



# United States Department of the Interior




FISH AND WILDLIFE SERVICE  
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Sacramento, California 95814

In reply refer to:  
81420-2008-F-1481-14

MAR 27 2015

## MEMORANDUM

To: Central Valley Office Operations Manager, Bureau of Reclamation Mid-Pacific Region, Central Valley Office

From: Acting Field Supervisor, U.S. Fish and Wildlife Service, Bay Delta Fish and Wildlife Office, Sacramento, California 

Subject: Reinitiation of Endangered Species Act Consultation on the Coordinated Operations of the Central Valley Project and the State Water Project

This memorandum is in response to your March 24, 2015, memorandum continuing the January 9, 2015, reinitiation of the December 15, 2008 Biological Opinion (2008 BiOp) on the Coordinated Operation of the Central Valley Project (CVP) and State Water Project (SWP) (Projects). The 2008 BiOp included a provision for the Bureau of Reclamation (Reclamation) to reinitiate consultation if the water year is classified as dry or critically dry for a second consecutive (or more) year(s). As such, Reclamation is seeking concurrence from the U.S. Fish and Wildlife Service (Service) that the drought response modifications proposed by Reclamation and the California Department of Water Resources (DWR) described below will result in no additional adverse effects on Delta Smelt or its critical habitat through the months of April to September 2015 beyond those previous analyzed in the 2008 BiOp. This response is in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The following sources of information were used to develop this response: (1) your March 24, 2015, memorandum to the Service with the attached *Project Description of April-September 2015 Drought Response Actions to Support Endangered Species Act Consultation* (Project Description) and the *Biological Review for Endangered Species Act Compliance with the WY 2015 Drought Contingency Plan April through September Project Description* (Biological Review); (2) your previous January 9, 2015, reinitiation request and subsequent supplemental requests dated January 27 and February 9, 2015, and respective supporting biological information; and (3) other information.

In response to the on-going drought and water shortage crisis, Reclamation and DWR submitted a Temporary Urgency Change (TUC) Petition Regarding Delta Water Quality on March 24, 2015 requesting that the California State Water Resources Board (State Board) temporarily modify requirements of D-1641 for 180 days, with specific requests for April through September to

enable changes in operations that will provide minimum human health and safety supplies and conserve water for later protections of instream uses and water quality. A previous TUC Petition was submitted on January 23, 2015, which the State Board partially approved with the issuance of the Board's February 3, 2015, TUC Order. A subsequent revised TUC Order was issued on March 5, 2015.

As described in the Project Description and the March 24, 2015 TUC Petition, Reclamation and DWR are specifically requesting modification of the D-1641 Delta outflow requirements, San Joaquin River at Vernalis flow requirements, export limits, Delta Cross Channel (DCC) gate operations, Rio Vista flow requirements, Western Delta salinity compliance point requirements, and San Joaquin River salinity requirements. These changes would reduce reservoir releases from those otherwise required to meet D-1641 from April through September to conserve storage for later fishery protection, minimum human health and safety needs, and if necessary, salinity control. Reclamation is not requesting any modification to the Reasonable and Prudent Alternative (RPA) in the 2008 BiOp, such that if a Service determination is made regarding Old and Middle River flows based on Delta Smelt entrainment risk, that determination would control. The Project Description also includes: (1) a description of a framework for possible future requests for Old and Middle River flow management flexibility, if conditions warrant; (2) a list of additional modifications required in the event that Temporary Emergency Drought Barriers are installed; and (3) identification of possible future conditions warranting additional modifications that may be implemented in 2015 and beyond to address the ongoing drought conditions, or to help recover from the conditions created from the previous three years of drought in the event the hydrology becomes wetter. However, Reclamation's current request and the attached Biological Review do not cover those potential future requests. Consequently, the Service will not address them in this memorandum. If it is found that any of the three potential modifications mentioned above are necessary, Reclamation will consult with the Service on the associated effects to Delta Smelt and other listed species as appropriate.

As stated in the Biological Review, the ongoing drought continues to affect Delta Smelt. The trend in Delta Smelt abundance has continued to decline with the 2014 Fall Midwater Trawl Delta Smelt index at 9, its lowest on record, and the March Spring Kodiak Trawl survey with a record low catch of 6 Delta Smelt. The Biological Review also discusses the effects of the drought as decreases in habitat and prey availability, habitat quality, and fitness and duration of spawning, as well as increases in abundance of predators, parasites, and toxic cyanobacteria like *Mycrosystis*. The Biological Review further analyzes the effects of the proposed modifications on Delta Smelt based on the current status and distribution of Delta Smelt. Though the Biological Review itself acknowledges uncertainty in its conclusions, the modifications are assumed to result in reduced habitat due to changes in water quality, shift upstream in available habitat, potential for entrainment of larvae and increased predation.

Although the proposed modifications to D-1641 were not anticipated in the project description for the 2008 BiOp, the resulting effects to Delta Smelt based on the Biological Review provided by Reclamation, appear to be within the range of effects previously analyzed in the 2008 BiOp.

Therefore, the Service accepts Reclamation's determination that the proposed drought response modifications described in your memorandum will result in no additional adverse effects on Delta Smelt or its critical habitat for April through May 2015 beyond those previously analyzed in the 2008 BiOp.

However, DSM2 quantitative analyses in the Biological Review are limited to the April through May timeframe and do not extend through the period of potential Delta Smelt concern. Consequently, we request that when the March 90% exceedance forecast is available and allows for further analysis, both DSM2 simulations be run through the end of June to assess juvenile entrainment effects, and other changes to effects on Delta Smelt and their critical habitat through September be assessed. This will allow us to ensure that conclusions drawn from the Biological Review, and overall effects through the period of the proposed drought modifications, do not change appreciably when using the March forecast. We are committed to continuing to coordinate with Reclamation and DWR to ensure that all additional information necessary to complete reinitiation of drought-related modifications for June through September can be developed as efficiently as possible.

Similar to the February 2015 reinitiation, larval Delta Smelt entrainment risk will be subject to reevaluation and adjustment to changing conditions, and will be based on a review of Delta Smelt distribution and catch data, ongoing Interagency Ecological Program monitoring, and fish salvage operations, as well as gauge data and the updated DSM2 simulations using the most recent exceedance forecast through end of June, the end of our juvenile entrainment protection action. These data will be used to inform the Real-Time Drought Operations Management Team, Water Operations Management Team, Smelt Working Group, Delta Conditions Team and other groups who will be providing input on a near real-time basis.

We remain committed to continued close coordination with you and your staff throughout this extremely challenging water year. Please address any questions or concerns regarding this response to me or Kim S. Turner, Assistant Field Supervisor at (916) 930-5603. Please refer to Service file number 81420-2008-F-1481-14 in any future correspondence regarding this project.