October 17, 2017

Mr. Grant Davis, Director
California Department of Water Resources
1416 Ninth Street, 11th Floor
Sacramento, CA 95814

Subject: Request for Consistency Determination for the Continued Operation of the State Water Project Incorporating 2017 Proposed Change to Action 4 of the 2008 Biological Opinion for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project (2080-2017-009-03)

Dear Mr. Davis:

This letter responds to your September 29, 2017 notification and request. Attached to this letter is the California Department of Fish and Wildlife (CDFW) determination under the California Endangered Species Act (CESA). This letter summarizes procedural moments related to previous notifications and requests, our analysis and response concerning the current request, and provides additional information.

Procedural summary

On June 17, 2009, CDFW received a notification from Director Snow of the California Department of Water Resources (DWR), on behalf of DWR, that on December 15, 2008, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion (USFWS File No. 814230-2008-F-1481-5) (BiOp) for the coordinated long-term operations of the Central Valley Project (CVP) and State Water Project (SWP), which includes the continued operation of the SWP (Project), referenced above. (See Cal. Reg. Notice Register 2009, No. 27-Z, p. 1057.) The BiOp describes the Project and sets forth a series of measures to minimize and fully mitigate the incidental take of Delta smelt, a species designated as endangered pursuant to the CESA. (Fish & G. Code, § 2050 et seq.). (See Cal. Code Regs., tit. 14 § 670.5, subd. (a)(2)(O).)

Director Snow’s June 17, 2009 notification included a request pursuant to Fish and Game Code section 2080.1 that CDFW determine the BiOp, including its Incidental Take Statement (ITS), is consistent with CESA as to the Project. On July 16, 2009, CDFW determined that the BiOp, including its ITS, is consistent with CESA. (Ref. No. 2080-2009-007-00.)

On October 10, 2011, CDFW Director Bonham received a written request from DWR Director Cowin for a determination pursuant to Fish and Game Code section 2080.1 that the December 15, 2008 BiOp, as enjoined in part by an order of the Federal District Court, was consistent with CESA. (Cal. Reg. Notice Register 011, No. 42-Z, p. 1704.) On October 14, 2011, CDFW issued a consistency determination to DWR, approving
certain changes made at that time to Reasonable and Prudent Alternative Component 3, Action 4 (the Fall X2 Action) of the December 15, 2008 BiOp. (Ref. No. 2080-2011-022-00.) In the October 2011 consistency determination, on page four, CDFW stated that "[t]he Fall X2 action is expected to be fully implemented in future years. The continued implementation of the Fall X2 action in future years when applicable is integral to DFG's ability to find consistency." As you know, this year is the first year since 2011 that the water year designation triggers the Fall X2 Action.

On September 26, 2017, the USFWS issued a memorandum (USFWS File No. 81420-2008-F-1481-15) (2017 Memorandum) responding to a request from U.S. Bureau of Reclamation (Reclamation) for a modified implementation of the Fall X2 Action in October 2017.

Specifically, the 2017 Memorandum authorized a change in the Fall X2 Action, which requires that Fall X2 be maintained at a monthly average no further east than 74 km from the Golden Gate in September and October following a wet water year. This fall follows a wet water year. The 2017 Memorandum allows average X2 in October to be maintained at no farther east than 80 km in calendar year 2017 only. All other requirements of the BiOp and its ITS remain unchanged.

On September 29, 2017, CDFW received your notification, on behalf of DWR that the 2017 Memorandum was issued by the USFWS, and request that CDFW determine that the BiOp and ITS, as amended by the 2017 Memorandum, is consistent with CESA for the proposed Project.

Department analysis and response concerning current request

CDFW has determined that the change to the implementation of the Fall X2 Action in October 2017 is not consistent with CESA as to the Project described in the BiOp, and therefore the request is denied. Please see the attached determination for a full explanation.

CDFW's determination is not a criticism of the USFWS or its 2017 Memorandum. Nor is it a CDFW response under or to the federal Endangered Species Act. We understand the 2017 Memorandum and agree that more collaborative science should be directed towards questions such as the precise location of any monthly average. New science may lead to a CDFW conclusion supporting different monthly average locations.

We believe in and have helped complete additional actions to benefit food supply and other components of habitat. We appreciate the various efforts to further collaborative monitoring. We understand and support adaptive management pursued through the Collaborative Science and Adaptive Management Process (CSAMP). CDFW has proven its ability to work creatively and flexibly with DWR, federal agencies, water agencies and districts, and non-governmental organizations. We renew our commitment on these fronts.
At this exact moment, however, in response to your notification and current request, CDFW is faced with a different question and a different standard under state law than any under the federal Endangered Species Act. CDFW must respond to your request under the CESA.

In order for CDFW to determine that there is substantial evidence that the 2017 proposal is consistent with CESA as it would pertain to incidental take of Delta smelt by DWR during the last two weeks of October 2017, CDFW would need to find that the impacts of the proposal have been minimized and fully mitigated as required by Fish and Game Code section 2081, subdivision (b)(2). The 2017 Memorandum, Reclamation’s analysis of the effects, and the record in front of CDFW related to this proposal do not support such a finding. The 2017 Memorandum identified that under the original 81 km proposal, the average area of the low-salinity zone would be reduced by 37% in October, in comparison to maintenance of X2 at 74 km. There was a reduction in effects to Delta smelt habitat as the X2 location moved westward to 78 km. However, the 2017 Memorandum shows that at 78 km, the average area of the low-salinity zone would be reduced by as much as 7 percent. For this reason, USFWS encouraged but did not require Reclamation and DWR to hold the October X2 location westward of 80 km as much as possible to limit modeled habitat changes. The record also shows that the final proposal of 80 km, while much better than the 81 km, still causes a double digit percent reduction in habitat suitability both as to area and quality.

In summary, the record created and presented to DFW is substantial evidence that there are impacts to Delta smelt from the 2017 proposal that are not minimized and fully mitigated. In addition, CDFW’s current 2011 consistency determination for DWR specifically alerted all parties that the maintenance of the Fall X2 Action in future applicable years was an integral component of determining consistency under CESA.

Additional information

First, today is October 17, 2017. Two weeks remain in this month under the 2017 Memorandum. The 2017 Memorandum approved a one-month modification to the location of X2 in October 2017 only, after which the 2008 BiOp must be implemented in its substantively unamended form. DWR will pursue an operations plan for the month of October that reduces exports to adhere to a westerly position of X2. DWR’s independent commitment to conducting its operations to do what it can to achieve an average X2 location of 79 for the month of October 2017 significantly minimizes any short-term habitat effects to Delta smelt. Therefore, CDFW has also determined that the 2011 consistency determination, Ref. No. 2080-2011-022-00, shall remain operative under CESA as to DWR’s ongoing implementation of the Project, the 2008 BiOp and its ITS, as that implementation is described without the 2017 proposal.

Second, I wish to thank DWR and the SWP water agencies, districts, and contractors. CDFW is making a decision under its applicable laws. CDFW acknowledges that Reclamation and the Central Valley Project may not assist DWR and SWP for the remainder of October. DWR has committed to CDFW to make best efforts to keep X2 at 79 km monthly average for October. If the Bureau and CVP do not assist, CDFW
acknowledges that, as compared to operating jointly at 80 km, there may be up to a 50,000 acre foot impact bore by the SWP. Moreover, it is CDFW’s understanding that DWR’s best effort commitment to keep X2 westward with no additional contributions from the CVP represents at least the water cost that would have been DWR’s portion of shared responsibility if both DWR and Reclamation had jointly sought to meet 74 km.

Third, there is science work to be done regarding the X2 Action. CDFW highlights the portion of the Fall X2 Action that requires USFWS to conduct a comprehensive review of the action in 2018, including an independent peer review of the full history of the action. CDFW expects to actively participate if the USFWS pursues such review. CDFW acknowledges that the actual Reasonable and Prudent Alternative Component 3, Action 4 (the Fall X2 Action) indicates this scientific process could result in modification of the action, continuation, or termination.

Fourth, if I could as Director of CDFW, I would invoke the Water Infrastructure Improvements for the Nation Act (WIIN Act) to require an offset for the SWP and payback for any inequitable outcome due to inconsistency under state law, which as you know is a provision in section 4005 of the Act. On that front, I encourage a renewed dialogue with you, me, and our federal counterparts. The CVP and SWP work together in tandem. We all made the best decisions possible during the unprecedented drought because of close and consistent coordination. If Reclamation or the CVP are contemplating future adjustments to the biological opinions governing the CVP and SWP, or are considering more operational changes under the WIIN Act, we will find us all right back where we are now managing different laws and standards and facing inequitable results. I would encourage all to avoid that future through continued close coordination.

Finally, to enable coordinated and collaborative management and CESA oversight of the SWP, CDFW strongly encourages DWR to consider submitting an application to CDFW for an incidental take permit, pursuant to Fish and Game Code, section 2081, subdivision (b), for its operations of the SWP regarding incidental take of Delta smelt. DWR already has a permit-based relationship for longfin smelt. CDFW stands ready to consult with DWR regarding that process, if you decide the state’s best interest and the SWP’s future requires more freedom from federal processes.

If you have questions regarding CDFW’s inconsistency determination, please contact Carl Wilcox, Policy Advisor to the Director for the Delta at (707) 944-5517.

Sincerely,

Chariton H. Bonham, Director
California Department of Fish and Wildlife

Enclosure
Mr. Grant Davis, Director  
California Department of Water Resources  
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Project: Continued Operation of the State Water Project Incorporating October 2017 Proposed Change to Component 3, Action 4 of to the 2008 Biological Opinion for the Coordinated Long-Term Operation of the Central Valley Project and State Water Project

Location: Sacramento-San Joaquin Delta and Suisun Marsh and Suisun Bay

Applicant: California Department of Water Resources

Notifier: Grant Davis, Director

Background

The proposed project (Project) by the Department of Water Resources (DWR) is the continued operation of the State Water Project (SWP) and other water diversion, storage, and conveyance actions that are described in the Operations Criteria and Plan (OCAP) for the long-term operations of the SWP and federal Central Valley Project (CVP) and the federal Biological Opinion (BiOp) issued by the U.S. Fish and Wildlife Service (USFWS) on December 15, 2008, based on the OCAP Biological Assessment (BA) consultation for the protection of Delta smelt (Hypomesus transpacificus).

Existing Project facilities in the Delta include Clifton Court Forebay, John E. Skinner Fish Facility, Harvey O. Banks Pumping Plant, and the North Bay Aqueduct at Barker Slough (NBA). Facilities which are operated in coordination with the federal CVP are the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, Goodyear Slough Outfall, Delta Cross Channel (DCC) gates, and the South Delta Temporary Barriers Project. Other facilities of the SWP include Lake Oroville which is operated for flood control, water supply and power generation. Oroville facilities are part of the SWP but are not part of the Project.

The SWP is operated to provide flood control and water for agricultural, municipal, industrial, recreational, and environmental purposes. Water from Oroville facilities and the Sacramento-San Joaquin Rivers are captured in the Delta and conveyed to SWP contractors. Water is stored in Oroville Reservoir and released to serve three Feather River area contractors and two NBA contractors, and water is delivered to an additional 24 contractors in the SWP service areas south of the Delta from the Harvey O. Banks Pumping Plant.

Facilities of the SWP are permitted by the California State Water Resources Control Board
(SWRCB) to divert water in the Delta and to re-divert water that is stored in upstream reservoirs. The U.S. Bureau of Reclamation (Reclamation) and DWR coordinate the operations of the SWP and CVP to meet water quality, quantity, and operational criteria in the Delta set by the SWRCB and to meet federal Endangered Species Act (ESA) (16 U.S.C. § 1531 et seq.) requirements for Central Valley steelhead, and green sturgeon, ESA and California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) requirements for Delta smelt, winter and spring-run Chinook salmon, and CESA requirements for the threatened longfin smelt. The Sacramento-San Joaquin Bay-Delta is home to the Delta smelt. Flow disruption, loss of habitat and entrapment caused by the SWP exports result in incidental take of Delta smelt.

Because the Project has the potential to take a species listed under ESA, Reclamation, on behalf of DWR, consulted with the USFWS under Section 7 of the ESA. On December 15, 2008, the USFWS issued a BiOp, which includes an incidental take statement (ITS). (USFWS Ref. No. 814230-2008-F-1481-5.) The BiOp describes the Project, including conservation measures developed to minimize impacts to Delta smelt, and sets forth measures to mitigate any remaining impacts to Delta smelt and its habitat. The measures in the BiOp include one Reasonable and Prudent Alternative (RPA) with five components which must be implemented and adhered to. The RPA actions are to be implemented using an adaptive approach with specific defined constraints. The BiOp includes a detailed description of the adaptive process, its framework, and the rationale for each of the RPA components.

On June 17, 2009 Chief Deputy Director McCamman of the Department of Fish and Game, now the Department of Fish and Wildlife (CDFW), received correspondence from DWR Director Snow, requesting a determination from CDFW that the BiOp and its incidental take statement are consistent with CESA pursuant to Fish and Game Code section 2080.1 for purposes of the Project and Delta smelt. (Cal. Reg. Notice Register 2009, No. 27-Z, p. 1057.) On July 16, 2009, CDFW issued a consistency determination to DWR which was signed by CDFW Deputy Director John McCamman. (Ref. No. 2080-2009-007-00.)

On September 26, 2011, Federal District Court Judge Oliver Wanger issued a second amended order enjoining full implementation of RPA Component 3, Action 4 (the “Fall X2 Action”) set forth in the December 15, 2008 USFWS BiOp. Specifically, the Wanger order enjoined the implementation of the 74 km X2 target and prohibited the imposition of an X2 target west of 79 km commencing October 16 through November 30, 2011. The Wanger order did not eliminate the Fall X2 Action but modified the 74 km criteria from the RPA for calendar year 2011 only. All other requirements of the RPA remained in effect.

On October 10, 2011, CDFW Director Bonham received a written request from DWR Director Cowin for a determination pursuant Fish and Game Code section 2080.1 that the USFWS BiOp for Delta smelt, as enjoined in part by the Wanger order, including its ITS, was consistent with CESA such that no further authorization from CDFW was necessary for Project related incidental take of Delta smelt. (Cal. Reg. Notice Register 2011, No. 42-Z, p. 1704.) On October 14, 2011, CDFW issued a consistency determination to DWR which was signed by CDFW Deputy Director Sandra Morey. (Ref. No. 2080-2011-022-00.)

Inconsistency Determination
No. 2080-2017-009-03
On September 7, 2017, Reclamation, in coordination with DWR, requested reinitiation of consultation with the USFWS to change the implementation of the Fall X2 Action based on new science, additional monitoring, and special circumstances related to failure of the Oroville Dam spillway and subsequent carryover storage restrictions. Under this proposal, Reclamation and DWR propose to operate to achieve a Fall X2 location in October 2017 no more easterly than 81 km. Fall X2 Action requirements for September and November would remain unchanged. On September 26, 2017, Reclamation modified the proposal, to instead operate to achieve an October monthly average X2 location no more easterly than 80 km. (Collectively, "2017 proposal").

On September 26, 2017, USFWS issued a memorandum authorizing the proposed change to maintain an average X2 no more eastward than 80 km for the month of October. (USFWS Ref. No. 81420-2003-F-1481-15, "USFWS 2017 Memorandum"). The amendment was for a one-month change to the Fall X2 Action in October 2017 within the limited context of its adaptive management provisions. The 2017 proposal includes modified operations of the DCC gates, a Reclamation facility, to be implemented at the request of CDFW. The 2017 proposal also includes continuation of ongoing monitoring to test the support for the conceptual models linking Delta smelt growth and survival to food availability and other habitat opportunities that change with the location of the low-salinity zone. This monitoring will include the Enhanced Delta Smelt Monitoring (EDSM) program conducted by USFWS, and contemporaneous habitat quality sampling by Reclamation to characterize the habitat conditions experienced by Delta smelt, collected by the EDSM in real time. Additionally, fish collected by EDSM will be assessed for health and fitness in the laboratory. This monitoring is in addition to normal monitoring conducted by the Interagency Ecological Program to assess fish distribution and ecological conditions in the Delta. Unless otherwise noted, the amendment did not change the ITS or any other information or requirements of the BiOp.

Subsequently on September 29, 2017, CDFW Director Bonham received a written request from DWR Director Davis for a determination pursuant to Fish and Game Code section 2080.1 that the USFWS BiOp for Delta smelt, as amended in response to the request from Reclamation, is consistent with CESA for the purposes of the Project and Delta smelt.

The Project activities described above are expected to incidentally take\(^1\) Delta smelt where those activities take place within the Sacramento-San Joaquin Bay-Delta, Suisun Marsh and Suisun Bay. In particular, Delta smelt could be incidentally taken as a result of Project operations due to entrainment into Project facilities, and loss of habitat and food supply as a result of changes in Delta inflows and outflow. Delta smelt is designated as a threatened species pursuant to the federal ESA and an endangered species pursuant to CESA. (See Cal. Code Regs., tit. 14, § 670.5, subd. (a)(2)(O).)

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\(^1\) Pursuant to Fish and Game Code section 86, “‘Take’ means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” See also Environmental Protection Information Center v. California Department of Forestry and Fire Protection (2008) 44 Cal.4th 459,507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), “take”...means to catch, capture or kill”).
Delta smelt individuals are endemic to the waters of the Sacramento-San Joaquin Bay-Delta, Suisun Bay and Marsh and the upper reaches of San Pablo Bay and are regularly salvaged in the winter and spring at the Project’s John E. Skinner Fish Facility. Project operations also affect the quality and abundance of Delta smelt habitat within its entire range. The USFWS determined that Delta smelt is reasonably certain to occur within the Project area and that Project activities are expected to result in the incidental take of Delta smelt.

According to the USFWS 2017 Memorandum, implementation of the 2017 proposal will temporarily reduce Delta smelt habitat during October as a result of the requested change in X2 location. USFWS did not find a clear causal link between this temporary change in Delta smelt critical habitat and population-level effects on Delta smelt because the requested change is short term in nature. USFWS concluded that the requested deviation in the monthly average X2 position in October 2017 is not likely to have detectable effects on the Delta smelt population given the comparatively longer time scales used to inform existing datasets and analyses.

**Determination**

After review and consideration of the 2017 proposal addressed by the USFWS 2017 Memorandum, CDFW has determined that there is substantial evidence to conclude the 2017 proposal is **not consistent** with CESA because the required measures do not meet the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c), for authorizing incidental take of CESA-listed species. This determination is based on the following considerations:

The 2017 proposal would result in greater impacts to Delta smelt habitat in 2017 than were considered in the 2008 BiOp, and therefore the proposal is not consistent with the requirements of Fish and Game Code section 2081, subdivision (b), that the impacts of the authorized taking must be minimized and fully mitigated. The USFWS 2017 Memorandum identified that under the original 81 km proposal, the average area of the low-salinity zone would be reduced by 37% in October, in comparison to maintenance of average X2 at 74 km. Under assumptions of either low or high turbidity, the effects analysis provided with the 2017 proposal also shows that an average X2 of 81 for October would reduce habitat suitability by 32 to 33%, while an X2 of 80 for October would result in an approximate 16 to 18% reduction in habitat suitability, in comparison to what would occur with an average X2 at 74 km. According to the effects analysis provided with the 2017 proposal, there was a continued reduction in effects to Delta smelt habitat suitability and area as the X2 location moved westward. For this reason, USFWS encouraged, but did not require, Reclamation and DWR to hold the October X2 location westward of 80 km as much as possible to limit modeled habitat changes.

CDFW's 2011 consistency determination, Ref. No. 2080-2011-022-00, was based on the expectation that the Fall X2 Action would be fully implemented in future years, and identified that continued implementation as integral to CDFW's ability to find consistency at that time. Also in 2011, the only other year in which the Fall X2 Action has been applicable, modeling
indicated that the monthly average X2 location under the Wanger order would effectively achieve the unmodified Fall X2 Action.

Therefore, the effects analysis prepared by Reclamation as a part of the 2017 proposal and the USFWS 2017 Memorandum identify new impacts associated with the October 2017 proposal that are not minimized and fully mitigated. For the reasons described above, CDFW has determined there is substantial evidence that the 2017 proposal is not consistent with CESA as it would pertain to incidental take of Delta smelt by DWR during October 2017 because CDFW cannot find that the impacts have been minimized and fully mitigated as required by Fish and Game Code section 2081, subdivision (b)(2).

The USFWS amended the 2008 BiOp only as to a one-month modification to the location of X2 in October 2017 only, after which the 2008 BiOp must be implemented in its substantively unamended form. The 2017 proposal is of a temporary nature and does not in and of itself modify implementation of the Fall X2 Action in subsequent years, nor does it affect the underlying information, Project operations or Reasonable and Prudent Alternative components that govern the Project after October 2017. Operations in September and November 2017 would not deviate from the 2008 BiOp. The Project presents an ongoing operation that is subject to unique circumstances and regulatory constraints in each water year. Independently, DWR will pursue an operations plan for the month of October 2017 that reduces exports to adhere to a monthly average X2 location of 79 km, implementing the USFWS recommendation from the BiOp Amendment and significantly minimizing short-term habitat effects to Delta smelt. Specifically, in comparison to the 37% reduction in the low-salinity zone area resulting from an X2 location at 81 km, an average location of 79 km results in a 12% reduction in the low-salinity zone area from what would occur with average X2 of 74 km. Further, the Fall X2 Action is structured as and subject to adaptive management, and its terms require USFWS to conduct a comprehensive review of the action in 2018, including an independent peer review of the full history of the action. For these reasons, CDFW has determined that the 2011 consistency determination, Ref. No. 2080-2011-022-00, shall remain operative under CESA as to DWR’s ongoing Implementation of the Project, the 2008 BiOp and its ITS, as that implementation is described without the 2017 proposal.

If the Project as described in the BiOp, excluding the specific RPA amendments for October 2017, changes after the date of this determination, or if the USFWS amends or replaces the BiOp, including any of the RPAs, DWR will need to obtain from CDFW a new consistency determination (in accordance with Fish and Game Code section 2080.1) or an incidental take permit (in accordance with Fish and Game Code section 2081, subdivision (b)).

By: ____________________________ Date: ________________
Sandra Morey, Deputy Director
Ecosystem Conservation Division
California Department of Fish and Wildlife