

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
ECOSYSTEM CONSERVATION DIVISION
P.O. BOX 944209
SACRAMENTO, CA, 94244-2090



AMENDMENT NO. 8
(A Minor Amendment)
California Endangered Species Act
Incidental Take Permit No. 2081-2019-066-00
California Department of Water Resources
Long-Term Operation of the State Water Project in the Sacramento-San Joaquin Delta

INTRODUCTION

On March 31, 2020, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2019-066-00 (ITP) to California Department of Water Resources (Permittee), authorizing take of Longfin Smelt (LFS, *Spirinchus thaleichthys*), Delta Smelt (DS, *Hypomesus transpacificus*), spring-run Chinook salmon (CHNSR, *Oncorhynchus tshawytscha*), and winter-run Chinook salmon (CHNWR, *Oncorhynchus tshawytscha*) (collectively, the Covered Species) associated with and incidental to the long-term operations of the State Water Project (SWP) in the Sacramento San Joaquin Delta (Project).

The Project as described in the ITP as originally issued by CDFW includes continued operation of the SWP facilities in the Sacramento-San Joaquin Delta (Delta) and Suisun Marsh. The SWP includes water, power, and conveyance systems, conveying an annual average of 2.9 million acre-feet of water. The principal components of the Project are operations of the Harvey O. Banks Pumping Plant (Banks Pumping Plant), the Clifton Court Forebay, the John E. Skinner Delta Fish Protective Facility, the Barker Slough Pumping Plant, the South Delta Temporary Barriers, San Luis Reservoir, the Delta Mendota Canal/California Aqueduct Intertie, the Georgiana Slough Migratory Barrier, and Suisun Marsh facilities including the Suisun Marsh Salinity Control Gates, Roaring River Distribution System, Morrow Island Distribution System, and Goodyear Slough Outfall. Permittee holds contracts with 29 public agencies in northern, central, and southern California for water supplies from the SWP. Water stored in the Oroville facilities, along with water available in the Delta (consistent with applicable regulations) is captured in the Delta and conveyed through several facilities to SWP contractors. The SWP is operated to provide flood control and water for agricultural, municipal, industrial, recreational, and environmental purposes. In issuing the ITP, CDFW found, among other things, that Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate Project impacts of the taking on the Covered Species and that issuance of the ITP would not jeopardize the continued existence of the Covered Species.

The Project includes technical teams that meet on a weekly basis for a portion of each year to assess the risk of entrainment of Covered Species in the south Delta, including the Smelt and Salmon Monitoring Teams, and to ensure that minimization measures that require reductions in exports at the Banks Pumping Plant are implemented.

In a letter dated September 30, 2020, Permittee requested changes to Conditions of Approval 8.1.1, 8.1.4, 8.3.1, 8.5.1, 9.1.3, and 9.2.1. Specifically, Permittee requested to change the start date for the Smelt Monitoring Team in Condition of Approval 8.1.1 and 8.1.4 to begin no later than November 1 each year to ensure consistency throughout the ITP. Permittee also asked to change the units used to report turbidity in Conditions of Approval 8.3.1, 8.5.1, and 9.1.3 from Nephelometric Turbidity Units (NTU) to Formazin Turbidity Units (FNU). Finally, Permittee requested an extension in the deadline for the first funding milestone required in Condition of Approval 9.2.1 to April 1, 2021 and clarifications to the requirements of that condition for funding restoration actions in the Sacramento River. These clarifications allow individual projects that receive funding to benefit either CHNWR or CHNSR, or both species, and allow Permittee to fund larger projects that extend over multiple years. On October 16, 2021 CDFW issued minor amendment 2081-2019-066-00-A1, including the requested changes to Conditions of Approval 8.1.1, 8.1.4, 8.3.1, 8.5.1, 9.1.3, and 9.2.1.

In a letter dated May 18, 2021, Permittee requested changes to Section 2.2 of the Project Description. Specifically, Permittee requested to change the description of Project operations for the June 1 – August 15, 2021 time period to incorporate modifications to Water Rights Decision 1641 (D-1641) included in the 2021 Temporary Urgency Change Petition Regarding Delta Water Quality (WY 2021 TUCP) submitted to the State Water Resources Control Board (SWRCB) by Permittee and the U.S. Bureau and Reclamation (Reclamation) on May 17, 2021, as subsequently approved by the SWRCB on June 1, 2021. Changes to D-1641 approved by the SWRCB included modifications to Delta outflow and salinity standards between June 1 and August 15, 2021, requirements to reduce SWP and Central Valley Project (CVP) exports from June 1 – August 15, 2021, and requirements to conduct new data analyses and synthesis to better understand impacts of critically dry years on fish species in the Delta. On June 2, 2021 CDFW issued minor amendment 2081-2019-066-00-A2, including changes to Section 2.2 of the Project Description reflective of the WY 2021 TUCP approval by the SWRCB.

In a letter dated March 18, 2022, Permittee requested changes to Condition of Approval 8.12 (Barker Slough Pumping Plant Longfin and Delta Smelt Protection). Specifically, Permittee requested the ability to meet and confer with CDFW regarding required export restrictions at the Barker Slough Pumping Plant (BSPP) if a larval DS were detected at Station 716 from April 1 – June 30, 2022. This request was made as a result of the ongoing drought, to implement the directive to the Permittee in an October 19, 2021

Emergency Proclamation, to proactively prevent situations where a community runs out of drinking water by assisting local agencies with identifying acute drinking water shortages in domestic water supplies, and working with local agencies in implementing solutions to those water shortages. The orders and provisions of the October 2021 proclamation were maintained in full force and effect by a subsequent Executive Order issued on March 28, 2022 by the Governor. Permittee requested the ability to establish a maximum diversion rate at the BSPP based on diversion rates needed to provide minimum health and safety deliveries to customers of the North Bay Aqueduct and proactively ensure that no community within the North Bay Aqueduct service area runs out of drinking water. On April 1, 2022, CDFW issued minor amendment 2081-2019-066-00-A3, modifying Conditions of Approval 8.12 and 9.1.1 in response to this request.

Also in its March 18, 2022 letter, Permittee requested to change the description of Project operations for the April – June, 2022 time period to incorporate modifications to D-1641 included in the Water Year (WY) 2022 TUCP submitted to the SWRCB by Permittee and Reclamation on March 18, 2022, as approved by the SWRCB on April 4, 2022. Changes to D-1641 approved by the SWRCB include: 1) modifications to Delta outflow and salinity standards between April 4 – June 30, 2022; 2) requirements to reduce SWP and Central Valley Project (CVP) exports from April 4 – June 30, 2022 when not meeting D-1641 standards; 3) requirements to evaluate the feasibility of dedicating a portion of the water conserved as a result of the WY 2022 TUCP to provide pulse flows or other flow enhancements above and beyond D-1641 requirements; 4) requirements to conduct modeling, monitoring analysis and reporting to inform drought-related operational decisions and planning; and 5) requirements to conduct monitoring and reporting to facilitate improved understanding of operations during the April – June, 2022 time frame and associated impacts. On April 5, 2022, CDFW issued minor amendment 2081-2019-066-00-A4, adding section 2.2.2 to the Project Description in response to this request.

In a letter dated July 22, 2022, Permittee requested changes to Conditions of Approval 7.7 and 8.5.2. Specifically, Permittee requested to change the requirement for Designated Biologists in Condition of Approval 7.7. The requested change would require a Designated Biologist to be present during weed removal activities at BSPP only when LFS or DS are detected at station 716 in the most recent Smelt Larva Survey or 20mm Survey. Permittee also asked to replace the detection of more than 11 juvenile DS in expanded salvage as an indicator of entrainment risk triggering certain requirements of Condition of Approval 8.5.2 with a south Delta habitat-based trigger. Specifically, the Permittee requested to use a turbidity threshold that is representative of conditions that correlate with larval and juvenile DS presence in the south Delta. On August 30, 2022, CDFW issued minor amendment 2081-2019-066-00-A5, modifying Conditions of Approval 7.7 and 8.5.2 in response to this request.

In a letter dated January 18, 2023, Permittee requested changes to Condition of Approval 8.6.3. Specifically, Permittee requested to change the requirement to use length at date methods to identify natural origin older juvenile Chinook salmon to allow for the use of genetic analyses, in 2023. The requested change would allow Permittee to use CDFW-approved genetic analyses to identify all older juvenile Chinook salmon observed in salvage at the SWP and CVP. Specifically, the Permittee requested to only count genetically-confirmed CHNWR toward the daily loss thresholds identified in Condition of Approval 8.6.3. On January 20, 2023, CDFW issued minor amendment 2081-2019-066-00-A6, modifying Condition of Approval 8.6.3 during water year 2023 in response to this request.

In a letter dated February 15, 2023, Permittee requested to change the description of D-1641 requirements in February and March, 2023 to incorporate modifications included in the Water Year (WY) 2023 TUCP that Permittee and Reclamation submitted to the SWRCB on February 13, 2023. The WY 2023 TUCP requests the SWRCB to remove a requirement to maintain X2 at Port Chicago during February and March 2023 when specific basin-wide hydrologic and Port Chicago electrical conductivity conditions otherwise would require X2 to be maintained at Port Chicago. On February 21, 2023, the SWRCB issued an order conditionally approving the WY 2023 TUCP. Changes to D-1641 approved by the SWRCB include: 1) modifications to Delta outflow and salinity standards from February 21, 2023 through March 2023; 2) requirements to conduct monitoring and reporting to facilitate improved understanding of the effects of the approved change on native resident and migratory species, including potential changes in entrainment of native fish species in the SWP and CVP export facilities; and 3) requirements to identify opportunities to use a portion of the water supplies resulting from the WY 2023 TUCP to improve water supplies for wildlife refuges and to provide for pulse flows for the benefit of native fish and wildlife. On February 23, 2023, CDFW issued minor amendment 2081-2019-066-00-A7, adding Section 2.2.3, Temporary Urgency Change Petition, February and March 2023, to the Project Description and Condition of Approval 9.2.3, Mitigation for Impacts Associated with WY 2023 TUCP, in response to this request.

In a communication dated December 11, 2023, Permittee requested changes to Condition of Approval 8.6.3. The requested change would allow Permittee to use CDFW-approved genetic analyses to identify all older juvenile Chinook salmon observed in salvage at the SWP and CVP. Specifically, the Permittee requested to only count genetically confirmed CHNWR toward the daily loss thresholds identified in Condition of Approval 8.6.3.

In issuing the ITP and Minor Amendments Nos. 1 through 7 (collectively “the ITP, as amended”), CDFW found, among other things, that the Permittee’s compliance with the Conditions of Approval of the ITP, as amended, would fully mitigate impacts to the

Covered Species and would not jeopardize the continued existence of the Covered Species.

This Minor Amendment No. 8 (Amendment) makes the following changes to the existing ITP:

1. Modifies Condition of Approval 8.6.3

AMENDMENT

The ITP is amended as follows (amended language in ***bold italics***; deleted language in ~~strikethrough~~):

1. Condition of Approval 8.6.3, ITP page 90 (Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold) shall be modified to read:

To minimize entrainment, salvage, and take of natural CHNWR during the peak and end of their migration through the Delta. Permittee shall restrict south Delta exports for five days to achieve a five-day average OMR index no more negative than -3,500 cfs when daily loss of natural older juveniles at the SWP and CVP salvage facilities exceeds the following thresholds based on the JPE reported in January of the same calendar year:

- January 1 – January 31: ~~0.00635~~ ***0.00124*** % of the CHNWR JPE
- February 1 – February 28: ~~0.00994~~ ***0.00231*** % of the CHNWR JPE
- March 1 – March 31: ~~0.0146~~ ***0.00372*** % of the CHNWR JPE
- April 1 – April 30: ~~0.00507~~ ***0.00226*** % of the CHNWR JPE
- May 1 – May 31: ~~0.0077~~ ***>0*** % of the CHNWR JPE

All natural older juvenile Chinook salmon juveniles shall be identified based on the Delta Model length-at-date criteria. Loss shall be calculated for the South Delta Export Facilities using the equation provided in CDFW 2018 (Attachment 6). This Condition of Approval may be modified through the process described in Condition of Approval 8.6.6 and an amendment to this ITP.

For the time this Amendment is in effect, Permittee shall restrict exports in response to the initial length-at-date identification of natural older juvenile Chinook salmon and the thresholds described above. If genetic analysis of an individual natural older juvenile Chinook salmon observed in salvage at the

SWP or CVP indicates that it is not CHNWR, that individual shall not count toward the daily loss threshold and continued export restrictions under this Condition of Approval are not required if the daily loss threshold has consequently not been met. All genetic analyses shall be conducted using CDFW-approved genetic methods.

All terms and conditions of the ITP as amended, and MMRP that are not expressly amended herein remain in effect and must be implemented and adhered to by the Permittee.

FINDINGS

Issuance of this Amendment will not increase the amount of take of the Covered Species compared to the Project as originally approved, nor will this Amendment increase other Project impacts on the Covered Species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).

Discussion: This Amendment makes changes to the ITP Condition of Approval 8.6.3 as originally issued. ITP Condition of Approval 8.6.3 has been changed to allow Permittee to use CDFW-approved genetic analyses to determine whether older juvenile Chinook salmon observed in salvage at the SWP and CVP south Delta facilities are CHNWR. If genetic analyses determine that an individual is not CHNWR that individual shall not be counted toward the daily loss threshold described in Condition of Approval 8.6.3. This Amendment also updates the CHNWR daily loss thresholds described in Condition of Approval 8.6.3. The updated thresholds are estimates of the average daily loss of genetically identified CHNWR, instead of older juvenile Chinook salmon identified using the length-at-date method, for the January - May period. No genetically identified winter-run have been observed in salvage in May in the historic record.

In water year 2023 CDFW issued a minor amendment to account for an unexpected error in adipose fin clipping and coded-wire tagging of hatchery produced late-fall run Chinook salmon from the Coleman National Fish Hatchery on Battle Creek which could have led to the fish being mistakenly identified as natural origin if observed in salvage. This unexpected error in hatchery tagging highlighted the potential for error in implementing Condition of Approval 8.6.3 if relying solely on length-at-date run identification methods and led CDFW to review the appropriateness of including genetic analyses for identification of natural origin CHNWR. Through that review, CDFW concluded that CDFW-approved methods for genetic analysis were an appropriate tool for identifying natural origin CHNWR. Subsequently, CDFW updated the CHNWR daily loss thresholds (% of Juvenile Production Estimate) in Condition of Approval 8.6.3. The updated thresholds are estimates of the average daily loss of genetically identified

CHNWR. CDFW has determined the resulting daily loss thresholds as amended with consideration of both LAD and genetics reflect the best available science.

CDFW has determined that changes to the Condition of Approval of the ITP will not increase the amount of take or the severity of other impacts of the taking on the Covered Species. Given the circumstances of this Project, CDFW believes that the changes to ITP Condition of Approval 8.6.3, Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold, are not likely to increase impacts of the Project to the Covered Species.

Issuance of this Amendment does not affect CDFW's previous determination that issuance of the ITP meets and is otherwise consistent with the permitting criteria set forth in Fish and Game Code section 2081, subdivisions (b) and (c).

Discussion: CDFW determined in March 2020 that the Project, as approved, met the standards for issuance of an ITP under CESA. This determination included findings that, among other things, the impacts of the taking would be minimized and fully mitigated and that the Project would not jeopardize the continued existence of the Covered Species. Those findings are unchanged with respect to this Amendment because the Project and ITP as amended: (1) will have no effect on the amount or severity of Project impacts on the Covered Species, as discussed above, and (2) does not substantively alter the measures that will be undertaken to minimize and mitigate previously authorized impacts on the Covered Species. As discussed above, CDFW has concluded that the modifications to the method used to identify Chinook salmon and quantify loss of natural-origin CHNWR at the SWP and CVP salvage facilities provide equivalent minimization value to the prior ITP provisions.

Permittee's continued adherence to and implementation of the avoidance, minimization and mitigation measures set forth in the Conditions of Approval of the ITP, as amended and associated MMRPs will minimize and fully mitigate impacts of the taking on the Covered Species.

None of the factors that would trigger the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163, exist as a result of this Amendment.

Discussion: CDFW issued the ITP in March 2020 as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) after, among other things, considering the Environmental Impact Report (EIR) certified by Permittee as the lead agency for the Project. In conjunction with its request for this minor amendment, on December 11, 2023, Permittee submitted to CDFW a copy of an

addendum to the EIR, which concluded that the amendment request gave rise to no new or substantially more severe significant environmental impacts, and that subsequent or supplemental environmental review is not warranted. Permittee filed a Notice of Determination on this addendum on December 7, 2023. As explained in the findings below, CDFW finds for purposes of CESA that this Amendment is a minor change to the original ITP. CDFW finds for the same reasons under CEQA that approval of the Amendment will not result in and does not have the potential to create any new significant or substantially more severe environmental effects than previously analyzed and disclosed by Permittee during its lead agency review of the Project, particularly with respect to the impacts authorized by CDFW pursuant to the ITP as amended. As a result, CDFW finds that no additional subsequent or supplemental environmental review is required by CEQA as part of CDFW's approval of this Amendment.

CDFW finds that this Amendment is a Minor Amendment, as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(4).

Discussion: This Amendment makes limited changes to an ITP Condition of Approval to allow Permittee to use CDFW-approved genetic analyses to determine whether older juvenile Chinook salmon observed in salvage are CHNWR. For the time this Amendment is in effect, if genetic analyses determine that an individual is not CHNWR it will not be counted toward the daily loss threshold, as amended, in Condition of Approval 8.6.3. These changes to the ITP will not: (1) increase the level of take or other Project impacts on Covered Species previously analyzed and authorized by the ITP, (2) affect Permittee's substantive mitigation obligations under the ITP, (3) require further environmental review under CEQA, or (4) increase temporal impacts on the Covered Species. Therefore, this Amendment will not significantly modify the scope or nature of the permitted Project or activity, or the minimization, mitigation, or monitoring measures in the ITP. CDFW has determined that the change to the ITP constitutes a Minor Amendment as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(4).

The authorization provided by this Amendment is not valid until signed by all parties and returned to CDFW. Digital signatures facilitated by CDFW will be automatically returned and shall comply with Government Code section 16.5. Wet signatures on duplicate original paper copies shall be returned by the Permittee via registered first-class mail or overnight delivery to the following address:

Department of Fish and Wildlife
Habitat Conservation Planning Branch
Attention: CESA Permitting Program
Post Office Box 944209

Sacramento, CA 94244-2090

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 12/22/2023

DocuSigned by:
Josh Grover
703E59B6647A482...

Joshua Grover
Deputy Director
Ecosystem Conservation Division

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of the original ITP and this Amendment, and (3) agrees on behalf of the Permittee to comply with all terms and conditions of the ITP as amended.

By: Lenny Grimaldo Date: 12/22/2023

Printed Name: Lenny Grimaldo Title: Asst. Environmental Director