



United States Department of the Interior

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VIA ELECTRONIC MAIL ONLY

Mr. Paul Souza
Regional Director
Pacific Southwest Region
U.S. Fish and Wildlife Service
2800 Cottage Way, W2928
Sacramento, CA 95825

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)

Dear Mr. Souza:

The Bureau of Reclamation is submitting this letter to satisfy requirements to reinitiate consultation consistent with Section 7 of the Endangered Species Act (ESA) and the 2008 Biological Opinion (2008 BO) 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 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 opinion. Reclamation, in coordination with the project applicant, the California Department of Water Resources (DWR), proposes to modify the manner in which the CVP and SWP are operated for Fall X2 in 2017, which may have an effect not considered in the 2008 BO. In 2017, changes in operations at Oroville Dam for public safety have resulted in less carryover storage. In addition, new science and monitoring information on the Delta Smelt are available for consideration as part of the adaptive management component of the 2008 Reasonable and Prudent Alternative (RPA). As such, Reclamation requests a reinitiation of consultation, in accordance with the 2008 BO and 50 CFR §402.16, in relation to proposed modifications to Fall X2.

This reinitiation request is specific to Water Year 2017 implementation of Action 4. 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 (LTO), which will address system-wide operations. The reinitiation 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. The CVP and SWP will continue to operate pursuant to the requirements of the 2008 BO and any intermediate reinitiation until a new opinion on LTO is issued. In contrast, this request only concerns proposed modifications to Fall X2 operations in Water Year 2017.

Background

In 2014, the U.S. Court of Appeals for the Ninth Circuit upheld the 2008 BO, including Fall X2 action, under the ESA. Additionally, under NEPA, Reclamation selected the No Action Alternative (which includes the RPA actions in the 2008 BO) in its 2016 Record of Decision for the Coordinated Long-term Operation of the CVP and SWP (LTO ROD). The proposed action is consistent with Action 4 of the RPA in that it seeks to work within the Adaptive Management parameters of the action described in the 2008 BO and selected alternative in the LTO ROD.

Adaptive Management

Action 4 of the RPA expressly requires that the Fall X2 action be adaptively managed, to ensure that the implementation of the action addresses the “uncertainties about the efficiency of the action” (page 369 of 2008 BO). The action also states that as new information is developed and as circumstances warrant, changes by the U.S. Fish and Wildlife Service (Service) to the Fall X2 action itself 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 BO). Reclamation seeks to adaptively manage and modify its operation of the CVP/SWP under RPA Action 4 in the Fall of 2017.

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. For example, on page 26, the AMP stated that key questions (e.g., how does outflow affect food supply) may be most efficiently answered by implementing the action in “very different ways (within the boundaries of prudence) in otherwise similar years and contrasting results.”

The AMP includes a review of Action 4 and evaluates habitat, X2 as a surrogate, evidence for the link between habitat and abundance, hydrology, and action specifics. The key questions identified in the AMP that remain unanswered include ecological mechanisms that link outflow to abundance, other drivers of abundance, and if there are more water-efficient ways to provide the necessary benefits.

New scientific information has been developed since the 2008 BO. In 2011, the Interagency Ecological Program (IEP) Management, Analysis, and Synthesis Team (MAST) released the Fall Low Salinity Habitat report to explore the importance of fall low-salinity habitat for Delta Smelt. The IEP MAST also developed the Final MAST Report in 2015, which included an updated Delta Smelt conceptual model. Results from these studies, and other new scientific information, are included in the attached effects analysis.

The Collaborative Science and Adaptive Management Program (CSAMP), consisting of a policy group of stakeholders and resources agencies, including Reclamation and the Service, formed in 2013. CSAMP has ongoing discussions on critical science-based management questions for the operation of the CVP/SWP. A subset of CSAMP, the Collaborative Adaptive Management Team (CAMT) is composed of senior scientists and high-level managers from State and Federal agencies, public water agencies, and environmental non-governmental organizations. The Delta Smelt Scoping Team (DSST) comprises technical experts that help design and review the products of studies focused on addressing the science needs identified by the CAMT and CSAMP. The DSST and CAMT meet regularly to promote collaborative development of scientific information to inform future decisions. The enclosed *Effects Analysis for the Proposed 2017 Fall X2 Action* incorporates comments received from the DSST and CAMT on an earlier version.

Special Circumstances

The damage that occurred at Oroville Dam in early 2017 requires operations that differ significantly from a normal wet year. Reservoir levels were lowered in the interest of public safety. The Federal Energy Regulatory Commission has required that DWR keep levels as low as feasible through November 1, 2017. This has impacted the water supply in Oroville to the point that the current and projected levels of water in storage nearly mimic those of drought years (Figure 77 in enclosed effects analysis). Additionally, recent hydrologic conditions are drier than in 2011, the only previous year in which X2 averaged near 74 km for September and October.

Proposed Action

Reclamation and DWR propose to operate to achieve an X2 location of 74 km in September and no greater (more eastward) than 81 km in October (Table 1). Operations for September and November would remain consistent with the 2008 BO.

Table 1. Modified Location of X2 for 2017

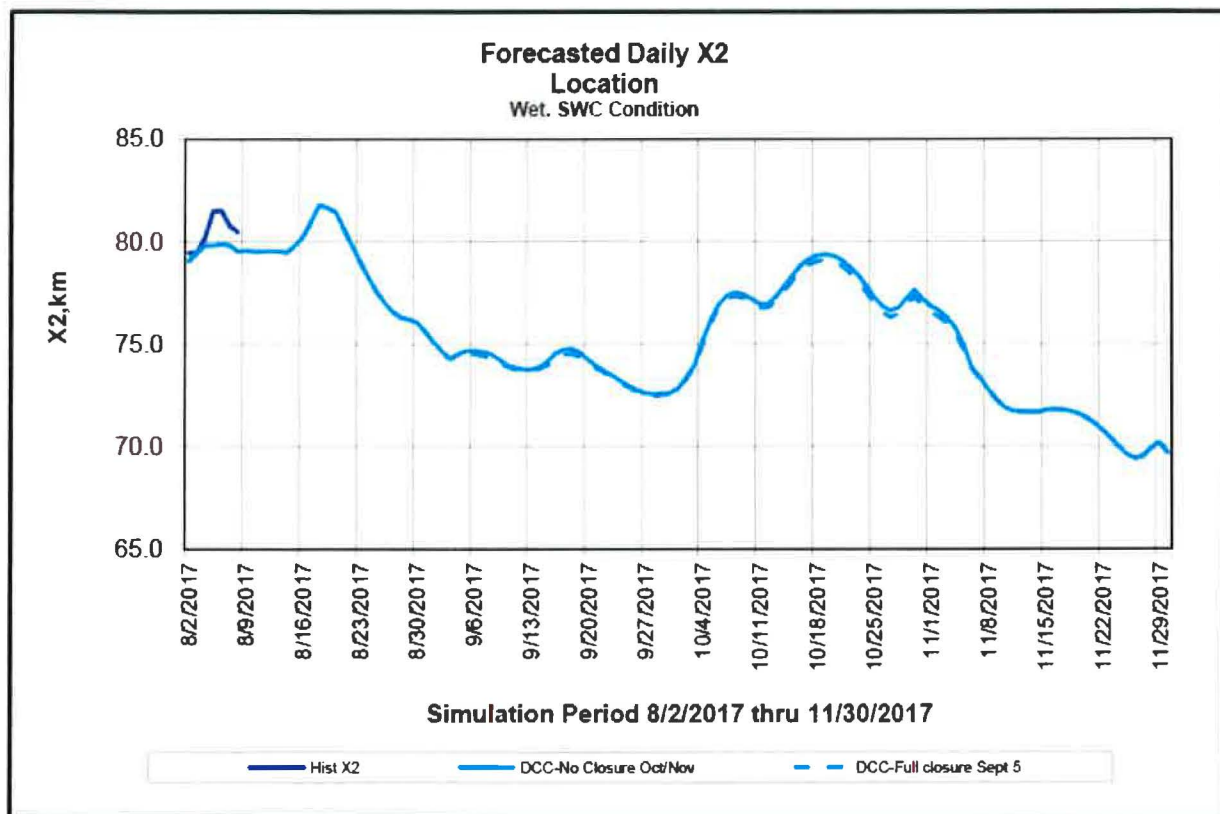
Month	Location of X2 (no more eastward than)
September	74 km
October	81 km

The proposed action and its effects, including critical habitat and biotic and abiotic factors, are further described in the previously-mentioned enclosure. This effects analysis considers the 2008 consultation, the current hydrology in 2017, monitoring needs, the needs of other species, including Sacramento River winter-run Chinook salmon, and the emergency response at Oroville Dam. The document looks at updating the analysis that formed the basis for Fall X2 with data from the past ten years. The effects analysis uses 81 km as an upper bound to estimate the effects of the proposed adjustment for the entire month of October. However, X2 in reality would be further downstream than 81 km during portions of the month of October. The species account for Delta Smelt and critical habitat is that which was recently developed for the Service's California WaterFix BO and represents a more current account from that utilized in the 2008 BO. We are incorporating it by reference for this reinitiation.

In addition to the enclosed effects analysis, an additional enclosure contains operational modeling from DWR on the location of Fall X2 from August 2nd through November 30th, 2017. Simulations include forecasted daily X2 locations in an existing wet condition and locations in a wet condition under this proposal (Figure 1).

The proposed action also includes modification to operation of the Delta Cross Channel (DCC) gates. The gate operations have been modeled in relation to existing X2 operations and operations included in this proposal. The effects of these modifications are addressed as bookends and are included in the operational modeling. The specific DCC action would be part of a separate request from the California Department of Fish and Wildlife that was recently received by Reclamation, and is currently under consideration.

Figure 1. Modified Location of X2 for 2017



Other Existing Delta Smelt Actions

In 2016, the California Natural Resources Agency released the Delta Smelt Resiliency Strategy (DSRS). The DSRS includes a suite of management actions to improve the status of Delta Smelt, and address issues such as predation, turbidity, and food availability and quality. Some of the DSRS actions include a spring/summer outflow augmentation and actions to stimulate production at lower trophic levels.

Reclamation is committed to actions that will help provide scientific information for use in the recovery of Delta Smelt. Reclamation has voluntarily funded the Enhanced Delta Smelt Monitoring (EDSM) program to improve understanding of Delta Smelt distribution and better support lifecycle modeling of the species. The University of California-Davis, through funding from Reclamation, will perform analyses of the health, growth, diet, movement, and reproductive and habitat history of captured (wild) and cultured Delta Smelt. The project will help better link augmentation of outflow to observed responses of Delta Smelt. Through the IEP, Reclamation and DWR maintain an extensive network of monitoring for parameters relevant to Delta Smelt, e.g. the Environmental Monitoring Program.

Increased monitoring, such as EDSM, could lead to better understanding of operative mechanisms between habitat and abundance for Delta Smelt and the development of causal mechanisms to inform species recovery.

Conclusion

As described in the enclosed effects analysis, the proposed Fall X2 action for 2017 would not adversely affect Delta Smelt. The proposed action would adversely affect Delta Smelt critical habitat. Effects to critical habitat primary constituent elements (PCEs) would specifically be river flow and salinity affecting the low salinity zone (PCEs 3 and 4 respectively), which are considered in the 2008 BO. Reclamation understands recent guidance to move towards physical and biological features in relation to critical habitat; however, PCEs were evaluated to ensure consistency with the 2008 BO. Adverse effects to critical habitat elements may not necessarily rise to the level of adverse modification to critical habitat as a whole. Reclamation seeks concurrence on this determination for the proposed Fall X2 action for 2017.

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.

Sincerely,



David M. Mooney
Acting Area Manager

Enclosures – 2

cc: See next page.

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