

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



AMENDMENT NO. 1  
(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 (*Spirinchus thaleichthys*), Delta smelt (*Hypomesus transpacificus*), spring-run Chinook salmon ESU (CHNSR, *Oncorhynchus tshawytscha*) and winter-run Chinook salmon ESU (CHNWR, *Oncorhynchus tshawytscha*) (collectively, the Covered Species) associated with and incidental to the long-term operations of the State Water Project in the Sacramento-San Joaquin Delta (Project).

The Project as described in the ITP as originally issued by CDFW includes continued operation of the State Water Project (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 will 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 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.

This Minor Amendment No. 1 (Amendment) makes the following changes to the existing ITP:

1. This Amendment changes the start date for the Smelt Monitoring Team each year in Condition of Approval 8.1.1 (*Smelt Monitoring Team*) to consistently state, "beginning no later than November 1."
2. This amendment changes the start date for the Smelt Monitoring Team each year in Condition of Approval 8.1.4 (*Collaborative Approach to Real-Time Risk Assessment*) to consistently state, "no later than November 1."
3. This Amendment changes the turbidity measurement units described in Condition of Approval 8.3.1 (*Integrated Early Winter Pulse Protection*) from Nephelometric Turbidity Units (NTU) to Formazin Nephelometric Units (FNU).
4. This Amendment changes the turbidity measurement units described in Condition of Approval 8.5.1 (*Turbidity Bridge Avoidance*) from Nephelometric Turbidity Units (NTU) to Formazin Nephelometric Units (FNU).
5. This Amendment changes the turbidity measurement units described in Condition of Approval 9.1.3 (*Delta Smelt Summer-Fall Habitat Action*) from Nephelometric Turbidity Units (NTU) to Formazin Nephelometric Units (FNU).

6. This Amendment extends the date for the initial funding of restoration projects described in Condition of Approval 9.2.1 (*Mitigation for Impacts Associated with Project Operations*) from October 1, 2020 to April 1, 2021. This Amendment also makes clarifications to this Condition of Approval, regarding the timing and scale of restoration projects that could be considered for approval by CDFW. Amendments to this Condition of Approval also clarify that individual projects that receive funding must benefit either CHNWR or CHNSR, or both species, subject to CDFW's approval.
7. This amendment revises the MMRP (ITP Attachment 1) for consistency with changes 1 through 6.

## AMENDMENT

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

1. The third paragraph in ITP Condition 8.1.1, ITP page 67 (Smelt Monitoring Team) shall be amended to read:

Permittee shall:

- Convene the first meeting of the Smelt Monitoring Team within three days of the effective date of this ITP and weekly thereafter. In each year, Permittee shall convene the Smelt Monitoring Team meeting weekly, beginning no later than ~~October 1~~ ***November 1*** each year, [...]

2. The first paragraph in ITP Condition 8.1.4, ITP page 70 (Collaborative Approach to Real-time Risk Assessment) shall be amended to read:

Beginning no later than October 1 (***Salmon Monitoring Team***) and ***November 1 (Smelt Monitoring Team)*** through the end of OMR Management (see Condition of Approval 8.8) the Smelt and Salmon Monitoring Teams shall meet weekly, or more often as required, to consider survey data, salvage data, and other pertinent biotic and abiotic factors and prepare risk assessments as described in Conditions of Approval 8.1.1, 8.1.2, 8.1.5.1 and 8.1.5.2.

3. The second bullet point in ITP Condition 8.3.1, ITP page 80 (Integrated Early Winter Pulse Protection) shall be amended to read:

- Three day running average of daily turbidity at Freeport is greater than, or equal to, 50 ***Formazin*** Nephelometric Turbidity Units (***NTU***), OR

4. The second and third paragraphs in ITP Condition 8.5.1, ITP pages 84 and 85 (Turbidity Bridge Avoidance) shall be amended to read:

After the Integrated Early Winter Pulse Protection (Condition of Approval 8.1.3) or February 1 (whichever comes first), until April 1, Permittee shall manage exports to maintain daily average turbidity in Old River at Bacon Island (OBI) at a level of less than 12 ~~FN~~FTU. If the daily average turbidity at OBI is greater than 12 ~~FN~~FTU, Permittee shall restrict south Delta exports to achieve an OMR flow that is no more negative than -2,000 cfs until the daily average turbidity at OBI is less than 12 ~~FN~~FTU.

If, after five consecutive days of OMR flow that is less negative than -2,000 cfs, the daily average turbidity at OBI is not less than 12 ~~FN~~FTU the Smelt Monitoring Team may convene to assess the risk of entrainment of DS (Condition of Approval 8.1.5.2). The Smelt Monitoring Team may provide advice to WOMT regarding changes in operations that could be conducted to minimize the risk of entrainment of DS (Condition of Approval 8.1.3). The Smelt Monitoring Team may also determine that OMR restrictions to manage turbidity are infeasible and may instead provide advice for a different OMR flow target that is between -2,000 and -5,000 cfs and is protective based on turbidity and adult DS distribution and salvage to the WOMT for consideration (Condition of Approval 8.1.3). Operational decisions shall be made following the process described in Condition of Approval 8.1.4 (Collaborative Real Time Risk Assessment).

5. The first paragraph in ITP Condition 9.1.3, ITP page 113 (Delta Smelt Summer-Fall Habitat Action) shall be amended to read:

The DS summer-fall habitat action (Summer-Fall Action) is intended to benefit DS food supply and habitat, thereby contributing to the recruitment, growth, and survival of DS. The FLASH conceptual model<sup>1</sup> states that DS habitat should include low-salinity conditions of 0 to 6 parts per thousand (ppt), turbidity of approximately 12 ~~FN~~FTU, temperatures below 25°C, food availability, and littoral or open water physical habitats. The highest-quality habitat in Suisun Marsh and Grizzly Bay includes areas with complex bathymetry, in deep channels close to shoals and shallows, and in proximity to extensive tidal or freshwater marshlands and other wetlands. The Summer-Fall Action will provide the aforementioned habitat components in the Suisun Marsh and Grizzly Bay through a range of actions by water year type to improve water quality and food supplies.

6. ITP Condition 9.2.1, ITP page 120 (Mitigation for Impacts Associated with Project Operations) shall be amended as follows:

9.2.1. Mitigation for Impacts Associated with Project Operations. ~~Within six months of the effective date of this ITP,~~ Permittee shall **provide funding toward** at least one restoration project annually, identified in coordination with CDFW, NMFS, USFWS, Reclamation and other entities undertaking restoration and enhancement in the Sacramento River watershed. **Permittee shall make its first funding payment toward one or more approved restoration projects no later than April 1, 2021. A funding commitment for a larger project that extends over multiple years will satisfy the annual funding requirement if approved by CDFW.** Permittee shall fund a total of \$20,000,000 for restoration projects over the term of the ITP as approved by CDFW. The selected restoration projects shall provide one or more of the biological benefits described below to **either** CHNWR **or** CHNSR, **or both species**, in the Sacramento River watershed upstream of the Delta, **subject to CDFW's approval and determination that the funding required by this Condition, on the whole, will result in benefits to both species**, as compensatory mitigation for impacts associated with Project operations. Larger restoration projects may be carried over multiple years. Restoration projects shall align with CHNWR and CHNSR recovery needs and be guided by information in the Salmon Resiliency Strategy.

[...]

After consulting with Reclamation, USFWS, and NMFS, Permittee and CDFW shall work ~~each year~~ to collaboratively select the restoration projects to be funded to restore and enhance **either** CHNWR **or** CHNSR, **or both species**, spawning and rearing habitat on the Sacramento River and its tributaries. CDFW acknowledges that planning, environmental review, and permitting may be necessary for restoration project implementation and funding under this Condition of Approval may be used for these project development activities. In some cases, implementation may be in the form of funding a restoration project in whole or in part to supplement restoration projects being implemented by others, when appropriate and approved by CDFW and when CDFW determines that funding under this Condition of Approval will ensure additive benefits to ~~CHNWR and CHNSR~~ **the species** that would not occur in the absence of Permittee's contribution. However, under no circumstances shall any funds under this Condition of Approval be used to fund any other regulatory permitting requirement other than those established in this ITP. Final allocation of this funding shall be subject to CDFW approval each year.

7. This Amendment revises the MMRP consistently with the changes above. A revised MMRP is attached to this Amendment.

All terms and conditions of the ITP 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 seven specific changes to the ITP as originally issued. ITP Conditions 8.1.1 and 8.1.4 have been changed to consistently establish the start date for the Smelt Monitoring Team each year to be “no later than November 1.” This corrects an internal inconsistency in the ITP and aligns with the timing of measures to minimize impacts of the taking to Delta and longfin smelt. Additionally, the units used to report turbidity in ITP Conditions 8.3.1, 8.5.1, and 9.1.3 have been changed from NTU to FNU to reflect updated information from the manufacturer of the turbidity sensors deployed by Permittee in the Project Area. CDFW reviewed the technical memorandum included in Permittee’s amendment request and information provided by the sensor manufacturer. CDFW concurs with Permittee that this change in units does not alter results and conclusions of analyses using NTU units because, while reported as NTU, the proper representation of historical measurements would be to use FNU. The empirical data remains unchanged and is simply now being reported in FNU. Thus, the change in turbidity units reflects updated nomenclature, but does not require a change in the numeric values included in these Conditions in the ITP.

This Amendment also extends the deadline for the first funding milestone in Condition of Approval 9.2.1 from October 1, 2020 to April 1, 2021. It also makes clarifying changes to allow individual restoration projects to benefit either salmonid species, or both, and clarifies how Permittee’s ability to fund larger restoration projects that extend over multiple years aligns with annual funding obligations. All changes made to Conditions in the ITP were also made in the corresponding sections of the MMRP. The resulting impacts to the Covered Species, however, including the timing and effectiveness of the minimization measures and the amount of funding for restoration projects to mitigate impacts to CHNWR and CHNSR as a result of the Project, will remain the same.

CDFW has determined that changes to Conditions 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 the Project or Conditions of the ITP described in this Amendment, including changes to: consistently establish the start date of the Smelt Monitoring Team meetings, the units used to report turbidity measurements, a six month extension for the requirement to initiate funding for certain required restoration projects, and clarifications regarding the

funding of larger projects and benefits to salmonid species, will not increase impacts 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. This Amendment ensures consistency in the start date of the Smelt Monitoring Team. It also updates turbidity units following an update in specifications from the manufacturer of the turbidity sensors deployed by Permittee in the Project Area. Because no change in the numeric turbidity *values* is required, only the unit nomenclature, no changes to the Smelt or Salmon Effects Analysis or thresholds in the ITP are needed. Additionally, this Amendment acknowledges that Permittee needs six additional months to provide initial funding for restoration projects that will benefit CHNWR and CHNSR. This extension in time will allow Permittee to continue to work with CDFW to develop a list of potential projects for consideration, establish an interagency team to provide feedback on the list of potential projects, and develop a process for funding approved restoration projects. The Amendment makes clarifying changes regarding the ability of Permittee to fund larger projects over multiple years to meet the ITP's annual funding requirement. In addition, the Amendment clarifies the ability to fund individual projects that benefit either CHNSR or CHNWR, subject to CDFW's approval and determination that the funding under the measure, on the whole, is providing benefits for both species. The spatial distribution of CHNWR and CHNSR do not overlap entirely. As a result, a restoration project that provides a key benefit to one species may not benefit the other. By identifying the highest priority projects for both species, but not requiring each project to benefit both species, this change allows greater flexibility in selecting projects while ensuring that both species will receive benefits from the funding over the permit term. Permittee's continued adherence to and implementation of the avoidance and minimization measures set forth in the ITP's Conditions of Approval and MMRP 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 30, 2020, 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 October 2, 2020. 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 several changes to ITP Conditions of Approval to ensure consistency in the annual start date of Smelt Monitoring Team meetings, update turbidity reporting units, provide Permittee an additional six months to initiate funding for the first restoration project required by Condition 9.2.1, clarify Permittee's ability to provide funding for larger projects over the course of multiple years, and clarify that individual projects that benefit one or both salmon species may be considered for funding to fulfill the requirements of this Condition. Prior to funding, all projects must be approved by CDFW. 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 Permittee signs and dates the acknowledgement below, and returns one of the duplicate originals of this Amendment by registered first class mail to CDFW at:

Department of Fish and Wildlife  
Water Branch  
Attention: Brooke Jacobs  
Post Office Box 944209  
Sacramento, CA 94244-2090

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

on 10/16/2020 \_\_\_\_\_

  
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Chad Dibble  
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: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_