testable hypotheses, including competing hypotheses where existing science is particularly uncertain. CDFW would have lead responsibility for implementation of the science process, but will emphasize improved coordination with other regulatory agencies, universities, and other entities.

Non-Flow Actions

The Proposed Final Amendments permit non-flow actions in voluntary settlement agreements. SED, Appendix K, p. 36. The Departments conclude that such actions will materially enhance habitat and biological outcomes. This point deserves emphasis. CDFW proposes that voluntary agreements would include a robust set of non-flow actions, such as replenishment of spawning gravels, riparian tree plantings, enhancement of habitat complexity, restoration of floodplain habitat, water hyacinth removal, potentially a fish segregation weir on the Tuolumne, hatchery improvements on the Merced, and actions to reduce predation rate by non-native predators.

Functional Flows

The Proposed Final Amendments require maintenance of 40% unimpaired flow, subject to an adaptive range of 30 to 50%, from February in each of the tributary rivers. SED, Appendix K, pp. 28-31. The "unimpaired flow requirement is designed to mimic the natural cues that species have evolved to respond to, but is not intended to be a rigid and fixed percentage of unimpaired flow." Indeed, the proposed requirement allows shaping and shifting between months and years to achieve ecological functions. Fact Sheet, p. 3; SED Appendix K, pp. 30-31. CDFW agrees that functional flows, including mimicry of ecological processes and associated cues, are critical to restore the viability of anadromous fishes, while understanding that unimpaired flows are one of several reasonable metrics for management of functional flows.

The State Water Board has made it clear that it will permit flexibility in the unimpaired flow requirement if voluntary settlement agreements would provide better outcomes in protection of anadromous fishes and the proposed alternative language in the enclosure would enhance that flexibility. In the continued development of voluntary agreements, CDFW is pursuing a coordinated approach which would implement non-flow actions, integrate them with an enhanced year-round base flow, and use pulse flows to activate habitat for juvenile rearing and growth. In cooperation with other stakeholders, CDFW will undertake further modeling analysis, understanding the evidentiary burden of demonstrating comparable outcomes. Assuming that voluntary agreements are reached, CDFW will be prepared to sponsor a workshop panel of experts with respect to outcomes of coordinated control of flow and non-flow actions in the context of the San Joaquin Basin, as well as the Sacramento Basin and legal Delta.

Conclusion

Since 2016 the Departments have undertaken negotiations with public water agencies, conservation groups, and other stakeholders to reach voluntary agreements as the basis for implementation of the updated WQCP with respect to anadromous and pelagic fishes. Those negotiations, while difficult and slow, show great promise.

The Departments will continue our best efforts to conclude negotiations and submit complete agreements for your consideration later this year. We appreciate your consideration of our proposed language.

Thank you for consideration of these comments.

Sincerely,

A handwritten signature in blue ink that reads "Karla A. Nemeth for".

Karla A. Nemeth
Director
Department of Water Resources

A handwritten signature in blue ink that reads "CM Bonham".

Charlton H. Bonham
Director
Department of Fish and Wildlife

Encl: Proposal of Alternative Language

Proposal of Alternative Language

We recommend the addition of alternative language in the new narrative objective for the San Joaquin Basin, as highlighted below:

Maintain inflow conditions from the San Joaquin River watershed to the Delta at Vernalis sufficient to support and maintain the natural production of viable native San Joaquin River watershed fish populations migrating through the Delta. Inflow conditions that reasonably contribute toward maintaining viable native migratory San Joaquin River fish populations include, but may not be limited to, flows that more closely mimic the natural hydrographic conditions to which native fish species are adapted, including the relative magnitude, duration, timing, and spatial extent of flows as they would naturally occur. Indicators of viability include population abundance, spatial extent, distribution, structure, genetic and life history diversity, and productivity.

*Maintain 40% of unimpaired flow, with an allowed adaptive range between 30% - 50%, inclusive, from each of the Stanislaus, Tuolumne, and Merced Rivers from February through June; **or in the alternative, undertake flow and non-flow actions in a coordinated manner, to achieve comparable outcomes for fish and wildlife beneficial uses.***

"Amendments and Substitute Environmental Document for Lower San Joaquin River and Southern Delta" (July 6, 2018), Appendix K, Table 3 ("Water Quality Objectives for Fish and Wildlife Beneficial Uses"), p. 18.

We suggest conforming changes to the Program of Implementation, and specifically, the section entitled "Voluntary Agreements," as highlighted below:

The State Water Board recognizes that voluntary agreements can help inform and expedite implementation of the water quality objectives and can provide durable solutions in the Delta watershed.

*Subject to acceptance by the State Water Board, a voluntary agreement may serve as an implementation mechanism for the LSJR flow objectives for the LSJR Tributaries as a whole, an individual tributary, or some combination thereof. Voluntary agreements may include commitments to ~~meet the flow requirements and to undertake non-flow actions~~ **undertake flow and non-flow actions in a coordinated manner. The State Water Board may accept an agreement as the Program of Implementation for the affected waters, even though the flow requirement is outside of the range of unimpaired flows otherwise prescribed by the flow objective, provided: (1) the agreement will reasonably be expected to achieve comparable outcomes by comparison to unimpaired flows within the range; and (2) DFW supports the agreement.** ~~If the voluntary agreements include non-flow actions recommended in this Plan~~*

~~or by DFW, the non-flow measures may support a change in the required percent of unimpaired flow, within the range prescribed by the flow objectives, or other adaptive adjustments otherwise allowed in this program of implementation.~~ Any such changes must be supported by DFW and satisfy the criteria for adaptive adjustments contained within this program of implementation. At a minimum, to be considered by the State Water Board, voluntary agreements must include provisions for transparency and accountability, monitoring and reporting, and for planning, adaptive adjustments, and periodic evaluation, that are comparable to similar elements contained in the program of implementation for the LSJR flow objectives.

The State Water Board encourages parties to present any executed voluntary agreement to the State Water Board for its review as soon as feasible to improve conditions in the watershed.

Appendix K, p. 36.