



**California-Nevada Chapter  
American Fisheries Society**  
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February 22, 2020

Paul Souza  
Pacific Southwest Regional Director  
United States Fish and Wildlife Service  
2800 Cottage Way  
Sacramento, California 95825

cc: National Marine Fisheries Service, Barry Thom; State Water Resources Control Board, Diane Riddle; Natural Resource Defense Council, Doug Obegi; The Bay Institute, Gary Bobker; Defenders of Wildlife, Rachel Zwillinger; San Francisco Baykeeper, Johnathan Rosenfield; California Sportfishing Protection Alliance, Chris Shutes; Golden Gate Salmon Association, John McManus

Dear Regional Director Paul Souza,

I write on behalf of the California-Nevada Chapter of the American Fisheries Society to strongly oppose implementation of the 2019 United States Fish and Wildlife Service (USFWS) Biological Opinion on the Reinitiation of Consultation on the Coordinated Long-term Operation of the Central Valley Project and State Water Project.

The mission of the American Fisheries Society is to improve the conservation and sustainability of fishery resources and aquatic ecosystems by advancing fisheries and aquatic science and promoting the development of fisheries professionals. The California-Nevada Chapter of the American Fisheries Society was founded in 1966 and includes over 400 fisheries and aquatic science professionals from Federal, State, and Tribal agencies, colleges and universities, and the private sector. The collective diversity and expertise of our members are the basis of an intimate and unparalleled familiarity with fisheries resources and issues within our region. Our Chapter is actively engaged in fisheries and conservation activities throughout California and Nevada to advance our profession and the cause of science-based fisheries conservation and management. Endangered species issues pertaining to the Sacramento-San Joaquin Delta are of particular concern to the California-Nevada Chapter of the American Fisheries Society.

As issued on October 21, 2019, the 2019 USFWS Biological Opinion severely truncates or eliminates existing protections under the 2008 USFWS Biological Opinion for federally listed endangered Delta Smelt. We urge you to consider the scale and range of changes to the communities, ecology, and natural resources of California and the Sacramento-San Joaquin Delta (Delta) that would result from implementing the 2019 USFWS Biological Opinion for the coordinated operations at the Central Valley Project and State Water Project.

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The California-Nevada Chapter of the American Fisheries Society concerns with the 2019 USFWS Biological Opinion include changes to Old and Middle River (OMR) flow management, Summer/Fall Habitat Actions, and the proposal for a Delta Smelt Hatchery. Updated OMR flow management actions include adult Delta Smelt protections under the First Flush Conditions and the Turbidity Bridge Avoidance measures as well as larval and juvenile Delta Smelt protections. The implementation of these actions relies on the presence of Delta Smelt to minimize impacts from water operations, with the absence of Delta Smelt allowing for less restrictive operations. As species decline in abundance, monitoring may not be able to detect species in an area they are present; requiring presence to initiate a trigger may prevent the implementation of any protective action when needed the most. Additionally, zero detection does not equate to the absence of fish and it is inappropriate to assume absence from monitoring efforts that are unable to account for gear selectivity or estimates of uncertainty. This is especially true for Delta Smelt given that the 2018 Fall-Midwater Trawl index was 0. In addition to a presence/absence off-ramp, the Turbidity Bridge Avoidance measure includes the use of a risk assessment to determine if the action is feasible or needed to reduce entrainment of Delta Smelt. This risk assessment will be conducted by the U.S. Bureau of Reclamation and the California Department of Water Resources without critical guidance or concurrence from USFWS, the Federal listing agency directed by the Endangered Species Act to use their authority to protect endangered and threatened species. It is unclear what analyses and monitoring data the U.S. Bureau of Reclamation and the California Department of Water Resources will be used to assess the risk of entrainment; therefore, it is unclear how protective this action will be for Delta Smelt.

The Project Description does not include using the San Joaquin Inflow:Export ratio as a trigger to reduce export operations in April and May, which was a requirement of the 2009 National Marine Fisheries Service Biological Opinion. This action was intended to provide flow protections for salmonids, but also provides protections from entrainment for larval Delta Smelt. Increased exports during April and May will likely result in higher entrainment of larval Delta Smelt without the San Joaquin Inflow:Export ratio trigger. The Project Description allows exemptions to OMR flow management during Storm-Related OMR Flexibility in addition to increased April and May export operations. OMR Flexibility allows for export pumping up to 14,900 cubic feet per second (cfs) with no limit on how often or for how long OMR Flexibility can be implemented. The absence of this information increases the uncertainty in assessing the impacts of implementing OMR Flexibility on Delta Smelt. In addition to these uncertainties, the 2019 USFWS Biological Opinion does not include a take limit for Delta Smelt at the export facilities. Instead, it defers the development of a take limit until a life cycle model is developed and approved by USFWS.

In lieu of the existing Fall X2 requirement of the 2008 USFWS Biological Opinion, the 2019 USFWS Biological Opinion includes a Summer/Fall Delta Smelt Habitat action that reduces the Fall X2 requirement and includes unassessed measures, such as the reoperation of the Suisun Marsh Salinity Control Gates and food enhancement actions. The existing Fall X2 required sufficient outflow in September and October to maintain X2 at  $\leq 74$  km following wet water years and  $\leq 81$  km following above normal water years. November inflow into Central Valley Project and State Water Project reservoirs in the Sacramento River Basin were required to be released to provide Delta outflow. The new Fall X2 requirement does not include November

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measures and only requires X2 to be managed at 80 km in wet and above normal water years. Moving the X2 location approximately 6 km upstream severely truncates critical habitat for rearing Delta Smelt in wet water years. It is also unclear how moving the X2 location will impact Delta habitat restoration projects, including the Tule Red Project, required by the 2008 USFWS Biological Opinion. The Summer/Fall action also includes the potential reoperation of the Suisun Marsh Salinity Control Gates for up to 60 days in the summer of below normal, above normal, and potential wet water years to reduce the salinity in Suisun Marsh and the reoperation of existing structures in the Delta to provide for food enhancements. These actions are still experimental and benefits may vary year to year. The Summer/Fall Delta Smelt Habitat action does not require approval from USFWS to plan, implement, modify, or off-ramp; therefore, it is unclear what actions are likely to be implemented each year.

The 2019 USFWS Biological Opinion requires the development of a conservation hatchery for Delta Smelt by 2030 in an attempt to minimize the risk of extinction for Delta Smelt. In the interim, the U.S. Bureau of Reclamation and the California Department of Water Resources will begin using the existing Fish Conservation and Culture Laboratory (FCCL) to supplement the wild population with captive bred Delta Smelt. The Project Description states that the captive breeding program will produce fish with the equivalent genetic resources of the wild stock and at sufficient quantities to augment the existing wild population. Given the current decline of Delta Smelt, it is unclear if the captive breeding program will be able to collect sufficient wild stock to provide adequate genetic diversity in the captive bred population or if there is sufficient suitable habitat to support a larger population and avoid density-dependent mortality. There is also extreme uncertainty in how the captive bred population will interact with the wild population. Furthermore, a captive bred population does not solve the underlying mechanistic problems of Delta Smelt decline.

The proposed decision-making processes and modeling approved in the 2019 USFWS Biological Opinion will be less protective than the existing 2008 USFWS Biological Opinion. Although this reinitiation of consultation process was intended to provide more protective measures<sup>1</sup>, the 2019 USFWS Biological Opinion eliminates critical oversight and decision-making authority of USFWS during real-time operations. Most protective actions in the 2019 USFWS Biological Opinion include a risk assessment for implementation that can allow cessation of protective actions if the U.S. Bureau of Reclamation and the California Department of Water Resources determine the risk to the species does not warrant added protections. It is not reasonable to assume that either the U.S. Bureau of Reclamation or the California Department of Water Resources will conduct risk assessments consistent with those done currently by USFWS or the Smelt Working Group (SWG). Modeling results for the 2019 USFWS Biological Opinion do not include all real-time operations in the Delta and do not include risk assessments for protective actions. However, this modeling shows that OMR will be more negative from January through

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<sup>1</sup> See Secretary of the Interior Sally Jewell, Memorandum for the President, Update on California Water Issues, August 30, 2016, at 2 (“The reinitiation process will likely lead to new or amended biological opinions that will increase protections for these species.”).

May during larval, juvenile, and adult Delta Smelt entrainment periods. The 2019 USFWS Biological Opinion states that impacts from negative OMR flows, limited juvenile rearing habitat, and reductions in the food web continue to contribute to a decline in the species. Despite these impacts to the species and the downward trend in population abundance, the 2019 USFWS Biological Opinion does not include a jeopardy determination for the species. Instead, the 2019 USFWS Biological Opinion increases the uncertainty of recovery of Delta Smelt by further exacerbating conditions in the Delta.

Thank you for your consideration. Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Titus" followed by a stylized flourish.

Rob Titus, President  
California-Nevada Chapter  
American Fisheries Society  
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Davis, CA 95617