



**California Department of Fish and Wildlife
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534**

California Endangered Species Act
Incidental Take Permit No. 2081-2021-041-03

2021 EMERGENCY DROUGHT SALINITY BARRIER

Authority:

This California Endangered Species Act (CESA) Incidental Take Permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.² CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee: California Department of Water Resources
Principal Officer: Jacob McQuirk, Operations and Maintenance Engineer
Contact Person: Jacob McQuirk, (916) 653-9883
Mailing Address: 1416 Ninth Street, Sacramento, CA 95814

Effective Date and Expiration Date of this ITP:

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **December 31, 2022**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 6.7 of this ITP.

¹Pursuant to Fish and Game Code section 86, "'take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill".])

²The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Project Location:

The 2021 Emergency Drought Salinity Barrier (Project) is located at West False River, which is a tributary to the San Joaquin River, within the County of Contra Costa (See Figure 1). The Project is located approximately 0.4 miles east of its confluence with the San Joaquin River between Jersey and Bradford Islands, approximately 4.8 miles northeast of the City of Oakley, at approximately Latitude 38.057057 N, Longitude 121.670432 W.

Project Description:***Background***

In 2015, the lack of precipitation within California caused a potential for water supplies to be insufficient to repel salinity in the Sacramento-San Joaquin Delta (Delta). As a response, the California Department of Water Resources (DWR) implemented the 2015 Emergency Drought Barrier (EDB) Project to repel salinity in the Delta. As part of the 2015 EDB Project, DWR installed a rock barrier spanning West False River, in May 2015, to protect water quality in the interior Delta. The rock barrier was fully removed by November 15, 2015. Installation and removal of the 2015 EDB was authorized under Executive Order B-29-15, Directive to Streamline Government Response (April 1, 2015), and covered in Incidental Take Permit No. 2081-2014-026-03 and Lake and Streambed Alteration Agreement No. 1600-2014-0111-R3. In 2020, CDFW issued ITP No. 2081-2019-066-00 that covers the long-term operation of the State Water Project in the Delta, and analyzed its effects within the legal Delta, Suisun Marsh and Suisun Bay.

In 2021, the lack of precipitation within California, recent warm temperatures and extremely dry soils have depleted the expected runoff water from the Sierra-Cascade snowpack and has again caused a potential for water supplies to be insufficient to repel salinity in the Delta. In an Emergency Proclamation issued May 10, 2021, Governor Gavin Newsom directed Permittee to take actions, if necessary, to implement plans that address potential Delta salinity issues, including, among other things, the installation and removal of emergency drought salinity barriers. As a response, Permittee proposes to implement a similar project as the 2015 EDB Project.

Description

The Project is limited to the installation and removal of one temporary rock barrier weir structure, which will span West False River, and installation of two water quality and/or flow monitoring stations. Once the barrier material is removed from the West False River location, it will be stored at stockpile locations at Stockton and Rio Vista.

West False River Barrier

The rock barrier structure will be trapezoid-shaped with a wide base tapering up to a 12-foot-wide top width and set perpendicular to the channel alignment. The barrier will be approximately 800 feet long, up to 200 feet wide at the base, and 12 feet wide at the top. The

toe fill will extend approximately 100 feet upstream and downstream of the barrier centerline. The top of the structure will be at an elevation of 7 feet above sea level across the entire crest.

Approximately 84,000 cubic yards of 18-inch-minus rock will be required to construct the barrier and will have a footprint of approximately 2.75 acres with a staging footprint of 0.3 acres (See Figure 2). Note, Permittee has reduced the staging footprint from 0.37 acres as shown in Figure 2 down to 0.3 acre.

To monitor water quality in the central Delta and the associated changes in water quality and flows resulting from the barrier location, Permittee will install two permanent water quality and/or flow monitoring stations: one at Woodward Cut and one at Railroad Cut (See Figure 3). Each monitoring station will be able to monitor several constituents including electrical conductivity (EC), and will be installed on two 12-inch-diameter steel pipe piles. The 12-inch-diameter steel pipe piles will be driven in by a vibratory pile driver and Permittee will place navigational aids as needed.

Vessel traffic will be blocked at the barrier site. Appropriate navigation signage will be installed and will comply with navigation requirements as established by the U.S. Aids to Navigation System and the California Waterway Marker system. Signs will be posted at the upstream and downstream entrances to the waterway or other locations as needed, informing boaters of the restricted access. Signs will be posted on both sides of the barrier, float lines with orange ball floats will be placed across the width of the channels to deter boaters from approaching the barrier, and solar-powered warning buoys with flashing lights will be present on the barrier crest to prevent accidents during night-time hours.

No boat portage is provided at the barrier because alternative routes (Fisherman's Cut or False River east for vessel traffic between the south Delta to the San Joaquin River; and the Main San Joaquin River for vessel traffic between the Antioch and the eastern Delta) are available. No culverts will be installed at the barrier. Migrating fish can use the adjacent San Joaquin River, Fisherman's Cut or Dutch Slough and their access will not be restricted.

Barrier Construction and Removal Schedule

Construction of the barrier is scheduled to begin no earlier than June 1, 2021 and barrier removal will be completed by November 30, 2021. The total overall construction schedule is estimated to be 45 working days and completed no later than July of 2021. Barrier removal will take up to 60 days. Construction and removal will require approximately 21 workers. Daytime and nighttime construction activities may occur during both the installation and removal of the barrier.

Barrier Construction

The rock to construct each barrier will come from one or more existing quarries near San Rafael or DWR's Rio Vista and Weber stockpile sites, where rock was stored from the 2015 EDB Project. The rock will be brought to the site by barges and most construction will take

place from a barge on the water. The contractors will also work from the levees to install rock at locations adjacent to the levees.

Construction equipment will be placed within a staging area (approximately 0.3 acres) adjacent to Jersey Island Road near the construction site. Any levee access roads that are damaged because of construction equipment or truck use will be restored to pre-construction conditions or better once construction is completed.

The rock barrier will be constructed by using excavators, dozers, and loaders to move/push rock from the barges into the channel and by using dump scows. The rock barrier will be contoured by using a barge-mounted crane with a clamshell or barge-mounted excavator from material barges. No channel dredging or excavation in the levee profiles will occur.

Barrier Removal

All rock will be removed from the barrier site in the fall of 2021.

To prevent levee scour, rock removal will start from the center of the channel and work outward. Permittee will restore the levee geometry to ensure compliance with any local maintaining agency. Bathymetric surveys will be completed after rock removal to confirm that the rock has been removed. The materials will be transported from the area on barges. Materials will be stored at stockpile locations at Stockton and Rio Vista (See Figure 3).

Site Restoration

Disturbed areas and any levee access roads that are damaged because of Project activities will be restored after initial construction and barrier removal. The affected areas will be restored to approximate pre-project conditions.

Project Environmental Commitments

The Permittee proposes to implement the following environmental commitments as a part of the Project:

- Water Quality Monitoring Plan
- Spill Prevention and Control Program
- Hazardous Materials Management Program
- Worker Environmental Awareness Program
- Biological Monitoring
- Fish Predation Analysis
- Install In-Water Navigational Buoys, Lights, and Signage
- Limit Land-based Access Routes and Construction Areas
- Minimize Wildlife Attraction by Removing Trash and Debris Daily

- Remove Invasive Aquatic Plant Species
- Minimization Measures for Special-Status Plants
- Minimization Measures for Migratory Birds
- Minimization Measures for Valley Elderberry Longhorn Beetle
- Minimization Measures for Giant Garter Snake
- Minimization Measures for Swainson’s Hawk

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Delta Smelt (<i>Hypomesus transpacificus</i>)	Endangered ³
2. Longfin Smelt (<i>Spirinchus thaleichthys</i>)	Threatened ⁴
3. Sacramento River Winter-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Endangered ⁵
4. Central Valley Spring-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)	Threatened ⁶
5. Giant Garter Snake (<i>Thamnophis gigas</i>)	Threatened ⁷
6. Swainson’s Hawk (<i>Buteo swainsonii</i>)	Threatened ⁸

These species and only these species are the “Covered Species” for the purposes of this ITP.

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include moving and placing rock, hydroacoustic impacts from pile driving, river substrate disturbance resulting in loss of natural river substrate, increased turbidity, suspended sediments, localized changes to water quality and circulation patterns affecting fish habitat quality, potential for release of contaminants into

³See Cal. Code Regs. tit. 14 § 670.5, subd. (a)(2)(O).

⁴See *Id.*, subd. (b)(2)(E).

⁵See *Id.*, subd. (a)(2)(M).

⁶See *Id.*, subd. (b)(2)(C).

⁷See *Id.*, subd. (b)(4)(E).

⁸See *Id.*, subd. (b)(5)(A).

the water, upland drilling, construction activities, and construction equipment moving materials in the upland areas (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality (“kill”) may occur as a result of Covered Activities such as fatal injury, burial, entrapment, high turbidity, and temporary and permanent loss of habitat. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species from migratory pathways, increased predation in the vicinity of the barrier, crushing and injury from construction equipment and vehicle strikes in the staging area and other upland areas. The areas where authorized take of the Covered Species is expected to occur include West False River and staging areas along West False River, the Rio Vista stockpile site in Solano County, and the Weber stockpile in San Joaquin County (collectively, the Project Area).

The Project is expected to cause temporary loss of 2.75 acres of aquatic habitat for the Covered Species and temporary loss of 0.3 acres of upland habitat for Covered Species. Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project’s incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from equipment used to install the barrier, capture and relocation, and short-term effects due to displacement of fish from preferred habitat, increased competition for food and space, and increased vulnerability to predation. The Project is not expected to result in habitat loss for giant garter snake (GGS). Potential effects to GGS in upland portions of the Project Area include injury or death to GGS when moving through the site and on the levee roads if they are struck by construction equipment or vehicles, or if they are buried by construction material placed in the staging area. Potential effects to Swainson’s hawk include nest abandonment due to noise and vibrations from equipment used to install the barrier and/or human presence.

Incidental Take Authorization of Covered Species:

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and

noise and vibration generating activities that may cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration (LSA) Agreement (Notification No. EPIMS-CCA-19852-R3) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.
- 3. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Biological Opinion to be prepared for the Project pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this ITP, the Conditions of Approval set forth in this ITP shall control.
- 4. ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.
- 5. General Provisions:**
 - 5.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
 - 5.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of all biological monitors (Designated Biologist) before starting Covered Activities. If Permittee requires more than one Designated Biologist, then Permittee shall also submit to CDFW in writing the name, qualifications, business address, and contact information of a Lead Designated Biologist. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated

Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.

- 5.3. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.
- 5.4. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.
- 5.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.
- 5.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 5.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles.
- 5.8. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.

- 5.9. Delineation of Project Area Boundaries. Before starting Covered Activities, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities.
- 5.10. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 5.11. Project Access. Project-related personnel shall access the Project Area using existing routes, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds in the Project Area do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.
- 5.12. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 5.11 of this ITP.
- 5.13. Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 5.14. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 5.15. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

6. Monitoring, Notification and Reporting Provisions:

- 6.1. Notification Before Commencement. The Designated Representative shall notify CDFW prior to starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 6.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.
- 6.3. Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP. The Designated Biologist shall conduct compliance inspections a minimum of once a week and during periods of inactivity while the temporary barrier is in place.
- 6.4. Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Conditions of Approval 6.3 and 6.9 into a Monthly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Monica Oey (Monica.Oey@wildlife.ca.gov) and Headquarters CESA Program email is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 6.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Monthly Compliance Reports

for that year identified in Condition of Approval 6.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species.

- 6.6. CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 6.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.
- 6.8. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 428-2002. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.
- 6.9. Water Quality Monitoring Plan. Permittee shall implement the draft *2021 Emergency Drought Salinity Barrier Monitoring Plan* (See Attachment 3) until CDFW provides

written approval of the *2021 Emergency Drought Salinity Barrier Monitoring Plan* and it is finalized. Results from monitoring data shall be submitted in tabular format accompanied by a summary of findings that shall be included with the Monthly Compliance Reports (Condition of Approval 6.4) unless otherwise agreed to in writing by CDFW.

7. Take Minimization Measures: The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

- 7.1. Work Period. Permittee shall conduct all in-water work and work on the waterside of the levees between June 1 and November 30.
- 7.2. Piles and Pile Driving. Piles installed in relation to the Project shall not exceed 12-inches in diameter. During installation of water quality and/or flow monitoring pipes, Permittee shall use vibratory driver to minimize the noise generated from construction activities.
- 7.3. Barrier Material. Permittee shall construct the barrier with suitable non-erodible materials that will withstand wash out. Permittee shall only use clean material that is free of trash, debris, and hazardous material.
- 7.4. Delineation of Staging Area Boundaries. Before starting Covered Activities, to minimize take of GGS, Permittee shall clearly delineate the boundaries of the staging area with fencing, stakes, or flags. Permittee shall restrict all Project-related parking, material storage, laydown sites, equipment storage, to the extent possible, to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags during the installation and again during the removal of the barrier.
- 7.5. Delineation of GGS Habitat. Before starting Covered Activities, Permittee shall clearly delineate GGS habitat within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize unnecessary disturbance of GGS habitat.
- 7.6. Covered Species Injury. If a Covered Species is injured as a result of Project-related activities, the Designated Biologist shall immediately take it to a CDFW approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report as described in Condition 6.8. Within the Notification, Permittee shall include the name of the facility where the animal was taken.

- 7.7. GGs Pre-Construction Surveys. Before commencement of Project construction (including installation of GGS habitat delineation per Condition of Approval 7.5) and Project removal, the Designated Biologist shall survey the Project Area and within 200 feet of suitable aquatic GGS habitat for GGS. The Designated Biologist shall submit survey results to CDFW within 5 days of the survey at the contact information below. If a lapse in Project-related work of 15 days or longer occurs, the Designated Biologist shall conduct another GGS focused survey and send the results to CDFW prior to resuming work. The Designated Biologist shall also conduct minimum weekly monitoring visits to ensure conditions of this ITP are properly implemented per Condition of Approval 6.3.
- 7.8. GGs Avoidance and Relocation. If a GGS is encountered within the Project Area, Permittee shall allow the individual to move out of the Project Area under their own volition for one hour. After one hour, if the individual has not moved out of the Project Area, the Designated Biologist shall relocate GGS by methods identified in the *Giant Garter Snake Relocation Plan for the Emergency Drought Barriers Project* (Attachment 2). If any snake is observed retreating into an underground burrow within the Project Area, no construction will be allowed within a 50-foot radius of the burrow until the Designated Biologist can determine that the snake is or is not a GGS.
- 7.9. Designated Biologist On-Site During Covered Activities. Permittee shall always have the Designated Biologist on-site to monitor for GGS during Covered Activities that take place on land.
- 7.10. Swainson's Hawk Pre-Construction Survey. The Designated Biologist, with at least 5 years of experience conducting protocol level surveys for Swainson's hawk, shall conduct a Swainson's hawk survey of the Project Area and within 0.5 miles from the Project Area, which includes all proposed work areas, staging, and storage areas. However, surveys will not be required in DWR's Rio Vista and Weber stockpile sites. These pre-construction surveys shall be completed prior to initiation of the Project.
- 7.11. Swainson's Hawk Weekly Nest Surveys. Due to the urgency of the Project, the Designated Biologist will be unable to conduct protocol level surveys to increase the chances of detecting Swainson's hawk nesting and/or nests. Therefore, a Designated Biologist, with at least 5 years of experience conducting Swainson's hawk protocol level surveys, shall conduct a Swainson's hawk nest survey once a week throughout Project construction and if barrier removal occurs during Swainson's hawk nesting season (March 1 through September 15). Nest surveys for Swainson's hawks shall be conducted in a manner consistent with the recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. For more information, see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline> If any active Swainson's hawk nests are found within 0.5 miles of the Project Area, CDFW shall immediately be contacted and additional measures may be required to continue Covered Activities.

7.12. Swainson's Hawk Active Nest Buffers. If an active Swainson's hawk nest is detected, the active nest shall be designated as an "Ecologically Sensitive Area" and protected while occupied during construction. The minimum distance of the protective buffer surrounding each identified nest site shall be 0.5 mile. If work within the 0.5 mile buffer becomes necessary, the Permittee shall consult with CDFW, at which time additional protective measures may be required. Nest monitoring shall continue during construction work until the young have fully fledged, are no longer being fed by the parents, and have left the nest site, as determined by the Designated Biologist.

8. Habitat Management Land Acquisition and Restoration: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall mitigate for 2.75 acres of temporary impacts to Covered Species aquatic habitat, take of Swainson's hawk, and 0.3 acres of impact to GGS upland habitat by:

- 8.1. Utilizing 1.51 smelt/salmonid credits from Liberty Island Mitigation Bank that was purchased in excess under ITP No. 2081-2014-026-03 for the 2015 EBD Project (See Attachment 4).
- 8.2. Permittee shall mitigate the remaining 1.24 acres of temporary impacts to aquatic habitat by purchasing 1.24 acres of salmonid credits from a CDFW-approved mitigation or conservation bank **AND** developing and implementing an Invasive Vegetation Management and Monitoring Plan (Plan), which the Permittee shall develop under CDFW's direction and guidance and subject to CDFW's prior, written approval, to manage non-native invasive vegetation at 1.85 acres of sand bar locations for two years. The goal of the Plan shall be to expose sand bar habitat and increase smelt egg deposition habitat. The initial treatment to sandbars in shallow water habitat shall be completed between November 1, 2021 and December 1, 2021. The second treatment shall be completed between November 1, 2022 and December 1, 2022.
- 8.3. Permittee shall purchase 0.3 acres of GGS credits from a CDFW-approved mitigation or conservation bank.
- 8.4. Permittee shall purchase 1 nest buffer credit for Swainson's hawk from a CDFW-approved mitigation or conservation bank.

Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of

this ITP if Security is provided pursuant to Condition of Approval 9 below for all uncompleted obligations.

8.5. Cost Estimates. CDFW has estimated the cost of Covered Species credits and restoration of temporarily disturbed habitat as follows:

8.5.1. The cost of implementation of an Invasive Vegetation Management and Monitoring Plan identified in Condition of Approval 8.2 is estimated at \$100,000/acre for initial treatment and \$50,000/acre for a second year of treatment for 1.85 acres: **\$277,500**.

8.5.2. The cost of salmonid credits identified in Condition of Approval 8.2 is estimated at \$175,000/acre for 1.24 acres: **\$217,000**.

8.5.3. The cost of GGS credit identified in Condition of Approval 8.3 is estimated at \$75,000/acre for 0.3 acre: **\$22,500**. Credit acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements.

8.5.4. The cost of Swainson's hawk nesting buffer credit identified in Condition of Approval 8.4 is estimated at \$170,000.00/acre for 1 acre: **\$170,000**. Credit acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements.

8.6. Covered Species Credits (Salmonid). Permittee shall purchase up to 1.85 acres of salmonid credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 9 below.

8.7. Covered Species Credits (GGS). Permittee shall purchase 0.3 acres of GGS credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 9 below.

8.8. Covered Species Credits (Swainson's Hawk). Permittee shall purchase one nest buffer credit for Swainson's hawk from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 9 below.

9. Performance Security: In light of the specific and immediate Emergency Proclamation to which this Project responds, discussions of Permittee's ensured funding sources for the Project, and need for expedited permitting, the Permittee may proceed with Covered Activities upon the effective date of this ITP but shall provide further documentation to ensure funding (Security) to complete any activity required by Condition of Approval 8 that

has not been completed before Covered Activities begin within 14 days after the effective date of this ITP. Permittee shall provide Security as follows:

- 9.1. Security Amount. The Security shall be in the amount of **\$687,000**. This amount is based on the cost estimates identified in Condition of Approval 8.1 above.
- 9.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 6) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.
- 9.3. Security Timeline. The Security shall be provided to CDFW within 14 days after the effective date of this ITP.
- 9.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.
- 9.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 7) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.
- 9.6. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.
- 9.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:
 - Written documentation of the acquisition of the salmonid, GGS, and Swainson's hawk credits;
 - Completion of the Invasive Vegetation Management and Monitoring Plan;
 - Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

Amendment:

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the

concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

Notices:

The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090

Alternatively, the Permittee shall email the digitally signed ITP to CESA@wildlife.ca.gov. Digital signatures shall comply with Government Code section 16.5.

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by email or registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2021-041-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Gregg Erickson, Regional Manager
California Department of Fish and Wildlife – Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
Telephone: (707) 428-2002
R3CESA@wildlife.ca.gov

and a copy to:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090
CESA@wildlife.ca.gov

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Monica Oey, Senior Environmental Scientist (Specialist)
California Department of Fish and Wildlife, Bay Delta Region – 3
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
Telephone (707) 428-2088
Monica.Oey@wildlife.ca.gov

Compliance with the California Environmental Quality Act:

CDFW's issuance of an ITP is generally subject to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 2100 et seq.). However, the Governor's Proclamation of State of Emergency, dated May 10, 2021, in Paragraph 8 directed Permittee to undertake actions, if necessary, to implement plans that address potential Delta salinity issues, including the installation of Emergency Drought Salinity Barriers. Paragraph 8 of the Emergency Proclamation further directed CDFW to immediately consider any necessary regulatory approvals needed to install Emergency Drought Salinity Barriers. For purposes of carrying out this directive and other specified directives, the Proclamation of State of Emergency suspended CEQA, stating specifically that this suspension applies to any actions taken by state agencies, as well as for any necessary permits or approvals required to complete these actions. Consequently, CDFW has not reviewed a certified environmental impact report or adopted mitigated negative declaration evaluating this Project, nor has CDFW adopted related findings pursuant to CEQA. Similarly, in applying for this permit, Permittee relied on the CEQA suspension provided by Paragraphs 8 and 11 of the Emergency Proclamation.

Incidental Take Permit
No. 2081-2021-041-03
CALIFORNIA DEPARTMENT OF WATER RESOURCES
2021 EMERGENCY DROUGHT SALINITY BARRIER

Notwithstanding the CEQA suspension that is applicable to the Project, the Permittee's Project Description includes environmental commitments designed to avoid or minimize potential environmental impacts, including impacts to Covered Species and other biological resources. This ITP authorizes incidental take that may occur in the course of Covered Activities as described in the Project Description and implementation of these environmental commitments is required for permit compliance.

Findings Pursuant to CESA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. [Fish and Game Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subs. (a)-(b), 783.5, subd. (c)(2)].

CDFW finds based on substantial evidence in the ITP application, the results of consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly and Annual Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of up to 4.05 acres of Covered Species habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;

- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

Attachments:

FIGURE 1	Location of Emergency Drought Salinity Barrier
FIGURE 2	Footprint of West False River Barrier
FIGURE 3	Monitoring Station and Stockpile Locations
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	<i>Giant Garter Snake Relocation Plan for the Emergency Drought Barriers Project</i> , prepared by the California Department of Water Resources
ATTACHMENT 3	<i>Draft 2021 Emergency Drought Salinity Barrier Monitoring Plan</i> , prepared by the California Department of Water Resources; dated May 2021
ATTACHMENT 4	Liberty Island Credit Confirmation
ATTACHMENT 5	Letter of Credit Form
ATTACHMENT 6	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 6/2/2021.

DocuSigned by:
Gregg Erickson
DE74D4C93C604EA...

Gregg Erickson, Regional Manager
Bay Delta Region

ACKNOWLEDGMENT

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

By: Jacob McQuirk Date: 6/2/2021
DocuSigned by: CE484A0DF8E345D...

Printed Name: Jacob McQuirk Title: Principal Engineer