

RECLAMATION

Managing Water in the West

Finding of No New Significant Impact

Delta Smelt Fall Habitat Action in 2019

Recommended by:

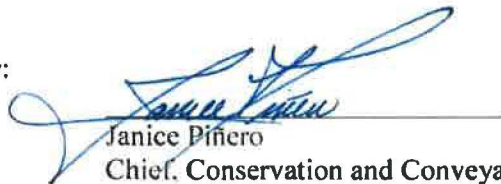


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Mission Statements

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper..

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Background

In 2008, the US Fish and Wildlife (USFWS) provided Reclamation a Biological Opinion (BO) on the Coordinated Long-Term Operation of the Central Valley Project (CVP) and State Water Project (SWP) under Section 7 of the Federal Endangered Species Act (ESA). The 2008 BO set forth a Reasonable and Prudent Alternative (RPA) with actions that allow for continued operation of the CVP and SWP in compliance with ESA.

In 2016, Reclamation signed the Record of Decision (ROD) for the Coordinated Long-term Operation of the CVP and SWP Environmental Impact Statement (2015 LTO EIS). Reclamation selected the No Action Alternative analyzed in the EIS, which included the RPA actions in the 2008 BO and 2009 National Marine Fisheries Service BO (2009 NMFS BO).

In September 2017, Reclamation proposed to modify the implementation of Action 4 of the 2008 BO for October of 2017, and prepared an environmental assessment for that proposed action. On September 7, 2017, Reclamation submitted a request to the USFWS to modify the implementation of Action 4 of the 2008 BO for October of 2017. The USFWS responded by memorandums on September 27, 2017, amending the 2008 BO to allow Reclamation to operate to achieve an average X2 location no greater than 80 km in October of 2017. The Delta Smelt Outflow Action in 2017 (2017 Action) was consistent with the Adaptive Management parameters of Action 4 of the RPA in the 2008 BO and selected alternative in the 2015 LTO EIS and 2016 ROD. The 2017 Action represented an X2 location downstream of the Action 4 prescription for a Wet Water Year. Upstream CVP reservoir releases and storage did not change during the 2017 Action. The only operational changes to the 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, the average X2 locations were 74 km in September and 77 km in October. In 2017, the California Department of Water Resources (DWR) was unable to operate to 80 km, instead operating to 74 km, because the California Department of Fish and Wildlife did not provide their approval. Reclamation issued a Finding of No New Significant Impact (FONNSI) for the 2017 Action on September 29, 2017.

New scientific information suggests there are alternatives to meet the biological goals of Action 4 of the 2008 BO RPA. The Delta Smelt Fall Habitat Action in 2019 strives to achieve a balance between the biological goals and effectiveness of Action 4 and water supply based on this new scientific information.

Reclamation prepared the Delta Smelt Fall Habitat Action in 2019 Environmental Assessment (EA), which tiers (40 CFR 1502.20 and 1508.28) off the 2015 LTO EIS and 2016 ROD. It also incorporates by reference the Delta Smelt Outflow 2017 EA and FONNSI. Analyses included in the EA are based on the information and analyses included in the 2015 LTO EIS, and the Delta Smelt Outflow 2017 EA. The 2015 LTO EIS and 2016 ROD are available online at:

https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21883

The Delta Smelt Fall Outflow 2017 EA and FONNSI are available online at:

https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=30266

Proposed Action

Habitat conditions and quantity in summer 2019 will be favorable for Delta Smelt, with low salinity habitat extending west of the Sacramento-San Joaquin River confluence and throughout Suisun Marsh. Conditions should also be accommodating for Delta Smelt across the Suisun Marsh and western Delta. The Proposed Action for Delta Smelt habitat in Water Year (WY) 2019 will achieve the Action 4 objective. New science and monitoring information on the Delta Smelt informed the Proposed Action. Action 4 of the 2008 BO requires adaptive management to ensure that the implementation addresses the “uncertainties about the efficiency of the action” (page 369 of 2008 BO). Action 4 also states that as new information is developed and as circumstances warrant, changes by the USFWS to the Fall X2 action itself may be necessary. The Proposed Action is a plan to adaptively manage and modify its operation of the CVP/SWP under RPA Action 4. This Proposed Action will maintain favorable habitat conditions in the Suisun Marsh and Western Delta during the fall.

Reclamation is proposing to 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 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 FLaSH conceptual model suggests that Delta Smelt habitat should include salinity conditions ranging from fresh to low salinity (0-6 ppt), minimum turbidity of approximately 12 Nephelometric Turbidity Units (NTU) for adults, temperatures below 23°C, food availability, and bathymetric complexity (FLaSH Synthesis, pp. 15-23; Komoroske et al. 2015). The goal of the Proposed Action is to provide these habitat components. During September and October, the Proposed Action would provide low salinity habitat in the lower Sacramento River, Suisun Marsh, Honker Bay, and portions of Grizzly Bay.

Reclamation will utilize existing monitoring programs such as the Enhanced Delta Smelt Monitoring (EDSM) program and the status and trend surveys to increase the sample number and frequency of fish, zooplankton, and environmental conditions. Increasing the sample size of these biological and abiotic metrics will provide additional data and power to detect a biological and/or environmental response to the Proposed Action. Reclamation will work with partner agencies to identify the appropriate timing and methodology for this monitoring effort. The goal of supplementing these monitoring programs is to increase the temporal and spatial resolution of

the fisheries data they generate. These data can be used to quantify the effects of the Proposed Action.

Findings

The 2019 proposed modification to Action 4 of the 2008 BO would not create “substantial changes in the proposed action that are relevant to environmental concerns” or “significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts” that were not fully discussed or did not exist at the time of the 2015 LTO EIS (40 CFR 1502. 9). The Proposed Action would not necessitate an updated analysis of range of alternatives or impacts. The analyses, potential impacts, and conclusions in the 2015 LTO EIS and the Delta Smelt Outflow Action in 2017 EA and FONNSI remain applicable and valid.

A Finding of No Significant Impact, or in this case Finding of No New Significant Impact (43 CFR 46.140(c)) should discuss significance in terms of the context and intensity of the impact (40 CFR 1508. 27). Context for the Proposed Action would be related to local effects to the Delta and effects upstream related to reservoir releases. Intensity refers to the severity of the impacts, which may include whether the action may adversely affect an endangered or threatened species or adversely modify its designated critical habitat.

The following were considered in evaluating intensity (40 CFR 1508. 27):

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal Agency believes that on balance the effect will be beneficial.

The Proposed Action would have beneficial impacts to storage and water supply but may have some effect to Delta Smelt designated critical habitat. This Proposed Action will maintain favorable habitat conditions in the Suisun Marsh and Western Delta during the fall and would not adversely modify Delta smelt critical habitat.

(2) The degree to which the proposed action affects public health or safety.

The Proposed Action will not affect public health or safety. There will be no construction related impacts from the Proposed Action. Water operations will not affect public health under the Proposed Action.

(3) Unique characteristics of the geographical area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The Proposed Action area represents designated critical habitat for Delta Smelt. Reclamation consulted with the USFWS under Section 7 of the ESA on the effects of the Proposed Action on Delta Smelt and its designated critical habitat. The USFWS does not

anticipate any sustained impact to the physical and biological factors that comprise the habitat's suitability from the Proposed Action.

- (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Reclamation received comments on the draft EA. Commenters raised concerns over the potential effects to ground water, hydrology and biological resources, specifically Delta Smelt, Salmonids and terrestrial species and their habitats. Reclamation included updated analysis to respond to the comments provided. As for impacts to Delta Smelt's designated critical habitat, Reclamation consulted with USFWS under Section 7 of the ESA, and the USFWS amended the 2008 BO consistent with the Proposed Action. The Adaptive Management aspect of the Proposed Action is focused on reducing these uncertainties that lead to controversy. To help address any uncertainties and controversy, USFWS has requested Reclamation evaluate the data collected as part of scheduled monitoring to determine whether a change in Delta Smelt survival is detected. USFWS also requested that, once available, Reclamation evaluate the Interagency Ecological Program (IEP) and Directed Outflow Project (DOP) monitoring data to determine whether a change in Delta Smelt vital rate is detected.

- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

There is some degree of uncertainty regarding adaptive management of federally listed species, including the Delta Smelt and its designated critical habitat. However, Reclamation consulted with the USFWS on the Proposed Action. The analyses presented in the EA and its appendixes represent an updated evaluation of the relationship between Delta Smelt and the low salinity zone. Reclamation (and the USFWS) used the best available scientific information in evaluating the Proposed Action. The USFWS concluded that there may be some effect to Delta Smelt related to the effects to Critical Habitat but does not anticipate any sustained impact to the physical and biological factors that comprise the habitat's suitability from the Proposed Action. As stated above, Reclamation will further evaluate the Proposed Action following implementation. There are no unknown or unique risks.

- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The Proposed Action is limited to the months of September and October 2019, and the need for it arises from new scientific information. The Proposed Action does not represent a decision about operations under the 2008 BO in any other time period and would not establish a precedent for future actions with significant effects. Furthermore, Reclamation expects that it will be operating the CVP under a new USFWS BO for CVP operations in 2020. If that occurs, the 2008 BO, including RPA Action 4, will no longer regulate CVP operations, and there would be no similar need to reinstate consultation related to Action 4 of the 2008 BO.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.

The Proposed Action would not result in cumulatively significant impacts on the human environment, as described below.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The Proposed Action would be temporary and is within the current normal operating ranges. Further, it would not have significant impacts to historic properties. This type of undertaking does not have the potential to cause effects to historic properties, should such properties be present, pursuant to Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA). There would be no new construction or ground-disturbing activities and no changes in land use because of this action. Reclamation has no further obligations pursuant to NHPA Section 106. 36 CFR § 800.3(a)(1).

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The Proposed Action may have some effects on Delta Smelt's designated critical, however the USFWS does not anticipate any sustained impact to the physical and biological factors that comprise the habitat's suitability. The USFWS amended the 2008 BO consistent with the Proposed Action. The Proposed Action will not jeopardize the continued existence of Delta Smelt or adversely modify its designated critical habitat. USFWS has requested Reclamation evaluate the data collected as part of scheduled monitoring to determine whether a change in Delta Smelt survival is detected. USFWS also requested that, once available, Reclamation evaluate the IEP and DOP monitoring data to determine whether a change in Delta Smelt vital rate is detected.

Also, implementation of the Proposed Action is consistent with the 2009 NMFS BO RPA requirements. The Proposed Action will be operated in such a manner that there would be no additional effects to Central Valley spring-run Chinook salmon Evolutionarily Significant Unit (ESU), Sacramento River winter-run Chinook Salmon ESU, California Central Valley steelhead Distinct Population Segment (DPS), and Southern DPS of North American Green Sturgeon and their designated critical habitats not considered in the 2009 NMFS BO and 2015 LTO EIS.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The proposed action meets all Federal, State, and local laws, and requirements imposed for the protection of the environment and meets the disclosure requirements of the National Environmental Policy Act (NEPA).

In accordance with NEPA, Reclamation has found that the Proposed Action does not create significant impacts not identified in the 2015 LTO EIS. Reclamation has found that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment. Therefore, an additional EIS is not required for carrying out the Proposed Action.

Potential impacts on the following environmental resources were evaluated in the 2019 EA. The 2015 LTO EIS was also used as a reference for evaluation of the following resource areas:

- Groundwater, Fish and Aquatic Resources, and Terrestrial Biological Resources.

Potential impacts on several environmental resources were examined and found to be similar to those in the 2015 LTO EIS and include:

- Air Quality and Greenhouse Gas Emissions; Geology and Soil Resources; Socioeconomics; Recreation Resources; Land Use; and Agriculture.

Potential impacts on several environmental resources not evaluated in detail in the 2015 LTO EIS were also found to be minimal or nonexistent impact:

- Aesthetic Resources; Hazards and Hazardous Materials; Noise; Transportation; and Utilities, Public Services, and Service Systems

Potential impacts on the following environmental resources were evaluated in the EA. The 2015 LTO EIS was also used as a reference. It was determined that the Proposed Action would not have any potential effects on the following resources:

- Cultural Resources: This type of undertaking does not have the potential to cause effects to historic properties pursuant to 36 CFR Part 800. 3(a)(1). There would be no new construction or ground-disturbing activities and no changes in land use as a result of this action.
- Indian Trust Assets: The Proposed Action does not have the potential to affect Indian Trust Assets. There would be no new construction or ground-disturbing activities and no changes in land use as a result of this action.
- Indian Sacred Sites: There would be no new construction or ground-disturbing activities and no changes in land use as a result of this action; therefore this project would not inhibit use or access to any Indian Sacred Sites.
- Environmental Justice: There would be no new construction or ground-disturbing activities and no changes in land use as a result of this action; therefore, the Proposed

Action would not result in adverse human health or environmental impacts to minority or low-income populations.

Cumulative Effects

Past, present, and reasonably foreseeable future actions were identified and considered in the analysis in the Final EA and in the 2015 LTO EIS (Sections 3. 5). Cumulative Effects analyses in the 2015 LTO EIS are included at the end of each chapter (e. g., Section 9. 4. 3. 9 for Fish and Aquatic Resources).

No past, present, or probable future projects were identified in the project vicinity that when added to project-related impacts, would result in a significant cumulative impact, and that would be cumulatively considerable. Other projects occurring in and around the Delta, but outside of the waterway, would not be affected by changes in outflow.

Public Review

Reclamation released the draft EA for public review and comment from August 5, 2019 to August 19, 2019. The document was made available on Reclamation's website at:

https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=39801

The following entities submitted comments on August 19, 2019: Kern County Water Agency, California Sportfishing Protection Alliance, Coalition for a Sustainable Delta, and State Water Contractors, San Luis and Delta-Mendota Water Authority, and Western Area Power Administration. On August 19, 2019, Tom Cannon also submitted comments individually.

6 References

Komoroske LM, Connon RE, Jeffries KM, Fangué NA. 2015. Linking transcriptional responses to organismal tolerance reveals mechanisms of thermal sensitivity in a mesothermal endangered fish. *Mol Ecol* [Internet].