



United States Department of the Interior

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VIA ELECTRONIC MAIL ONLY

MEMORANDUM

To: Regional Director, U.S. Fish and Wildlife Office, Sacramento, California

From: Area Manager, U.S. Bureau of Reclamation, Bay-Delta Office, Sacramento, California

Subject: Request for Reinitiation of Consultation on the 2008 Biological Opinion for the Coordinated Long-term Operation of the Central Valley Project and State Water Project Biological Opinion for the Proposed Change in Implementation of Reasonable and Prudent Alternative Component 3 – Action 4 (Fall X2)

The Bureau of Reclamation submits this letter to satisfy requirements to reinitiate consultation, consistent with Section 7 of the Endangered Species Act (ESA) and the 2008 Biological Opinion (2008 BiOp), regarding the effects of the Coordinated Long-term Operation of the Central Valley Project (CVP) and State Water Project (SWP) on delta smelt (*Hypomesus transpacificus*) and its designated critical habitat. ESA regulations require action agencies to reinitiate consultation when the action is modified in a manner that may affect listed species or critical habitat in a way that was not considered in the biological opinion and when new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered. Based upon new delta smelt science and monitoring information, Reclamation proposes to modify the manner in which the CVP/SWP operates Fall X2 in September and October of 2019. This modification would fall under the adaptive management component of the 2008 Reasonable and Prudent Alternative Component 3 – Action 4 (Fall X2) and may have an effect not considered in the 2008 BiOp. Therefore, Reclamation requests reinitiation of consultation to determine the effects associated with the proposed modifications to Fall X2.

This reinitiation request is specific to operation of Fall X2 in September and October of 2019. It is separate and apart from Reclamation's August 2, 2016, request for reinitiation of consultation on the Coordinated Long-term Operation of the CVP and SWP (ROC on LTO), which will address system-wide operations. The ROC on LTO will explore alternatives to current operation under the National Environmental Policy Act (NEPA) prior to submitting the proposed action under ESA. That effort, once complete, is expected to supersede previous consultations and reinitiations, including this one.

Adaptive Management

The 2008 BiOp expressly requires Fall X2 to be adaptively managed, under the supervision of the U.S. Fish and Wildlife Service (the Service), to ensure the implementation of the action addresses the “uncertainties about the efficiency of the action” (page 369 of 2008 BiOp). The action also states that as new information is developed and as circumstances warrant, changes by the Service to Fall X2 may be necessary. Modifications by the Service may be “in consideration of the needs of other species” and “other CVP/SWP obligations” (page 283 of 2008 BiOp). Reclamation seeks to adaptively manage and modify its operation of the CVP/SWP of Fall X2 in September and October of 2019.

In August 2011, Reclamation transmitted to the Service the Adaptive Management of Fall Outflow for Delta Smelt and Water Supply Reliability (AMP), which the Service found consistent with the RPA. Although the AMP did not establish specific management actions beyond 2011, it provided a framework that could be used for adaptively managing the action in future years. In 2011, the daily average X2 values from DAYFLOW for September and October 2011 were 75 km and 74 km, respectively (pers. comm. D. Hilts). Thus, the initial management requirement of Fall X2 was met. See the attachment for further information concerning Water Year 2011 and synthesis studies analyzing the fall habitat management.

The AMP considers the available information on: delta smelt habitat; X2 as a surrogate for delta smelt habitat; correlations between habitat and abundance; Delta hydrology; X2 and delta smelt habitat in the fall; and the specific X2 action prescribed in the BiOp. The AMP concluded that outflow affects the quality and extent of abiotic delta smelt habitat and that restoring lost abiotic habitat availability is likely to produce subsequent-abundance benefits to delta smelt, probably by raising the carrying capacity. However, AMP identified unanswered questions that can only be addressed by adaptive management. Those are: 1) what are the key underlying ecological mechanisms that link outflow to delta smelt abundance, and how important and manageable is each link?, 2) how does fall outflow fit in with other drivers of delta smelt abundance?, and 3) are there more water-efficient ways to provide the necessary benefits? The proposed action will help address these unanswered questions.

Delta Smelt Adaptive Habitat Management in 2017

After 2011, there was an extended multi-year drought. Since Fall X2 is only triggered in wet and above-normal water years, it was not triggered again until 2017. In 2017, Reclamation proposed and operated to 74 km in September and 80 km in October. The adaptive management plan for 2017 evaluated the conceptual models described in the AMP and made predictions as to the expected outcomes. Adaptive management in 2017 represented an X2 location upstream of the initial management requirement for a wet year of 74 km. Upstream CVP reservoir releases and storage did not change due to the adaptive management in 2017. The only operational changes to CVP that occurred were differences in south Delta exports in October; whereas, the export levels for September did not change. According to California Data Exchange Center (CDEC) data in 2017, adaptive management resulted in average X2 locations at 74 km in September and 77 km in October. This variation from the proposed action was due to DWR’s inability to obtain approval to

operate Fall X2 to 80 km --instead operating to 74 km. It is anticipated the same divergent operations of CVP and SWP will occur in September and October of 2019.

Proposed Action

Reclamation will operate the CVP to no more eastward than 80 km in September and October of 2019, and DWR is expected to operate the SWP to achieve its proportional share of a combined 74 km CVP/SWP operation during the same time period. It is anticipated that the monthly average X2 will be similar to conditions experienced in October of 2017 (i.e. 77 km). Although it is expected that actual conditions during September and October of 2019 will be similar to October of 2017, Reclamation's proposed action is to maintain the monthly average X2 no more eastward than 80 km in September and October of 2019 in the context of the adaptive management provisions of Fall X2.

The proposed action and its effects, including designated critical habitat and biotic and abiotic factors, are further described in the attachment. This effects analysis considers the 2008 consultation, the current hydrology in 2019, monitoring needs, and the needs of other species, including Sacramento River winter-run Chinook salmon. This document attempts to update the analysis that formed the basis for Fall X2 with data from the past decade.

The species account for delta smelt and its designated critical habitat, which was recently developed for Reclamation's 2018 Biological Assessment on the ROC on LTO, represents a more current account from that utilized in the 2008 BiOp. We are incorporating it by reference for this reinitiation.

In addition to the attached effects analysis, operational modeling from DWR on the location of X2 from August 1 through December 1, 2019, is also included. These simulations include forecasted daily X2 locations in the existing wet condition under the initial management requirement of 74 km and locations in a wet condition under this proposal of 80 km. The effects analysis uses 80 km as an upper bound to estimate the effects of the proposed adjustment.

Reclamation will utilize existing monitoring programs such as the Enhanced Delta Smelt Monitoring (EDSM) program and the Interagency Ecological Program (IEP) to monitor resulting parameters relevant to delta smelt from the proposed action to inform future adaptive management.

Conclusion

As described in the attached effects analysis, Reclamation has determined that the proposed action may affect but is not likely to adversely affect threatened delta smelt. Additionally, Reclamation has determined the proposed action would adversely affect Delta smelt designated critical habitat. Effects to critical habitat primary constituent elements (PCEs) would specifically consist of decreased river flow and increased salinity affecting the low salinity zone (PCEs 3 and 4 respectively). Reclamation understands recent guidance to move toward physical and biological features in relation to critical habitat, however, PCEs were evaluated to ensure consistency with the 2008 BiOp. Reclamation seeks concurrence on this determination.

If you have any questions or concerns please contact me at dmmooney@usbr.gov or 916-414-2400. Thank you for your time and attention to this important matter. Reclamation has appreciated your staff's willingness to work with us in the past and looks forward to continuing to work together as we navigate the challenges the Delta ecosystem faces.

Attachment

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