

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



AMENDMENT NO. 10  
(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*), 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 letter dated December 11, 2023, Permittee requested changes to Condition of Approval 8.6.3. The requested changes are to use CDFW-approved genetic analyses to identify all older juvenile Chinook salmon observed in salvage at the SWP and CVP. Specifically, the request specifies that the Permittee shall restrict exports as required by Condition of Approval 8.6.3 in response to the initial length-at-date identification of natural older juvenile Chinook salmon and the thresholds. 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 Condition of Approval 8.6.3 are not required if the daily loss threshold has consequently not been met. All genetic analyses

shall be conducted using CDFW-approved genetic methods. On December 22, 2023, CDFW issued Minor Amendment No. 8, modifying Condition of Approval 8.6.3, in response to this request, and updated related CHNWR daily loss thresholds to be consistent with historical loss of genetically identified CHNWR.

In a letter dated June 14, 2024, the Permittee requested changes to the Covered Species subject to the take authorization provided by the ITP, to add White Sturgeon (WS, *Acipenser transmontanus*), as an additional Covered Species. The Fish and Game Commission voted to designate WS as a candidate species at its June 19, 2024 meeting. On July 12, 2024 CDFW issued Major Amendment No. 9, modifying the Effective Date and Expiration Date of the ITP, adding WS as a Covered Species, revising the Impacts of the Taking on Covered Species to include WS, adding Conditions of Approval 7.9 (White Sturgeon Monitoring and Science Requirements), 7.9.1 (White Sturgeon Science Program), and 7.9.2 (Larval White Sturgeon Entrainment Monitoring) to Section 7 (Monitoring, Notification and Reporting Provisions), revising Condition of Approval 8.1 (Real-time Operations, Monitoring, and Technical Teams) by adding Condition of Approval 8.1.6 (White Sturgeon Monitoring Team), revising Condition of Approval 8.10 (SWP Proportional Share) to include Condition of Approval 8.22, revising Condition of Approval 8.14 (Clifton Court Forebay Aquatic Weed Control Practices) by adding WS in the Covered Species to be monitored, adding Condition of Approval 8.22 (White Sturgeon Entrainment Protections), revising Condition of Approval 9.2.2 (Implement the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project) to include consideration of WS, adding Condition of Approval 9.6 (White Sturgeon Habitat Restoration Project Scoping), and revising Condition of Approval 10.1 (Performance Security Amount).

In issuing the ITP and Amendments Nos. 1 through 9 (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.

In a letter dated September 17, 2024, Permittee requested changes to Conditions of Approval 9.1.3 (Delta Smelt Summer-Fall Habitat Action) and 9.1.3.1 (Summer Fall Action Plan). Specifically, Permittee requested to implement an alternative to the Summer Fall Habitat Action in 2024 that includes: 1) implementation of a monthly average X2 of 80 km in September; 2) daily Suisun Marsh Salinity Control Gate (SMSCG) operations from September 6 – September 30; and 3) off-ramping the requirement to maintain a monthly average X2 of 80 km in October and instead operating to D-1641 requirements for October.

This Minor Amendment No. 10 (Amendment No. 10) makes the following changes to the existing ITP:

1. Amendment No. 10 revises Condition of Approval 9.1.3.1 Summer-Fall Action Plan.

**AMENDMENT**

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

1. The second paragraph of Condition of Approval 9.1.3.1 (Summer-Fall Habitat Action) shall be revised to read:

The Summer-Fall Action Plan shall be developed based on hydrologic, operational, and temperature forecasts using the best available modeling to plan SMSCG operations (Table 9-A) to maximize the number of days that Belden’s Landing three-day average salinity is equal to, or less than, 4 ppt in all but dry years following below normal years. In a dry year following a below normal year the Summer-Fall Action Plan shall be developed to maximize the number of days that Belden’s Landing three-day average salinity is equal to, or less than, 6 ppt. CDFW anticipates that a three-day average salinity of 4 ppt at Belden’s Landing (or 6 ppt in dry years following below normal years) may be met by operating the SMSCG intermittently throughout the summer-fall. The required days of SMSCG operations (Table 9-A) need not be on consecutive days. As a result, this action is likely to extend beyond the required number of days of SMSCG operations to maximize benefits to DS. Project operations shall be consistent with the operations described in the Summer-Fall Action Plan from June – October each year. Permittee shall meet and confer with CDFW within thirty days of the effective date of this ITP to determine actions to implement June – August to improve Delta smelt habitat to the maximum extent feasible, including the possibility of operating the SMSCG. The requirements described in this Condition shall begin with the 2021 water year. ***Permittee shall operate to maintain a monthly average X2 of 80 km in September 2024 and operate the SMSCG on a daily basis from September 6 – 30, 2024. Permittee shall operate to meet the requirements of D-1641 in October 2024, and is not required to meet a monthly average X2 of 80 km during this time.***

## 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 9.1.3.1 as originally issued. No changes to Condition of Approval 9.1.3 were necessary in response to Permittee’s request. ITP Condition of Approval 9.1.3.1 has been changed to allow Permittee to implement an alternative Summer-Fall Action in 2024. The alternative Summer-Fall Action requires Permittee to operate to a monthly average X2 of 80 km in September 2024 and operate the SMSCG daily from September 6 – September 30, 2024. Additionally, in October 2024 Permittee is not required to operate to a monthly average X2 of 80 km. The operation of the SMSCG on a daily basis from September 6 – 30, 2024 is expected to provide improved habitat conditions for DS in September 2024 beyond what would have been provided by operating in September to a monthly average X2 of 80 km in the absence of SMSCG operations.

In September 2023 Permittee operated to a monthly average X2 of 80 km and operated the SMSCG on a daily basis. During that time DS habitat conditions in the Suisun Bay region were equivalent to conditions observed during prior wet years with X2 requirements, including 2017. In September 2023 three DS were caught in monitoring surveys in Grizzly Bay, a region that would have likely had salinity above 6 PSU, where DS are seldom caught, if the action had not occurred. Additionally, the conditions created by the simultaneous SMSCG operations and Fall X2 shifted DS low salinity zone habitat to be in proximity to recent habitat restoration projects that have been implemented as requirements of this ITP. These habitat projects were designed to enhance food production for LFS and DS, a key element of high-quality DS habitat alongside turbidity, salinity, and temperature. Ongoing monitoring is being conducted to understand and quantify changes in food availability in immediate proximity of projects and in the larger regional area, as a result of these projects. As more projects are completed, monitoring is in place to observe cumulative benefits of restoration for DS and LFS food production.

Based on observations of a similar action in September 2023 and modeling included in Permittee’s ITP amendment application, SMSCG operations in September 2024 are expected to expand low salinity zone habitat in a continuous stretch between Suisun Marsh and Grizzly Bay. These regions have historically had more favorable turbidity and the coolest temperatures in the broader area, below thresholds that would inhibit DS growth. As a result, the change to the Fall X2 requirement in October 2024 is offset by benefits provided by improved conditions in September 2024. Because Condition of

Approval 9.1.3.1 is a mitigation measure, these changes will not increase the amount or severity of Project impacts. The changes included in this amendment are expected to result in equivalent mitigation value for DS.

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 9.1.3.1, Summer-Fall Action Plan, 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 diminish the measures that will be undertaken to minimize and mitigate previously authorized impacts on the Covered Species because it provides equivalent or improved mitigation value. As discussed above, CDFW has concluded that the modifications to the DS Summer-Fall Action in September and October 2024 provide equivalent mitigation 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 September 17, 2024, 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 September 17, 2024. 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, time bound changes to an ITP Condition of Approval to allow Permittee to operate to a modified Summer-Fall Action in September and October 2024. Permittee will operate to a monthly average X2 of 80 km in September 2024 and operate the SMSCG daily from September 6 – 30, 2024. Additionally, Permittee is not required to achieve a monthly average X2 of 80 km in October 2024. 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) reduce the 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).

**ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

on 9/30/2024

DocuSigned by:  
*Joshua Grover*  
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