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CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTH CENTRAL REGION
1701 NIMBUS ROAD
RANCHO CORDOVA, CA, 95670

OCT 19 2018
HABITAT CONSERVATION
PLANNING BRANCH



AMENDMENT NO. 1
(A Minor Amendment)
California Endangered Species Act
Incidental Take Permit No. 2081-2017-015-02-A1
California Department of Water Resources
Fremont Weir Adult Fish Passage Modification Project in Yolo County, CA

INTRODUCTION

On October 12, 2017, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2017-015-02 (ITP) to the California Department of Water Resources (Permittee), authorizing take of giant garter snake (*Thamnophis gigas*), Chinook salmon – Sacramento River spring run (*Oncorhynchus tshawytscha*), and Chinook salmon – winter run (*Oncorhynchus tshawytscha*) (collectively, the Covered Species) associated with and incidental to the Fremont Weir Adult Fish Passage Modification Project in Yolo County, California (Project). The Project as described in the ITP as originally issued by CDFW includes the removal of an existing fish ladder at Fremont Weir, modification of the stilling basin, installation of a fish passage structure, and installation of a box culvert (Fremont Weir fish passage structure); improvements to the channel that extend from the south side of the Sacramento River to the new fish passage structure located at Fremont Weir (Upstream Channel); improvements to a poorly defined channel that begins on the south side of the pre-existing fish ladder curving in a southeast direction to an existing deep pond (Reach 1); replacement of an earthen agricultural crossing (Agricultural Road Crossing #2) on the Tule Canal with box culverts; and complete removal of an earthen agricultural crossing (Agricultural Road Crossing #3) on the Tule Canal. The Project includes maintenance activities for these structures and will occur after the initial construction is complete. 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 involves the complete removal of an existing earthen agricultural crossing (Agricultural Crossing #3). Take Minimization Measure 8.3 in the ITP requires the Permittee to dewater suitable aquatic giant garter snake (GGS) habitat within 200 feet (of the construction activity) and that the dewatered channel shall remain dry for at least fifteen (15) consecutive days prior to construction and until construction activities in the dewatered area are complete. Dewatering procedures for Agricultural Crossing #3 began on June 18, 2018, by installing water baffles up and downstream of the project area and by pumping water downstream.

Dewatering the Tule Canal around Agricultural Crossing #3 has not been completed due to the periodic release of water from adjacent agricultural fields into the canal. Discharges from adjacent agricultural fields continue to inundate the canal and raise water levels causing the aquadams to overtop. Pumps that are used to re-route the water from the dewatering zone are not capable of meeting the supply of water coming into the canal.

The Permittee submitted an amendment request for the ITP on September 26, 2018, and paid the associated fee of \$7,739.25 on September 28, 2018. The amendment requests to alter the Take Minimization Measure 8.3 for Agricultural Crossing #3. The amendment also requests to change the removal method of Agricultural Crossing #3 to only remove the top portion of the crossing down to the existing water level and to remove an existing culvert. This change in construction methodology would not require in-water work. The Permittee will place silt fencing and gravel bags at the current water level on both the upstream and downstream side of the crossing to isolate the area from the water in the Tule Canal. Approximately 1,000 cubic yards of material were proposed to be removed from Agricultural Crossing #3 per the original construction methods. Due to the reduced amount of grading/excavation proposed in the change to the construction methods, that amount would be reduced to approximately 450 cubic yards. The material removed from the crossing would be transported to the current Elkhorn Area spoil site.

This Minor Amendment No. 2081-2017-015-02-A1 (Amendment) makes the following changes to the existing ITP:

First, this Amendment changes the dewatering requirement for Agricultural Crossing #3 to allow for gravel bags and silt fencing to be installed at the edge of water. Dewatering for 15 days prior to the commencement of construction activities at Agricultural Crossing #3 will no longer be implemented.

Second, this Amendment changes the Project Description to reflect the revised plan to only excavate the top (dry) portion of Agricultural Crossing #3, including the existing culvert, down to the existing water level rather than remove the entire crossing.

AMENDMENT

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

1. The first paragraph in ITP Condition 8.3, page 16 (Take and Minimization Measures) shall be amended to read:

Dewatering of Aquatic Habitat. Prior to construction activities within 200 feet of suitable aquatic GGS habitat, Permittee shall dewater the channel and the channel

shall remain dry for at least fifteen (15) consecutive days. The dewatered area shall remain dry until construction activities in the dewatered area are complete.

Dewatering within 200 feet upstream and downstream of Agricultural Crossing #3 will not be performed due to the influx of agricultural drain water to Tule Canal. In-lieu of dewatering 200 feet upstream and downstream and prior to the start of construction activities, the Permittee shall install a cofferdam of silt fencing and gravel bags will be utilized to isolate the work area upstream and downstream of Agricultural Crossing #3. The cofferdam located at Agricultural Crossing #3 may be placed just outside of the limit of excavation at the water's edge. During installation of cofferdams, a Designated Biologist shall remain in the channel to identify aquatic species. The Designated Biologist will relocate non-covered species. If Covered Species are identified, the Designated Biologist will either remove the species or consult with CDFW per Conditions 8.16 and 8.21.

2. The corresponding MMRP Measure 35 shall be amended to say the following

Prior to construction activities within 200 feet of suitable aquatic GGS habitat, Permittee shall dewater the channel and the channel shall remain dry for at least fifteen (15) consecutive days. The dewatered area shall remain dry until construction activities in the dewatered area are complete. ***Dewatering within 200 feet upstream and downstream of Agricultural Crossing #3 will not be performed due to the influx of agricultural drain water to Tule Canal. In-lieu of dewatering 200 feet upstream and downstream and prior to the start of construction activities, the Permittee shall install a cofferdam of silt fencing and gravel bags will be utilized to isolate the work area upstream and downstream of Agricultural Crossing #3. The cofferdam located at Agricultural Crossing #3 may be placed just outside of the limit of excavation at the water's edge.*** During installation of cofferdams, a Designated Biologist shall remain in the channel to identify aquatic species. The Designated Biologist will relocate non-covered species. If Covered Species are identified, the Designated Biologist will either remove the species or consult with CDFW per Conditions 8.16 and 8.21.

3. The Project Description, Page 2 shall be amended to read:

The purpose of the Project is to provide fish passage for adult salmon and sturgeon and to remove barriers that prevent fish passage. The Project includes the removal of an existing fish ladder at Fremont Weir, modification of the stilling basin, installation of a fish passage structure, and installation of a box culvert (Fremont Weir Fish Passage Structure); improvements to the channel that extends from the south side of the Sacramento River up to the fish ladder located at Fremont Weir (Upstream Channel); improvements to a poorly defined channel that begins on the south side of the existing fish ladder curving in a southeast direction to an existing

deep pond (Reach 1); replacement of an earthen agricultural crossing (Agricultural Road Crossing #2) on Tule Canal with box culverts; and, ~~complete~~ **partial** removal of an earthen agricultural road crossing (Agricultural Road Crossing #3) on Tule Canal. The Project's initial construction will occur over two construction seasons. The Project includes maintenance activities for these structures and will occur after the initial construction is complete.

The Project Description, Page 5 shall be amended to read:

The **top portion of the** earthen Agricultural Crossing #3 (See figure 4) located on the Tule Canal will be **graded/excavated down to the existing water level and the existing culvert will be** removed as this crossing is no longer needed. The north and south areas of the channel adjacent to this crossing will be modified to create a consistent channel bottom profile of approximately 34.1 feet through the area. **Gravel bags and silt fencing will be placed at the water level on both the upstream and downstream side of the crossing to isolate the work area from the water in the Tule Canal. Less than** Approximately 1,000 cubic yards of material will be removed from Agricultural Crossing #3 and transported to Elkhorn Area spoil location site.

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 two specific changes to the ITP as originally issued. A change to the dewatering for aquatic habitat for Agricultural Crossing #3 methods and a change in the Project Description that describes only partial removal of Agricultural Crossing #3 to be level with existing water levels in the Tule Canal. The resulting impacts to the Covered Species, however, including the number of acres of habitat that will be permanently and temporarily impacted as a result of the Project, will remain the same.

CDFW has determined that changes described above 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, 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 October 2017 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. 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 October 2017 as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) After, among other things, considering the Mitigated Negative Declaration (MND), (State Clearinghouse No. 2017022012), by the California Department of Water Resources as the lead agency for the Project. 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 the California Department of Water Resources 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 modifies the requirement for dewatering the work area and changes the Project Description for work performed on Agricultural Crossing #3.

These changes to the ITP will not: (1) increase the level of take or other Project impacts on Covered Species previously analyzed and authorized by the ITP, (2) affect Permittee's substantive mitigation obligations under the ITP, (3) require further environmental review under CEQA, or (4) increase temporal impacts on the Covered Species. Therefore, this Amendment will not significantly modify the scope or nature of the permitted Project or activity, or the minimization, mitigation, or monitoring measures in the ITP. CDFW has determined that the change to the ITP constitutes a Minor Amendment as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(4).

The authorization provided by this Amendment is not valid until 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
Habitat Conservation Planning Branch
Attention: CESA Permitting Program
Post Office Box 944209
Sacramento, CA 94244-2090

APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on

10/11/18



Kevin Thomas
Acting Regional Manager
North Central Region

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:

Catherine McCallum
for DFM

Date:

10/16/2018

Printed Name:

Catherine McCallum

Title:

Office Chief
(Environmental Compliance)

Minor Amendment No. 1
Incidental Take Permit 2081-2017-015-02-A1
CALIFORNIA DEPARTMENT OF WATER RESOURCES
Fremont Weir Adult Fish Passage Modification Project

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
CALIFORNIA ENDANGERED SPECIES ACT**

INCIDENTAL TAKE PERMIT NO. **2081-2017-015-02 &
2018-2017-015-02-A1**

PERMITTEE: **California Department of Water Resources**

PROJECT: **Fremont Weir Adult Fish Passage Modification**

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	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.	ITP Condition # 6.1	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
2	Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, 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.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
3	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.	ITP Condition # 6.3	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
4	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 regarding 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. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project area.	ITP Condition # 6.4	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
5	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.	ITP Condition # 6.5	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
6	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.	ITP Condition # 6.6	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
7	Permittee shall inspect all vehicles and equipment and remove all visible soil, mud, and plant materials prior to entering and existing the Project area.	ITP Condition # 6.9	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
8	Before starting Covered Activities along each part of the route in active construction, 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 in that area.	ITP Condition # 6.10	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
9	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.	ITP Condition # 6.11	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
10	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 do not exceed 20 miles per hour to avoid Covered Species on or traversing the roads within the Project area. 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.	ITP Condition # 6.12	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
11	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 6.11 of this ITP.	ITP Condition # 6.13	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
12	The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities. Notification shall be given each year at the beginning of the next phase of construction and maintenance activities.	ITP Condition # 7.1	Before commencing ground- or vegetation-disturbing activities	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
13	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.	ITP Condition # 6.15	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
14	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.	ITP Condition # 7.2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
15	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 Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 7.6	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
16	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 (916) 358-2900. 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.	ITP Condition # 7.8	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
17	When take of the Covered Species is documented, specifically one giant garter snake or winter-run or Sacramento River spring run Chinook salmon, consultation with CDFW is required to review circumstances causing take and evaluate whether all prudent and feasible measures have been implemented to minimize and fully mitigate the take that has occurred or may continue to occur. Permittee shall notify the CDFW Regional Representative at R2CESA@wildlife.ca.gov to request consultation.	ITP Condition # 7.9	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
18	All Covered Activities occurring in-channel and in upland areas within 200 feet of aquatic habitat shall be conducted during the GGS active period (May 1 – October 1). Covered Activities may continue beyond October 1 for areas already under construction and only during periods of dry weather, with CDFW pre-approval.	ITP Condition # 8.1	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
19	In-channel maintenance activities shall be conducted between May 1 – October 1 and flows into the Fremont Weir have ceased. In-channel work is limited to removal of accumulated sediment and vegetation. Bank and channel slope disturbance is not permitted during channel maintenance activities. Permittee shall operate equipment from bank top and shall excavate from only one side of the channel during a given year. Permittee shall confine all excavation/dredging to the channel bottom.	ITP Condition # 8.2	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
20	<p>The following measures shall be implemented to avoid and minimize spread or introduction of invasive species:</p> <ul style="list-style-type: none"> • Clean construction equipment and vehicles in designated areas prior to entering and existing the Project site • Educate construction supervisors and managers about invasive species identification and the importance of controlling and preventing the spread of invasive species • Minimize surface disturbance to the greatest extent feasible to complete the work • Use native, non-invasive species or non-persistent hybrids in erosion-control plantings to stabilize site conditions and prevent invasive plant species from colonizing • Use weed-free imported erosion-control materials (or rice straw) in upland areas • One year after construction and maintenance activities, conduct a monitoring site visit to ensure no new occurrences have established 	ITP Condition # 8.8	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
21	Staging and storage areas for equipment materials, fuels, lubricants and solvents, will be located outside of the channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the channel will be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the channel will be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life. Vehicles will be moved away from the channel prior to refueling and lubrication. When refueling of equipment outside of the channel is infeasible, refueling activities shall be conducted in such a way that spilled petroleum products will not enter the watercourse.	ITP Conditions # 8.9	Before commencing ground- or vegetation-disturbing activities / Entire project	Permittee	
22	No more than 72-hours prior to commencement of Covered Activities, the Project site shall be surveyed for GGS by the Designated Biologist. The Designated Biologist shall provide the results of the pre-construction survey to CDFW prior to commencement of Covered Activities.	ITP Conditions # 8.10	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
23	In areas of tall grass or vegetation in GGS upland habitat, Permittee shall trim vegetation to a height of no greater than six inches (6") prior to construction in order to see movement of GGS.	ITP Conditions # 8.11	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
24	Exclusion fencing shall be installed 200 feet from the edge of GGS aquatic habitat within the Project area and remain in place during construction activities during their active period. The exclusion fence shall consist of 3-foot tall erosion fencing buried six inches below the ground level and soil shall be compacted on both sides of the fence. Permittee shall avoid damage to small mammal burrows to the maximum extent possible during installation of the exclusion fencing. If burrows cannot be avoided, burrows shall be hand excavated by the Designated Biologist prior to trenching activities. GGS found during excavation shall be relocated (persee Condition 8.167). The Designated Biologist shall inspect the fence at the start of each workday. Permittee shall maintain the fence until completion of the Project. Permittee shall ensure fence is taut and bottom edge of fence remains buried. Permittee shall remove the fencing upon completion of the Project.	ITP Conditions # 8.12	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
25	Before the start of work each morning, the Designated Biologist shall check for wildlife under any equipment such as vehicles and stored pipes. The Designated Biologist shall check all excavated steep-walled holes or trenches greater than one-foot deep for any wildlife. The Designated Biologist shall survey the areas graded for any wildlife each morning. Wildlife shall be removed by the Designated Biologist and relocated to a safe location (See Condition 8.7).	ITP Conditions # 8.14	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
26	Permittee shall develop a GGS Relocation Plan for review and approval by CDFW 30 days prior to commencement of ground disturbing Covered Activities. The GGS Relocation Plan shall quantify the amount, relative location, and quality of suitable habitat (aquatic and terrestrial) including invasive and non-native species present, available upland burrows, suitable prey items, and potential barriers for movement. Due to genetically distinct populations, relocation areas should be within the same watershed as the Project site.	ITP Conditions # 8.17	Before commencing ground- or vegetation-disturbing activities / Entire Project	Permittee	
27	Permittee shall purchase 8.72 acres of giant garter snake credits and 1.68 acres of salmonid credits from a CDFW-approved mitigation or conservation bank. CDFW has estimated the purchase of giant garter snake credits at a conservation or mitigation bank identified in Condition of Approval 9.1, estimated at \$45,000 per credit, at \$392,400 and salmonid credits at \$100,000 per credit, at \$168,000. Temporary restoration activities have been estimated at \$2,750 per acre, at \$9,735.	ITP Conditions # 9.1 & 9.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
28	Permittee shall submit to CDFW prior to Project activities if no Security is provided for the Covered Species Credit cost estimates, a copy of the Bill of Sale(s) and payment receipt or within 18 months from issuance of this ITP if Security is provided.	ITP Condition # 9.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
29	<p>Security Amount. The Security shall be in the amount of \$570,135. This amount is based on the cost estimates identified in Condition of Approval 9.1 above.</p> <p>Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 2) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.</p> <p>Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.</p> <p>Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.</p> <p>Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 3) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.</p> <p>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.</p> <p>10.7. 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:</p> <ul style="list-style-type: none"> • Copies of bills of sale and payment receipt • Successful implementation of the Vegetation Restoration Plan • Timely submission of all required reports <p>Even if Security is provided, the Permittee must complete the required purchase of Covered Species credits no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide purchase of Covered Species credits 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.</p>	ITP Condition # 10.1 – 10.7	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
DURING CONSTRUCTION					
30	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.	ITP Condition # 6.7	Entire Project	Permittee	
31	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.	ITP Condition # 6.14	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
32	The Designated Biologist shall be on-site at all times and at each location when Covered Activities occur. The Designated Biologist shall have clear communication with personnel conducting the Covered Activities. 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 weekly during periods of construction inactivity and after clearing, grubbing, and grading are completed.	ITP Condition # 7.3	Entire Project	Permittee	
33	The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.3 into a Quarterly 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 during Project construction. Once Project construction is completed and after submission of the Quarterly Report post construction, Quarterly Compliance Reports will not be required during the maintenance activity period. Quarterly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Region 2 and Headquarters CESA Program. Email addresses for CDFW Region 2 is R2CESA@wildlife.ca.gov and Headquarters CESA Program 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.	ITP Condition # 7.4	Entire Project	Permittee	
34	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 Quarterly Compliance Reports for that year identified in Condition of Approval 7.4; (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; and (7) information about other Project impacts on the Covered Species.	ITP Condition # 7.5	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
35	Prior to construction activities within 200 feet of suitable aquatic GGS habitat, Permittee shall dewater the channel and the channel shall remain dry for at least fifteen (15) consecutive days. The dewatered area shall remain dry until construction activities in the dewatered area are complete. <i>Dewatering within 200 feet upstream and downstream of Agricultural Crossing #3 will not be performed due to the influx of agricultural drain water to Tule Canal. In-lieu of dewatering 200 feet upstream and downstream and prior to the start of construction activities, the Permittee shall install a cofferdam of silt fencing and gravel bags will be utilized to isolate the work area upstream and downstream of Agricultural Crossing #3. The cofferdam located at Agricultural Crossing #3 may be placed just outside of the limit of excavation at the water's edge.</i> During installation of cofferdams, a Designated Biologist shall remain in the channel to identify aquatic species. The Designated Biologist will relocate non-covered species. If Covered Species are identified, the Designated Biologist will either remove the species or consult with CDFW per Conditions 8.16 and 8.21.	ITP Amendm ent No.1 Condition # 8.3	Entire Project	Permittee	
36	Work within stream channels must be performed in isolation from the flowing stream. To isolate the work area, watertight coffer dams shall be constructed as close as practicable upstream and downstream of the work area. The water shall be diverted through a suitably sized pipe from upstream of the cofferdam and discharge downstream of the downstream cofferdam. Cofferdams shall be constructed of a non-erodible material, which does not contain soil or fine sediment. Cofferdam construction shall be adequate to prevent seepage into or from the work area. The entire work area shall be dewatered. Cofferdams and the stream diversion system shall remain in place and functional throughout the construction period. If the coffer dams or stream diversion fails then they shall be repaired immediately. Normal flows shall be restored to the affected stream immediately upon completion of work at that location.	ITP Condition # 8.4	Entire Project	Permittee	
37	Flow diversions shall be done in a manner that shall prevent pollution and/or siltation and shall provide flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion.	ITP Condition # 8.5	Entire Project	Permittee	
38	Permittee shall monitor turbidity in the adjacent water bodies to ensure that Covered Activities do not affect turbidity levels. Permittee shall follow the Basin Plan for the Sacramento River and San Joaquin River basins (Fourth Edition) (Central Valley Regional Water Quality Control Board 2011) which contains turbidity objectives (see NMFS BO Conservation Measure 1.3.4.6)	ITP Condition # 8.6	Entire Project	Permittee	
39	Concrete shall be isolated from the wetted channel and be allowed to cure. The Permittee shall apply water to the concrete and test this water until the pH of the test water is between 6.5 and 8.0 pH units before allowing the stream to be exposed to the concrete. Water contaminated with leachate shall be separated from the stream flow via a diversion structure until the pH falls within the range specified.	ITP Condition # 8.7	Entire Project	Permittee	
40	To prevent inadvertent entrapment of wildlife during construction and periods of inactivity, the Designated Biologist shall ensure all excavated trenches and holes have one or more escape ramps prior to sunrise each morning.	ITP Condition # 8.15	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
41	If a GGS is encountered during construction activities, construction activities shall immediately cease. The GGS should be allowed to leave the area on its own accord and construction activities may not start back up until the GGS has safely moved out of harms way. If the GGS can not move out of harms way on its own then the Designated Biologist shall relocate the GGS in accordance with the GGS Relocation Plan (Condition 8.17).	ITP Condition # 8.16	Entire Project	Permittee	
42	The Designated Biologist shall relocate GGS found within the Project area to appropriate habitat in accordance with the approved GGS Relocation Plan (Condition 8.17) and monitor the GGS until it is determined that the GGS is not imperiled by predators or other dangers. The Designated Biologist shall notify CDFW immediately or no later than noon of the next business day of any GGS relocation. Notification shall be via telephone, or email, followed by a written incident report. Notification shall include the ITP number, date, time, location, circumstances of the incident, and any associated data (pictures, weight, length, sex, tag #, etc.).	ITP Condition # 8.18	Entire Project	Permittee	
43	The Designated Biologist may capture GGS by hand or facilitated with a snake stick. GGS may be pinned down by placing a hand or snake stick directly behind the head and applying gentle pressure. The amount of pressure required will depend on the size of the GGS but it should be sufficient to prevent it from moving its head without injury. Grasp the GGS by the tail, handling firmly but with great care. Pick the GGS up gently mid-body and deposit the GGS in the bottom of a snake bag. Support the body of the GGS in addition to holding the head. Following capture, tie the top of the snake bag with a cord. Captured GGS shall be released as soon as practicable.	ITP Condition # 8.19	Entire Project	Permittee	
44	During transport, all equipment used for capturing, handling and transportation shall be well maintained and checked before use. If a container other than a snake bag is used, the container shall be inspected to ensure no sharp edges, protrusions, or rough surfaces are present that could cause injury. Snakes shall be protected from exposure to inclement weather, harsh environmental conditions, and major temperature fluctuations and extremes. Snakes shall be observed periodically to determine their state of well-being during transport. Following use of transport containers, all items used shall be cleaned thoroughly and disinfected or discarded, as appropriate.	ITP Condition # 8.20	Entire Project	Permittee	
45	If a snake is injured as a result of Project-related activities, the Designated Biologist shall immediately take it to a USFWS and CDFW-approved wildlife rehabilitation, veterinary facility, or other qualified individual. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured snake. The Permittee shall notify CDFW of the injury to the snake immediately by telephone and e-mail to R2CESA@wildlife.ca.gov followed by a written incident report. Notification shall include the ITP number, date, time, location, circumstances of the incident, any associated data (pictures, weight, length, sex, tag #, etc.) and the name of the facility or individual caring for the snake.	ITP Condition # 8.21	Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
46	<p>Pumps used to dewater the work area shall be equipped with screens that meet the following criteria:</p> <p>a. Perforated plate or woven wire: screen openings shall not exceed 3/32 inches (2.38 mm), measured in diameter for round openings and diagonally for square openings. Slotted openings shall not exceed 0.0689 inches (1.75 mm)</p> <p>b. Screen material shall provide a minimum of 27% open area. The screen open area does not include any part of the frame that blocks the open area</p> <p>c. Approach velocity shall not exceed 0.2 feet per second for passive pumps and 0.4 feet per second for active pumps</p>	ITP Condition # 8.22	Entire Project	Permittee	
47	Permittee shall have and use a salmonid identification protocol. If Covered Species are encountered during construction activities, work will cease immediately and CDFW will be notified within one hour of observation. Work will not begin again until the CDFW biologist(s) have removed the fish from the work area.	ITP Condition # 8.23	Entire Project	Permittee/CDFW	
POST-CONSTRUCTION					
48	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.	ITP Condition # 6.8	Post-construction	Permittee	
49	Permittee shall not use plastic monofilament netting on the Project site for erosion control or other purposes to avoid entanglement of GGS.	ITP Condition # 8.13	Post-construction	Permittee	
50	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.	ITP Condition # 6.16	Post-construction	Permittee	
51	Permittee shall restore on-site the 3.54 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Within 6 months of issuance of this ITP, and at least 30 days before starting restoration work, Permittee shall submit a Vegetation Restoration Plan (Plan) to CDFW for review and approval. The Plan will facilitate revegetation of the 3.54 acres of temporary construction disturbance on-site, and shall ensure that the contractor successfully implements the Plan. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The Plan shall also indicate the best time of year for seeding to occur as well as seeding with only native plants.	ITP Condition # 9.2	Post-construction and after completion of mitigation	Permittee	