



Permit #23264 CHCP ITS

STATEMENT OF FINDINGS AND RECOMMENDATIONS

Findings and Recommendations on Issuance of an Incidental Take Permit (Permit #23264) to the Stockton East Water District based on the Calaveras River Habitat Conservation Plan

This Statement of Findings and Recommendations documents the conclusions of NOAA's National Marine Fisheries Service (NMFS) with respect to issuance of an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of the Endangered Species Act of 1973 (ESA), as amended, in response to an application from the Stockton East Water District (SEWD) for an ITP. Based on the findings in this document, NMFS staff recommends the approval of SEWD's Calaveras River Habitat Conservation Plan (HCP), dated September 2019 and issuance of the ITP to SEWD, subject to the conditions described later in this document.

I. Description of the Proposal

SEWD applied to NMFS for a permit to allow the incidental take permit four species (Covered Species) for implementation of the proposed Calaveras Habitat Conservation Plan (HCP). Under the permit, SEWD would receive incidental take authorization for certain activities administered under their jurisdiction as identified in the HCP submitted by the prospective permittee as part of the permit application. Covered activities under the HCP include reservoir impoundment, controlled water releases, water withdrawals, and activities within the stream channel (Covered Activities). A detailed description and list of covered activities and conservation strategies are described further in Chapter 5 of the HCP (SEWD 2019).

The permit would provide incidental take coverage for one endangered fish species: Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*) evolutionary significant unit (ESU), and two threatened fish species: Central Valley (CV) steelhead (*Oncorhynchus mykiss*) distinct population segment (DPS), and threatened CV spring-run Chinook salmon (*O. tshawytscha*) ESU. The permit also covers one species not currently listed under the ESA: species of special concern CV fall/late fall-run Chinook salmon (*O. tshawytscha*) ESU should they become listed during the term of this permit. The permit would become effective to authorize take of the currently unlisted fish species concurrent with their listing under the ESA.

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) proposes to issue one incidental take permit (ITP) to Stockton East Water District (SEWD or District) under the authority of section 10(a)(1)(B) and section 10(a)(2) of the Endangered Species Act (ESA) of 1973, as amended, for a 50-year period.

Documents used in the preparation of this statement of findings and recommendations include: the Final Calaveras River Habitat Conservation Plan (HCP) (SEWD 2019); the Final



Environmental Assessment (EA) (NMFS 2020a) and; the NMFS Biological Opinion on the permit application (NMFS 2020b). These documents are incorporated by reference.

The NMFS has reviewed the above-described documents, as well as other available biological information and other documentation, in accordance with 16 U.S.C. 1539(a), 50 C.F.R. 17.22(b), 17.32(b) and other applicable laws and regulations.

Permit Area

The permit area is the area that the permittee is requesting authorization from NMFS for Covered Activities that may result in take of Covered Species. The Calaveras HCP permit area encompasses the lower Calaveras River and its adjacent riparian zone between New Hogan Dam and the confluence with the San Joaquin River. Ongoing water impoundment in New Hogan Reservoir, and municipal and agricultural water delivery through the Calaveras River to Bellota Weir, the Old Calaveras River channel, Mormon Slough, and the Stockton Diverting Canal are Covered Activities within the permit area. Additional Covered Activities within the permit area include water diversion maintenance, improvements to diversion structures to provide fish passage and screen fish, and fisheries monitoring throughout the Calaveras River.

The permit would authorize these activities for the 50-year period, which would result in impacts to Covered Species, including take of species currently listed under the ESA and their habitats.

Covered Activities

Activities proposed to be covered under the permit (collectively, “Covered Activities”) are the otherwise lawful activities described in Chapter 5 of the HCP (SEWD 2019) and in the Biological Opinion (NMFS 2020b), as summarized here:

- The impoundment and non-flood control operations of water from New Hogan Reservoir.
- The operation of the Old Calaveras River Headworks facility.
- The operation of the Bellota Diversion facility.
- The operation of small instream flashboard dams within the District’s service area.
- The operation and improvement of privately-owned diversion facilities within the SEWD’s service area.
- Channel maintenance operations for instream structures within the District’s service area.
- SEWD fisheries monitoring program.

Activities Not Covered in the Permit

The HCP specifically does not cover the following: 1) new water diversions, 2) new activities related to groundwater storage, 3) additional water rights that may be acquired by SEWD, 4) new fish screens on water diversions other than Bellota Diversion Facility and privately owned diversions within the permit area.

Relationship of the HCP to Section 7 Consultations

Actions that are Covered Activities under the HCP may also be subject to separate Section 7 review if those actions are authorized, carried out or funded by Federal agencies. Incidental take for Covered Activities carried out by the permittee will be subject to mitigation, minimization, avoidance and other measures provided for under the HCP. To the extent that Covered Activities involving a Federal nexus are determined to affect federally listed species or their critical habitat in a way not already analyzed in the permit biological opinion, incidental take coverage would occur through the Section 7 process.

Term of the Permit

The permit would be in effect for a period of 50 years. NMFS and SEWD do not have an Implementing Agreement. NMFS may suspend or revoke the permit for cause in accordance with regulations and subject to the requirements for notice, review and opportunity to cure in force at the time of such suspension or revocation. These regulations are currently codified at 50 CFR § 222.306. Such suspension or revocation may apply to the entire permit, or only to specified Covered Species, HCP Boundaries, or Covered Activities. In the event of suspension or revocation for noncompliance or violation by District or Districts, the Districts' obligations under this Agreement and the HCP will continue until NMFS determines that all Take of Covered Species that occurred under the ITP has been fully mitigated in accordance with the HCP. The SEWD may relinquish the permit in accordance with the regulations of NMFS in force on the date of such relinquishment. (These regulations are currently codified at 50 CFR §222.306(d).) Notwithstanding relinquishment of the permit, the SEWD will be required to provide post-relinquishment conservation or mitigation for any Take of Covered Species that NMFS determines will not have been fully mitigated under the HCP by the time of relinquishment. The SEWD obligations under the HCP will continue until NMFS notifies the SEWD that no post-relinquishment conservation or mitigation is required, or that all post-relinquishment conservation or mitigation required by NMFS is complete. Unless the parties agree otherwise or the permit is revoked for non-compliance or violation, NMFS may not require more conservation or mitigation than would have been provided if the SEWD had carried out the full term of the HCP.

Background

The Calaveras River, a tributary to the San Joaquin River, serves as an important source of water for agricultural and municipal uses in Calaveras and San Joaquin counties. The Calaveras River has been subject to impoundment since 1930, when Hogan Dam was constructed for flood control. The New Hogan Project is operated by U.S. Army Corps of Engineers (USACE) during the flood control season, for flood control, municipal and industrial water supply, irrigation, and recreation purposes.

SEWD manages the water resources of the Calaveras River during non-flood control periods for its respective constituents. SEWD provides approximately 50,000 AF of surface water annually to its agricultural service area. In addition to supplying agricultural water, SEWD provides approximately 50-57,000 AF of treated surface water annually to its urban contactors, including

the City of Stockton, the County of San Joaquin, and the California Water Service Company. In March 2000, the USACE made flood control releases from New Hogan Reservoir to the Calaveras River in response to storm events. As the storm inflow tapered off, the USACE ramped down flood control release flows in a manner that stranded CCV steelhead and resident rainbow trout (*Oncorhynchus mykiss*). Subsequently, beginning in 2003 and 2004, SEWD began collaboration with regulatory agencies to develop the Calaveras HCP for its non-flood control operations within the Calaveras River basin. In August 2019, SEWD submitted the final version of the Calaveras HCP as part of their application for an Incidental Take Permit to the NMFS.

Conservation Strategy

SEWD has previously begun implementing a variety of conservation strategies, both interim and long-term, to assist in the conservation of Covered Species. The interim strategies include a Temporary Barrier at the Old Calaveras River Headworks Facility, Temporary Fish Ladders at Bellota Diversion Facility, and Temporary Fish Screens at Bellota Diversion Facility. The long-term strategies include a Minimum Instream Flow Commitment; Non-Dedicated Fall Storage Flow Management Strategy; Flood Control Release Coordination with, and Advisory Support to, the USACE; Agriculture and Municipal Conservation Programs; Fall Flashboard Dam Removal Operations; Stakeholder Education Program regarding Fishery Issues; Artificial Instream Structural Improvements; SEWD Small Instream Structures Maintenance Timing and Actions; and Fish Handling Protocols.

In general, the conservation strategy has been designed to support the Biological Goals of the HCP, which are to: (1) maintain a viable population of *O. mykiss* within the conservation area, and (2) maintain adequate habitat conditions upstream of Bellota for fall-, late fall-, spring-, or winter-run Chinook salmon that may opportunistically migrate into the conservation area but are not expected to maintain a viable population based on both pre-dam and current conditions.

The Biological Goals are as follows:

1. **Flow:** Over the term of the ITP, provide instream flows in the Calaveras River downstream of New Hogan Dam to support Central Valley steelhead conservation and the biological needs of fall-, late fall-, spring-, and winter-run Chinook salmon should they migrate into the Calaveras River system.
2. **Fish Passage:** Over the term of the ITP, improve access into/out of the 18- mile spawning and rearing reach between Bellota and New Hogan Dam that is within the range of the Central Valley steelhead DPS and opportunistic usage by identified runs of Chinook salmon.
3. **Avoid/Minimize Fish Entrainment:** Over the term of the ITP, avoid or minimize entrainment of Central Valley steelhead, fall-, late fall-, spring-, and winter-run Chinook salmon (should they migrate into the Calaveras River system) at diversion structures identified as priority structures.
4. **Water Quality:** Over the term of the ITP, maintain adequate water quality conditions for Central Valley steelhead and identified runs of Chinook salmon in the Calaveras River downstream from maintenance sites.

5. **Avoid Direct Injury/Mortality:** Over the term of the ITP, avoid direct injury and mortality of Central Valley steelhead and identified runs of Chinook salmon in the Calaveras River during instream channel maintenance and fisheries monitoring activities.

Monitoring and Reporting Plan

The applicant (SEWD) has committed to a Fisheries Monitoring program that requires a variety of sampling methods (e.g. rotary screw trapping, snorkeling, etc.). The monitoring information will be used to assist water management decisions on the Calaveras River and evaluate the effectiveness of implementing the various conservation strategies as described in the HCP. Compliance Monitoring Activities (CM) and Effectiveness Monitoring Activities (EM) will be implemented to verify and evaluate whether the conservation strategies are achieving the goals of the HCP and to verify that take is not being exceeded. An annual HCP implementation report that includes documentation of all CM's and EM's conducted that year will be prepared and submitted to NMFS within 120 days of the end of each year. Five-year reviews of EM's will also be prepared and submitted to NMFS within 120 days of the end of every five years. Specifics of the CMs and EMs are described in Appendix D of the HCP (SEWD 2018).

Schedule

The general schedule for the HCP implementation is described in Chapter 9 – Adaptive Management - of the HCP (SEWD 2018). Several conservation strategies related to water releases from New Hogan storage and agricultural diversions are implemented every year. Major construction related conservation strategies are planned over 5 year increments for planning and funding purposes as follows:

Milestones in the HCP Implementation -

Year 5:

- First Five-Year Comprehensive Report Due.
- Finalized schedule for screening prioritized diversion structures (Conservation Strategy 6).

Year 10:

- Five-Year Comprehensive Report Due.
- Bellota Diversion Facility: Construction of a combined crest gate/fishway/fish screen will be completed.
- Old Calaveras River Headworks Facility: Construction of a non-entraining barrier will be completed at the Headworks facility and at the downstream end of the channel near the confluence with the Stockton Diverting Canal.

Year 15 and every 5 years thereafter, through the HCP Period:

- Five-Year Comprehensive Reports Due.

II. Public Comment

On September 30, 2019, a notice of receipt of the incidental take permit application, availability of a draft Environmental Assessment (EA), and request for public comments was published in the Federal Register (84 FR 51518). SEWD was requesting a permit for the incidental take of winter-run Chinook salmon, spring-run Chinook salmon, fall/late fall-run Chinook salmon, and CCV steelhead associated with the activities as described in the Calaveras River HCP. In addition, the draft EA and HCP were available for a 45-day public comment period (<https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment>). NMFS received several comments regarding analysis of the scope, content, and impacts of the HCP. These comments were addressed as changes to the Final EA as appropriate or as a comment response in the Final EA appendix.

III. Section 10(a)(2)(A) HCP Criteria – Analysis and Findings

The HCP addresses each of the required elements of section 10(a)(2)(A) as follows:

i. **The impact to result from such taking.**

The four anadromous fish species that are Covered Species under this HCP will be impacted in similar ways because they share similar life history strategies and habitat needs.

Winter-run Chinook salmon

Winter-run do not currently reside in the Calaveras River, so it is unlikely that take of this species will occur unless river conditions change during the 50-year permit period. The adaptive management process would be used to ensure that impacts to this species are minimized in additional ways not already identified, if necessary.

Spring-run Chinook salmon

Spring-run do not currently reside in the Calaveras River, so it is unlikely that take of this species will occur unless river conditions change during the 50-year permit period. The adaptive management process would be used to ensure that impacts to this species are minimized in additional ways not already identified, if necessary.

Fall/late-fall Chinook salmon

Fall and late-fall Chinook salmon use the Calaveras River when conditions are suitable usually during higher flows years. Adults are subject to take during their migration to the spawning grounds from passage impediments and flow related migration delays. Juveniles are subject to take from unscreened diversions, inadequate migration flows, and temporary impacts from construction activities. Conservation Measures incorporated in the HCP should sufficiently minimize take occurring from ongoing Covered Activities.

Steelhead

Steelhead use the Calaveras River year-round. Adults are subject to take during their migration to the spawning grounds from passage impediments and flow related migration delays. Juveniles are subject to take from unscreened diversions, inadequate migration flows, and temporary impacts from construction activities. Conservation Measures incorporated in the HCP should sufficiently minimize take occurring from ongoing Covered Activities.

ii. **The steps taken to minimize and mitigate such impacts, and the funding that will be available to implement them.**

The Conservation Strategy as described in the HCP, minimizes and mitigates for the ongoing water delivery activities of the SEWD. In addition, take of listed species are further avoided, minimized, and mitigated through the Reasonable and Prudent Measures of the Biological Opinion (NMFS 2020) as summarized here:

- 1) Measures shall be taken by Stockton East Water District to implement the conservation strategies and biological objectives, including the adaptive management process, described in the Calaveras Habitat Conservation Plan.
- 2) Measures shall be taken by Stockton East Water District to minimize sediment events and turbidity plumes in the action area and related short-term and long-term effects, as discussed in this biological opinion.
- 3) Measures shall be taken by Stockton East Water District to reduce underwater sound impacts and other disturbances related to pile driving, as discussed in this biological opinion.
- 4) Measures shall be taken by Stockton East Water District to reduce mortality of the Covered Species requiring capture/relocation in association with the Fisheries Monitoring Program described in the Calaveras Habitat Conservation plan and in this opinion, for any dewatering or fish rescue activities.
- 5) Measures shall be taken by Stockton East Water District to reduce the extent of degradation and alteration to the habitats in the action area as a result of construction and maintenance activities, related to both direct and indirect effects of this project, as discussed in this biological opinion.
- 6) Measures shall be taken by Stockton East Water District to minimize impacts to existing vegetation.
- 7) Measures shall be taken by Stockton East Water District to prepare and provide NMFS with a plan and a report describing how the Covered Species in the action area would be protected and/or monitored and to document the observed effects of the action on the Covered Species and critical habitat of CCV steelhead.

Funding for the minimization, mitigation, and implementation of the HCP in Chapter 12 of the HCP (SEWD 2019). Existing sources of SEWD funding are identified as

well as future funding sources that will be pursued for the larger, more costly fish passage/ fish screening construction projects. SEWD commits to completing the conservation strategies on schedule as described in the HCP.

In Chapter 9 of the HCP, SEWD commits to an adaptive management program that will track success of the Conservation Strategy, identify any changes needed to the avoidance, minimization, mitigation or monitoring in order to meet the Biological Goals and Objectives and changed circumstances.

Changed circumstances that could arise in the permit area such as the listing of a Covered Species, listing of a Non-covered species, and Delisting of a Covered Species have been identified and are described in further detail in Section 11.1.1 of the HCP (SEWD 2019). The No Surprises Rule requires that potential changed circumstances be identified in the CHCP along with measures that would be taken by the Permittee to respond to those changes. If a changed circumstance occurs within the CHCP boundaries, the Permittee will notify NMFS of this changed circumstance within 60 days unless there is a substantial threat of imminent, significant adverse impacts to a Covered Species. NMFS will evaluate the circumstances and may determine that additional conservation strategies are necessary. Pursuant to the No Surprises Rule, if such measures have been addressed in the CHCP, their implementation is required. If such measures are absent from the CHCP, NMFS will not require any additional conservation or mitigation without the consent of the Permittees, as long as the CHCP is found to be properly implemented. "Properly implemented" means that the commitments and provisions of the HCP and ITP have been, or are being, fully implemented.

iii. **Alternative actions to the taking considered by the applicant and reasons why such alternatives are not being used.**

SEWD identified several alternatives in Chapter 10 of the HCP that were considered but dismissed. These are summarized below.

Alternative 1 - No Action: Under this alternative, SEWD would continue ongoing operations of water delivery but not implement the Conservation Strategy as proposed in the HCP. SEWD would also not receive an Incidental Take Permit from the NMFS. This alternative does not meet SEWD regulatory requirements under the ESA and does not provide conservation value to the Covered Species. For these reasons, this alternative was dismissed.

Alternative 2 - Flashboard Dams installed later than April 15: Under this alternative, all the District's proposed activities would continue with the exception that flashboards would be installed by SEWD later than April 15. To provide sufficient agricultural deliveries, SEWD must install flashboard dams to create enough head for irrigators to withdraw surface water through their intake pumps, which typically occurs between March 15 and April 15 of each year and cannot be delayed if farmer's

request water. For this reason this alternative was dismissed although SEWD did commit in the HCP to delay flashboard installation to as late as possible in the spring.

Alternative 3 - Artificial adult *O. mykiss* and Chinook migration flows: Under this alternative, all the District's activities would continue, and all the conservation strategies identified in the CHCP would be implemented. In addition, artificial pulse flows would be released from New Hogan Dam to attract and assist passage for adult fall-run Chinook salmon and steelhead in the Calaveras River in the fall and winter, respectively. The analysis of this alternative demonstrates that providing even relatively small volumes of stored water for migration results in negative consequences to storage. Additionally, existing water rights do not allow for the provision of artificial migration flows. Given the detrimental impacts on beneficial consumptive use by providing an artificial adult pulse flow for steelhead and the lack of practical benefits of providing an artificial adult pulse flow for Chinook salmon, this alternative was dismissed.

Alternative 4 - Artificial juvenile *O. mykiss* and Chinook migration pulse flows: Under this alternative, all the District's activities would continue, and all the conservation strategies identified in the CHCP would be implemented. In addition, a 7- to 10-day pulse flow would be provided just prior to flashboard dam installation (installation occurs between April 15 and May 15) to encourage and assist juvenile salmonids to migrate out of the river before passage is impeded by flashboard dams. Biological and flow data analysis determined that this alternative did not help achieve the Biological Goals of the HCP, so it was dismissed.

Alternative 5 - Moving the SEWD Water Intake from Bellota to a location closer to the Dr. Joe Waidhofer Water Treatment Plant: Under this alternative, all the District's proposed activities would continue with the exception that the SEWD intake at Bellota would be moved to a location closer to the treatment plant. In addition, all the conservation strategies identified in the CHCP would be implemented except for those related to structural improvements at Bellota, which would no longer be needed if the Bellota intake were moved. The relocation of the Bellota intake to a point further downstream would result in flows provided year-round in an extended reach of river, supporting Biological Objective 1. Above further investigation, representatives from the California Department of Health and Safety confirmed that relocating the intake from Bellota to a location anywhere downstream of Bellota is not feasible. For this reason, this alternative was dismissed.

- iv. **Other measures the Secretary may require as being necessary or appropriate for purposes of the plan.** Any additional measures that require the HCP to be fully implemented are described in 2.9.3 Reasonable Prudent Measures and 2.9.4 Terms and Conditions section of the Biological Opinion and in the Incidental Take Permit.

IV. Section 10(a)(2)(B) Permit Issuance Criteria – Analysis and Findings

Having considered the above, NMFS makes the following findings under section 10(a)(2)(b) of the ESA:

- i. **The taking will be incidental.** The NMFS concluded in its biological opinion that take in the form of harm, harassment, mortality, and injury is likely to occur incidentally due to the covered activities and conservation measures by the HCP. Harm is the significant modification of habitat that impairs the listed species' behavior patterns (breeding, feeding, and sheltering) in such a way as to cause injury or death. The covered activities will affect fish and their habitat, as described in the effects analysis above, but are conservation measures will minimize impacts. NMFS finds that any take that occurs is incidental to the activities authorized under the HCP.
- ii. **The applicant will, to the maximum extent practicable, monitor, minimize, and mitigate the impacts of such taking.** The NMFS finds that the applicant (Stockton East Water District), to whom the Permit coverage extends, will monitor, minimize and mitigate the impacts of take of the covered species to the maximum extent practicable. Under the provisions of the HCP, the impacts of take will be minimized, mitigated, and monitored in accordance with the requirements of the Permit as described in the biological opinion in section *1.3.2 Conservation Strategies/Mitigation Measures* (NMFS 2020b). In consideration of all the above facts, NMFS finds that: (1) the mitigation is commensurate with the impacts; (2) the HCP is consistent with the long-term survival and recovery of the covered species (also see (iii) below); and (3) the HCP monitors, minimizes and mitigates the effects of take to the maximum extent practicable. These findings are based on the fact that benefits to the species will be demonstrable, especially compared to existing conditions or those conditions expected to occur absent the HCP.
- iii. **The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided.** The NMFS finds that the applicant will ensure that adequate funding for the plan will be provided. In addition, the applicant will continue to work cooperatively with other State and Federal agencies, private landowners, governments, and local watershed groups to identify opportunities for cooperative analysis and funding to support salmonid habitat restoration projects. In addition, procedures to deal with changed and unforeseen circumstances are adequately addressed in the HCP - Chapter 11: Assurances (SEWD 2019).
- iv. **The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.** The NMFS, using the best scientific and commercial data available, has evaluated the anticipated extent of take that will be incidental to the practices covered by the HCP, throughout the term of the HCP (summarized in Incidental Take Statement, above), and has concluded that the incidental takings likely to occur will not appreciably reduce the likelihood of survival and recovery. This conclusion can be found in the conclusion section of the

biological opinion (NMFS 2020b). The section 7(a)(2) “no jeopardy” standard is identical to the section 10(a)(2)(B) “no jeopardy” standard.

- v. **The applicant has amended the conservation plan to include any measures (not originally proposed by the applicant) that the Assistant Administrator determines are necessary or appropriate.** The NMFS identified no additional necessary or appropriate measures. During development of the HCP, NMFS and the applicant collaborated extensively on developing conservation measures that would minimize take to the maximum extent practical. The HCP and ITP incorporate all elements determined by NMFS to be necessary for approval of the HCP and issuance of the permit.
- vi. **There are adequate assurances that the conservation plan will be funded and implemented, including any measures required by the Assistant Administrator.** The NMFS finds that the applicant will ensure funding adequate to implement the HCP. In Chapter 12 of the CHCP, describes the funding mechanisms available to implement the CHCP conservation strategies and monitoring identified in earlier chapters of the CHCP.

V. Recommendation on Permit Issuance

NMFS has no evidence that the ITP should be denied on the basis of criteria and conditions set forth in 50 C.F.R. section 222.303(e)(1). The applicant has met the criteria for issuance of the ITP and does not have any disqualifying factors that would prevent the ITP from being issued under current regulations.

Based on the foregoing findings, NMFS recommends the issuance of the ITP to Stockton East Water District for their ongoing operations described in their HCP and located in San Joaquin County, California. The ITP would authorize the incidental take of endangered Sacramento River winter-run Chinook salmon, threatened California Central Valley spring-run Chinook salmon, and threatened California Central Valley steelhead. Take authorization for Central Valley fall and late-fall Chinook salmon would go into effect should either species become federally listed while the ITP is in effect.

VI. References

NMFS and SEWD. 2020a. Environmental Assessment/Initial Study Calaveras River Habitat Conservation Plan. Publicly available at:
<https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment>.

NMFS. 2020b. Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for Issuance of Incidental Take Permit for Calaveras Habitat Conservation Plan. Publicly available at:

[https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment.](https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment)

SEWD and FishBio. 2019. Calaveras Habitat Conservation Plan. Publicly available at:
[https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment.](https://www.fisheries.noaa.gov/action/calaveras-river-habitat-conservation-plan-and-environmental-assessment)

A. Catharine Marcinkavage

August 14, 2020

Cathy Marcinkavage
Acting Assistant Regional Administrator

Date