California Department of Fish and Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670

California Endangered Species Act
Incidental Take Permit No. 2081-2020-034-02

Yolo Bypass Salmonid Habitat Restoration and Fish Passage (Big Notch) Project

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 take[1] 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:	**Dean F. Messer, Chief, Division of Environmental Services**
Contact Person:	**Analisa Martinez, Senior Environmental Scientist (Supervisor)**
Mailing Address:	**3500 Industrial Blvd.** **West Sacramento, CA 95691**

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 **30 years** from the date it is signed by CDFW so long as the Permittee satisfies the 10-year review process described in the Permit Term section below.

[1]Pursuant 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".)

[2]The 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.

Permit Term:

Permittee is required to prepare and submit to CDFW a 10-year compliance report at least 180 days prior to each 10-year anniversary of the effective date of this ITP (Condition of Approval 7.7). Permittee shall meet and confer with CDFW within 60 days after the 10-year compliance report submittal to discuss the report and any potential ITP compliance issues. Within 30 days following that meeting, if CDFW determines that there are any outstanding ITP compliance issues, CDFW shall provide a letter describing the outstanding ITP compliance issues and what actions are necessary for the Permittee to remain in or come into compliance. Within 30 days of receiving CDFW's letter, the Permittee shall provide CDFW a response in writing listing actions taken or proposed to show how the compliance issues will be resolved. Permittee shall work with CDFW to confirm the resolution proposed meets the needs to bring the ITP into compliance. If the Permittee fails to provide the required written response or fails to complete the necessary actions to remain in or come into compliance, CDFW may revoke or suspend the permit as provided under California Code of Regulations, Title 14, section 783.7.

Permittee shall include in their 10-year compliance report, at a minimum, the following:

1. A list of projects (including both construction and maintenance projects) completed over the prior 10-year period, including projects that are currently in progress;
2. Acreages of impacts to Covered Species habitat(s) over the prior 10-year period, along with Geographic Information System (GIS) mapping depicting impacts to Covered Species habitat(s) over the last ten years;
3. Total acres and GIS mapping depicting onsite restoration of temporarily impacted Covered Species habitat pursuant to Condition of Approval 8.18 and 9.6;
4. Number of individuals of the Covered Species taken during the last 10-year period;
5. A copy of the table in the Mitigation Monitoring and Reporting Program (MMRP) with notes showing the current implementation status of each mitigation measure;
6. An assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing, and mitigating impacts associated with the Yolo Bypass Salmonid Habitat Restoration and Fish Passage (Big Notch) Project (Project);
7. An assessment of whether the Covered Activities and Project Description, as described in this ITP, for Operations and Maintenance (O&M) are still valid;
8. A summary of the results of monitoring and fish rescues associated with Project Operations over the prior 10-year period, including the number and location(s) of any spring- and/or winter-run Chinook salmon encountered during these fish rescues, and an assessment of whether monitoring and fish rescues are likely to be necessary during the next 10 years; and
9. Any new information relevant to the conservation of the Covered Species and/or to

the Project Area, as defined in the impact analysis section of this ITP.

If during the 10-year compliance review process, 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, the Permittee shall submit a request for an amendment pursuant to Title 14, Section 783.6 of the California Code of Regulations and associated fee based on the fee schedule at time of submittal.

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 7.9 of this ITP.

Project Location:

The Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project, also known as the Big Notch Project (Project) is located at the Sacramento River, Tule Pond, and Tule Canal, within the Fremont Weir Wildlife Area, in the County of Yolo, State of California; in portions of Sections 27, 28, 32, 33, and 34, Township 11N, Range 3E, U.S. Geological Survey (USGS) map 'Knights Landing', and Sections 3, 10, and 34, Townships 10N and 11N, Range 3E, USGS map 'Gray's Bend', Mt. Diablo meridian; Assessor's Parcel Numbers (APNs) 057-020-010-000, 057-020-001-000, 057-070-006-000, 057-060-008-000, 034-230-010-000, 057-100-016-000, 057-020-006-000, 057-060-005-000, and 057-060-002-000 (See **Figure 1**).

Geographic coordinates for individual components of the project are included below in **Table 1**.

Table 1: Geographic Coordinates

Project Component	Latitude	Longitude
Intake Channel	38.765818	-121.635988
Headworks Structure	38.764951	-121.636580
Transport Channel	38.761354	-121.636476
Tule Channel	38.744987	-121.636246
Agricultural Road Crossing 1	38.740903	-121.635242
Supplemental Fish Passage Structure	38.761846	-121.664204

Project Description:

The project consists of the construction of several facilities in the Fremont Weir Wildlife Area with the intent to create a more frequent hydraulic connection between the Sacramento River and the Yolo Bypass. Implementation of the Project is a requirement of Condition of Approval 9.2.2 of the ITP for the Long-Term Operation of the State Water Project in the Sacramento-San Joaquin Delta (ITP No. 2081-2019-066-00). The Project will allow increased flow from the Sacramento River to enter the Yolo Bypass through a gated notch on the east side of the Fremont Weir. The gated notch will create an opening in the Fremont Weir that is at a lower elevation than the Fremont Weir, with gates to control water going through the facility into the Yolo Bypass. The Project will connect the new gated notch to the existing Tule Pond with a channel that parallels the existing east levee of the Yolo Bypass. The Project will also include the construction of a supplemental fish passage facility on the west side of the Fremont Weir and improvements to allow fish to pass through an existing agricultural road crossing over Tule Canal south of Tule Pond. The Project also includes operation of the headworks gates and maintenance of the structures.

The dimensions (length, width, height, and depth) of the Project structures described in this ITP are approximate and based on Permittee's designs at the time of issuance.

The Project includes the following components:

CONSTRUCTION

Intake Channel

The primary purposes of the Intake Channel are to draw juvenile salmonids and floodplain inundation flows from the Sacramento River to the new Headworks Structure and to provide upstream adult fish passage between the Headworks Structure and the Sacramento River. The 800-foot-long rock lined Intake Channel will be constructed with a 98-foot bottom width with 3:1 side slopes (horizontal to vertical). The east side of the channel will have a bench elevated four feet above the main channel. The channel will slope away from the Fremont Weir so that flows will drain toward the Sacramento River. It will reach the river with an invert elevation of 12 feet. Rock will be placed at the inlet of the Intake Channel, where the channel meets the Sacramento River. The downstream end of the channel will include a short transition from the trapezoidal Intake Channel to the rectangular sides of the Headworks Structure. An access ramp will be constructed for vehicle access into the channel.

Headworks Structure

The Headworks Structure will control the diversion of flow from the Sacramento River into the Yolo Bypass. It will serve as the primary upstream fish passage facility for adult fish and the primary facility for conveying floodplain inundation flows and juvenile salmonids onto the Yolo Bypass.

The Headworks Structure will be a three-bay, reinforced concrete structure that will bisect the existing Fremont Weir, approximately 220 feet from the Yolo Bypass east levee. The gate structure will be 108 feet long by 108 feet wide. The structure is designed to convey approximately 6,000 cubic feet per second (cfs) at a river stage of 28 feet (14 feet of water depth in the Headworks Structure) with all gates fully open. The structure will include one large gate with an invert elevation of 14 feet and two small gates with an invert elevation of 18 feet. It will also include a concrete control structure, an upstream vehicular bridge crossing, and a concrete Outlet Transition which will transition the rectangular sides of the control structure to the side channel slopes of the Transport Channel. A sheet pile cutoff wall will be constructed around the structure under the gates to prevent seepage from the river and allow the concrete structure to be constructed in dry conditions.

Stoplogs will be placed at each of the three headworks bays upstream and downstream of the control structure to dewater the gates for maintenance.

Three pneumatically operated, flush-mounted bottom hinge bladder gates (Obermeyer) will be used in the Headworks Structure. The top of the gate elevation of 32 feet will be flush with the existing Fremont Weir crest. The upstream face of the control gates will be approximately in-line with the upstream face of the existing Fremont Weir. When fully open, the gates will be flush with the channel invert. Debris fins will be installed between the gates of the Headworks Structure to redirect debris to pass through or over the gates.

Headworks Structure Bridge

A reinforced concrete, three-span vehicular bridge will be constructed on the upstream side of the Fremont Weir to connect with the existing access road. The bridge will span the channels through the new Headworks Structure, 108 feet long. The bridge will be built at nearly the same alignment and elevation as the existing upstream maintenance road and will allow continued patrolling and maintenance access along the weir. The bridge will have a roadway width of 14 feet and an overall width of 18 feet. The top curb elevation will be equal to the top of the weir elevation. A ramp connecting the top of the Fremont Weir downstream to the stilling basin will be constructed on the west side of the bridge.

Outlet Transition
An Outlet Transition will be constructed connecting the Headworks Structure to the Transport Channel. The Outlet Transition will be a 100-foot-long reinforced concrete channel that provides a gradual hydraulic transition from the headworks into the graded Transport Channel. The width will vary between 108 feet at the headworks and 196 feet at the Transport Channel. The transition will be accomplished with reinforced retaining walls that flare out from the headworks abutment piers and a reinforced concrete slab-on-grade bottom, which will gradually transition into the slopes of the trapezoidal Transport Channel. The Outlet Transition will have a gentle slope consistent with the downstream Transport Channel.

Control Building
A Control Building will be built to house the controls for the Headworks Structure. The Control Building will be a single-story, 40-foot by 20-foot concrete masonry unit located on an engineered fill pad constructed on the eastern levee landside slope. The engineered fill pad will be formed with approximately 2,700 cubic yards of clean fill material and will bisect the existing agricultural maintenance road east of the levee. The road will be realigned around the new fill pad. The Control Building will house a programmable logic controller for the gates, three power units, compressors, a propane generator and a motor control center. The propane tank for the generator will be buried south of and adjacent to the control building.

Transport Channel

The Transport Channel will be a rock-lined graded trapezoidal channel with an interior inline bench, serving as the primary facility for upstream fish passage between the existing Tule Pond and the Headworks Structure. It will also serve as the primary channel for conveying juvenile salmonids and rearing habitat flows from the Headworks Structure to Tule Pond.

The 2,650-foot-long Transport Channel will include a bench on the east side of the channel, elevated four feet above the main channel. The main channel will have a bottom width of 30 feet. The bench width will vary between 30 and 65 feet. The trapezoidal channel will have 3:1 slopes and will be 150 feet wide at the top. The channel will gradually slope towards Tule Pond. At the top of each side of the channel, an 8-foot-wide area with rock (a rock key) will be added to reduce the potential for the channel to head cut the channel banks. The facility will have a 12-foot-wide maintenance corridor at the top of each side of the channel. Rock will also be placed in the tributary channel near the northern portion of Tule Pond to protect from scour.

Pedestrian Bridge
The Headworks Structure Bridge will provide vehicular and pedestrian crossing on the northern side of the Fremont Weir. However, when water begins to flow through the new gated notch in the Fremont Weir, the channels south of the weir will fill and create a barrier. If

recreational users are in the Fremont Weir Wildlife Area, the pedestrian bridge will provide an additional point of access across the transport channel from the Fremont Weir Wildlife Area to the eastern levee. The pedestrian bridge will be a 120-foot-long, 12-foot-wide concrete pedestrian bridge and will be constructed across the Transport Channel south of the Fremont Weir.

Tule Pond
The Transport Channel will outfall into Tule Pond at the northern inlet at an elevation of 12 feet. The Tule Channel located south of Tule Pond will tie into the southernmost portion of the pond at an approximate elevation of 10 feet. Other than tying in the Transport Channel and the Tule Channel, no work is proposed within Tule Pond.

Tule Channel

Channel improvements in Tule Channel downstream of Tule Pond will be made to connect isolated pools within the wooded area that extends from the Tule Pond outlet downstream to Agricultural Road Crossing 1, where the Tule Canal begins. The channel will facilitate upstream adult fish passage between the existing Tule Canal and Tule Pond. The channel will meander to tie-in to existing topography. The Tule Channel will be a 3,294-foot-long generally trapezoidal rock-lined channel, with a bottom width of a minimum of 20 feet and a bottom invert elevation of 10 feet. The final channel alignment will generally conform to existing topography within the wooded area, meeting the minimum requirements noted above. It will begin downstream of Agricultural Road Crossing 1 and will extend north to Tule Pond. A permanent access road, graded with crushed rock, will be built on high ground adjacent to, and to the west of, the channel.

Agricultural Road Crossing 1 Improvements

Project improvements at Agricultural Road Crossing 1 will include removal of the existing road crossing and cross-canal berms, channel improvements to connect the existing Tule Canal to the new Tule Channel, construction of a bridge for vehicular traffic, three 15-foot-wide box culverts, and an elevated flume through the new Tule Canal connection that will maintain water deliveries to agricultural water users in the Elkhorn Area. Removing the barriers to fish passage will also remove a flow barrier that retains water in Tule Pond and the wooded area north of the crossing.

The cross-canal berms will be removed and a 20-foot-wide channel with 3:1 side slopes will be graded to an elevation of 10 feet and lined with rock. The channel will connect the new Tule Channel to the north at an elevation of 10 feet. South of the crossing, a rock weir at an elevation of 15 feet will act as the new downstream control point. Three adjoining 15-foot-wide box culverts spanning the width of Tule Canal will be installed with stoplog slots on the

upstream side of the box culverts in each bay. The vehicular crossing will be 18-feet-wide and 80-feet-long and will be placed over the box culverts with abutments on each end. It will connect to existing access roads at an elevation of 21 feet. An elevated flume will be installed to provide a connection to the eastern side of Tule Canal that will feed the existing supply pipes through the levee. Two manually operated lift gates will be placed on the east end and west ends of the concrete cross-channel.

Supplemental Fish Passage Facility

The Supplemental Fish Passage Facility, consisting of an excavated channel leading into the Sacramento River, a channel transition, and a concrete fish passage structure, will be built on the western side of the Fremont Weir to provide passage for adult fish to travel from the western portion of the Yolo Bypass into the Sacramento River.

The excavated channel will have a gentle slope towards the Sacramento River so that flows will drain towards the river. Rock will be placed at the inlet of the channel, above the water line of the Sacramento River, to prevent erosion. The channel will reach the river with an invert elevation of 20 feet (compared to the invert of 22 feet at the Fremont Weir). The excavated channel will have a 10-foot bottom width and 3:1 side slopes, will stretch over 350 feet from the Fremont Weir to the Sacramento River, and will connect to the fish passage facility through a channel transition. The transition will be 10 feet long and will connect the 10-foot-wide channel to the 15-foot-wide fish passage structure. The concrete fish passage structure will have an elevation of 22 feet at Fremont Weir and will house a 15-foot-wide by 5-foot-tall vertical lift gate. Sheet piles may be installed around the concrete structure to prevent under-seepage from the Sacramento River and allow the concrete structure to be constructed in dry conditions. When open, the gate will allow less than approximately 1,000 cfs to enter the Yolo Bypass. At an elevation of 32 feet, the concrete wall of the fish passage structure will be flush with the top of the existing weir. The structure will have a 16-foot-wide traffic-rated deck to allow vehicular passage.

Dewatering

Dewatering is expected to be necessary in localized areas of excavation and will be accomplished using a combination of sheetpile cofferdams and cutoff walls, open sumps, wells, and pumps. Some sheetpile cutoff walls around concrete structures may be removed following construction and some may be left in place permanently. During dewatering, any fish stranded in residual pools will be captured and relocated outside of the work area.

OPERATIONS

Headworks Structure

Operation of the Headworks Structure will consist of opening and closing the gates based on river conditions to maximize the number of out-migrating juvenile Chinook salmon that enter the Yolo Bypass. Gate operations may begin November 1 of each year and will first open based on river conditions. All gates will be opened when the river elevation reaches 15 feet, which is one foot above the lowest gate invert. At this river elevation, about 130 cfs will enter the gated notch. If the river continues to rise, the gates will remain fully open until the river reaches an elevation of 28 feet. At this point, flows through the gates will reach approximately 6,000 cfs and the smaller gates will be closed to prevent flows over approximately 6,000 cfs. Gate closures will be controlled to prevent sudden reductions in flow. Most gate operations will be done remotely but the gates may be operated manually if necessary.

Once the Fremont Weir begins to overtop, the smaller gates will remain in their last position prior to the overtopping until the overtopping event is over, at which point they will be opened and closed as necessary to keep the flow through the gate as close to 6,000 cfs as possible. All gates will close when the river elevation falls below 14 feet. Gate operations to increase inundation may continue through March 15 each year, based on hydrologic conditions. The gates may remain partially open after March 15 to provide adult fish passage. Flows after March 15 will be limited to the maximum available capacity of Tule Canal (typically about 300 cfs).

Supplemental Fish Passage Facility

The Supplemental Fish Passage Facility's manually operated vertical lift gate will be left in the closed position year-round, except following an overtopping when the river elevation is at or less than 29 feet. At this point the gate will be opened to allow any fish trapped in the stilling basin on the west side of the Fremont Weir to move back into the Sacramento River.

MAINTENANCE

Maintenance activities will include facility inspections and removal of sediment, vegetation, and debris. To prevent corrosion, the gates will be rinsed with water of any mud, sediment, and any other material that may have attached itself during operation at the end of the flood season as part of facility inspections. Maintenance activities will typically be conducted outside of the flood season, from April 16 to October 31.

Sediment Removal

Operation of the Project will increase the amount of sediment accumulating annually upstream of Agricultural Road Crossing 1 by an estimated 37,800 cubic yards. Sediment removal associated with the Project will focus on the channel system and will take place approximately once every five years, or as needed. Sediment removal will occur in the constructed Project channels and facilities, including the Intake Channel, Headworks Structure, Outlet Transition, Transport Channel, Downstream Tule Channel, Agricultural Road Crossing 1, and the Supplemental Fish Passage Facility and excavated channel. Sediment removal may include removal of aquatic vegetation or other vegetation in the channels. Scrapers, bulldozers, backhoes, loaders, graders, long-reach excavators, amphibious excavators, bobcats, pickup trucks, hand tools, or other appropriate equipment will typically be used to excavate sediment. Sediment loading in Tule Pond will be monitored annually. If sediment removal from Tule Pond becomes necessary, separate environmental review and incidental take authorization will be needed.

Facility Inspection and Debris Removal

Project Facilities will be inspected at the beginning and end of the flood season and after overtopping events. Any accumulated debris will be removed from the headworks using an excavator or crane.

Vegetation Removal

Maintenance activities will include removing vegetation from the Project channels, including the Intake Channel, Transport Channel, and Tule Channel annually. Spot removal will be performed to prevent unwanted woody vegetation from establishing in and around the channels. Grasses and woody vegetation will be allowed to grow within the Transport Channel but will not be allowed to grow higher than the existing ground within the Yolo Bypass. Maintenance, such as mowing or new tree growth removal, will be focused during dry periods, but could occur when the channel is wet (such as for portions of the Transport Channel that may have standing water much of the year). Intake channel maintenance will occur during dry conditions.

Project Benefits to Chinook Salmon

The Project's purpose is to increase volitional access for juvenile salmonids, including Chinook salmon, onto seasonally inundated habitat, increase the acreage of seasonal floodplain rearing habitat, reduce stranding of juvenile salmonids, minimize the presence of migration barriers, increase the availability and abundance of aquatic food resources for juvenile salmonids, and improve connectivity within the Yolo Bypass and between the Yolo

Bypass and Sacramento River for adult salmonids.

Seasonal rearing habitats such as floodplains are often more productive than the main channels of rivers and provide refuge from predatory fishes. These habitats are very important to rearing Chinook salmon (Maslin et al. 1997; Sommer et al. 2001). Sommer et al. (2001) found that the habitat complexity and abundance of prey available in floodplain rearing habitat within the Yolo Bypass allowed juvenile Chinook salmon to grow substantially faster in the Yolo Bypass than in nearby Sacramento River sites (Sommer et al. 2001). Operation of the Headworks Structure as described above is expected to increase access to floodplain habitat and increase the availability of juvenile rearing habitat by up to 20,000 acres (USBR and DWR 2012). A two-Dimensional Unsteady Flow Model of wetted areas in the Yolo Bypass was used for the Project. Based on historical data from water years 1997 through 2012 used in the model, the Project may result in a 10.1 to 14.4% increase in average monthly wetted area during the months of December through February, an increase of 6.7% in March, and generally similar conditions during the remainder of the October through May evaluation period. This would result in significant increases in rearing habitat availability for Chinook salmon smolts and pre-smolts moving from the Sacramento River into the Yolo Bypass from December to March (USBR and DWR 2019). Increased frequency and duration of inundation of the Yolo Bypass would increase primary and secondary production, resulting in an increase in food resources for fish (Lehman et al. 2007; Schemel et al. 2004; Sommer et al. 2001).

The construction of the Transport Channel and Supplemental Fish Passage Facility and improvements to the Tule Channel and Agricultural Road Crossing 1 would increase connectivity between the Yolo Bypass and the Sacramento River. These improvements, along with increased flows entering the Yolo Bypass from the Sacramento River at Fremont Weir would result in improved passage for adult Chinook salmon moving upstream from the Yolo Bypass into the Sacramento River and provide for increased spawning opportunities in the Sacramento River and its tributaries through a reduction in migration delays (Harrell and Sommer 2003; USBR and DWR 2019).

In addition to Chinook salmon, the Project will also benefit other fish species such as steelhead (*Oncorhynchus mykiss irideus*) and North American green sturgeon (*Acipenser medirostris*) (USBR and DWR 2019).

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
Chinook salmon – Central Valley spring-run ESU (*Oncorhynchus tshawytscha*)	Threatened[3]
Chinook salmon – Sacramento River winter-run ESU (*Oncorhynchus tshawytscha*)	Endangered[4]
Giant garter snake (*Thamnophis gigas*)	Threatened[5]
Swainson's hawk (*Buteo swainsoni*)	Threatened[6]

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

Impacts of the Taking on Covered Species:

Activities undertaken to implement the Project activities as described above in the Project Description (Covered Activities) and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above are expected to result in incidental take of individuals of the Covered Species include: site preparation activities such as clearing, grubbing, vegetation trimming, dewatering, excavating, and grading; capture and relocation; surveying or monitoring activities, placement of revetment, material stockpiling, laydown and transport; sediment deposition; demolition of a portion of the existing concrete at the Fremont Weir to allow for excavation down to an elevation of seven feet and installation of a cofferdam; construction of the Intake Channel, Headworks Structure, Transport Channel, pedestrian bridge crossing the Transport Channel, Tule Channel, and Supplemental Fish Passage Facility; improvements at Agricultural Road Crossing 1 including removal of the existing road crossing and cross-canal berms, channel improvements to connect the existing Tule Canal to the new Tule Channel, construction of a bridge for vehicular traffic, three 15-foot-wide box culverts, an elevated flume, a rock weir, an enclosed concrete cross-channel, and two manually operated lift gates; dewatering; installation of fencing and signage; staging of construction equipment, materials, and excess excavated soil and green waste; and maintenance activities including vegetation removal,

[3]See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C).
[4]See *Id.*, subd. (a)(2)(M).
[5]See *Id.*, subd. (b)(4)(E).
[6]See *Id.*, subd. (b)(5)(A).

debris removal, sediment removal, and facility inspections.

Impacts are described in more detail by Covered Species below:

Chinook Salmon Incidental Take and Impacts

Incidental take of Chinook salmon (both spring-run and winter-run) in the form of mortality ("kill") may occur as a result of Covered Activities such as exposure to suspended sediments or other pollutants resulting from in-water work, runoff from construction sites, or sediment removal activities; fish-kills resulting from pressure waves generated by construction activities such as pile driving; stranding of fish during dewatering; and mortality resulting from stress or injury associated with capture and relocation efforts. As flows that top the weir subside, and pools of water on the downstream side of the weir accumulate in the weir apron and in depressions within the bypass areas, fish become stranded in these areas and are susceptible to poaching or may die from poor water quality, increased predation, and other unfavorable environmental conditions. More importantly, stranded threatened or endangered species may represent a significant portion of the entire population, an issue that is particularly impactful if stranded individuals are adults that would be otherwise contributing to the spawning population. While the Project is intended to, among other things, reduce the overall amount of stranding of adult and juvenile salmonids in the Yolo Bypass, it is unlikely to eliminate the problem altogether, and some incidental take may occur as a result of stranding during Project operations. Incidental take of Chinook salmon may also occur in the form of pursuit, catching, capturing, or attempting to do so during capture and relocation efforts associated with dewatering activities and/or fish rescue efforts associated with stranding. Incidental take may occur during maintenance activities if maintenance activities occur in wetted portions of the channels, as a result of dewatering, capture and relocation.

The Project is expected to permanently alter 21.60 acres of habitat for Chinook salmon by grading and placing rock within 1.25 acres of riverine habitat and permanently converting 6.44 acres of floodplain wetland and 13.91 acres of floodplain riparian habitat to engineered stream channel habitat. It will temporarily disturb 21.88 acres of Chinook salmon habitat including 1.00 acre of riverine habitat, 5.10 acres of floodplain wetland habitat, and 15.78 acres of floodplain riparian habitat. Impacts of the authorized taking also include adverse impacts to Chinook salmon related to temporal losses and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from construction activities and capture and relocation; potential injury and illness resulting from contaminants entering the water from the construction site; temporary increases in turbidity due to in-water work and erosion from the construction site; reduction in habitat complexity due to removal of riparian vegetation and instream woody material; increases in water temperature and vulnerability to predation in areas where riparian

shade trees and instream woody material are removed; temporary increases in sedimentation and turbidity during maintenance sediment removal; and increased risk of pollution due to accidental chemical spills or seepage during maintenance activities.

Giant Garter Snake Incidental Take and Impacts

Incidental take of giant garter snake (GGS) in the form of mortality ("kill") may occur as a result of Covered Activities such as exposure to suspended sediments or other pollutants resulting from in-water work, runoff from construction sites, or sediment removal activities; mortality resulting from stress or injury associated with capture and relocation efforts; crushing by construction equipment, vehicles, or placement of materials; and entombment during excavation and placement of spoil. Incidental take of GGS may also occur in the form of pursuit, catching, capturing, or attempting to do from capture and relocation efforts and entrapment in excavated areas, construction materials, and fenced areas. Incidental take may occur during maintenance activities as a result of crushing or entombment during sediment removal activities including spoils placement and spreading, or injury from equipment during vegetation removal. Operation of the Project may result in inundation of occupied burrows, causing drowning.

The Project is expected to cause the permanent loss of 14.7 acres of GGS habitat (including 10.33 acres of aquatic habitat and 4.37 acres of upland habitat) and temporary loss of 11.98 acres of GGS habitat (including 2.32 acres of aquatic habitat, 3.58 acres of upland habitat within 20 meters of aquatic habitat, and 6.08 acres of upland habitat beyond 20 meters of aquatic habitat. Impacts of the authorized taking also include adverse impacts on GGS related to temporal losses and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from construction activities and capture and relocation; potential injury and illness resulting from contaminants entering the water from the construction site; temporary increases in turbidity due to in-water work and erosion from the construction site; temporary increases in sedimentation and turbidity during maintenance sediment removal; increased risk of pollution due to accidental chemical spills or seepage during maintenance activities, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

Swainson's Hawk Incidental Take and Impacts

Incidental take of Swainson's hawk (SWHA) in the form of mortality ("kill") may occur as a result of disturbance-related nest failure resulting in the loss of young, fledglings, or eggs due to nest destruction or abandonment during grubbing, grading activities, demolition, or construction that occurs in close proximity to the nest during SWHA nesting season. Incidental take of SWHA individuals may also occur through capture when eggs or chicks are

salvaged after parental nest abandonment has occurred. The chance of viability of eggs and/or survival for chicks in this circumstance is greatly reduced. Potential indirect impacts to SWHA and their habitat include effects of ground-disturbing activities associated with implementation of Covered Activities. These include construction-related noise; ground vibration; fugitive dust; habitat loss and modification; introduction or spread of invasive species; and increased human activity which could result in a reduction in prey abundance and/or availability. Project-related noise, vibration, percussion, odors, and artificial lighting could cause physiological and/or behavioral disruptions that may interfere with breeding and cause a loss of fitness in dependent young resulting from interruptions to brooding and/or feeding schedules. SWHA individuals nesting, foraging, or roosting at or near the Project Area may have become habituated to the local baseline agricultural activities and vehicular through traffic; however, many of the Project related activities may represent novel stimuli and/or more intensive disturbance which could result in incidental take. As requested by the Permittee, this ITP only authorizes the abandonment of one (1) SWHA nest during Project construction.

The Project is expected to cause take of up to one SWHA nest during construction. Impacts of the authorized taking also include adverse impacts to SWHA related to temporal losses and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from construction, displacement from preferred habitat, and increased competition for food and space.

The areas where authorized take of the Covered Species is expected to occur are depicted in **Figures 2, 3 and 4** and include all Project construction and staging areas (collectively, the Project Area).

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. **CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the 'Aquatic Resources and Fisheries' and 'Vegetation, Wetlands, and Wildlife Resources' sections of the Environmental Impact Report (SCH No. 2013032004) certified by the California Department of Water Resources on July 19, 2019, as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

3. **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 Agreement (LSAA) (Notification No. 1600-2020-0183-R2) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.

4. **ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project (WCR-2019-11447) and the Biological Opinion on the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project (08FBDT00-2019-F-0061) 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.

5. **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.

6. **General Provisions:**

   6.1. 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. ***(Construction and O&M)***

6.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of one or more biological monitors (Designated Biologists) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) are knowledgeable and experienced in the biology and natural history of the Covered Species. The Designated Biologist(s) 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(s) in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist(s) must be changed. If a Covered Species needs to be captured and relocated, the Designated Biologist(s) will notify the Capture and Handling Designated Biologist(s), and will stop work until the Covered Species either leaves the construction area on its own, or the Capture and Handling Biologist(s) performs the capture and relocation. ***(Construction and O&M)***

6.3. Capture and Handling Designated Biologist(s). Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biologist(s) (Capture Biologist) at least 30 days before starting Covered Activities who will be responsible for the capture and handling of the Covered Species. Permittee shall ensure that the Capture Biologist(s) is knowledgeable and experienced in the biology, natural history, capture, and handling of the Covered Species (including possession of appropriate handling permits). Permittee shall obtain CDFW approval of the Capture Biologist(s) in writing before starting Covered Activities and shall also obtain approval in advance in writing if the Capture Biologist(s) must be changed. ***(Construction and O&M)***

6.3.1. Capture Biologist Role. For the purposes of this ITP, the approved Capture Biologist(s) may fulfill any role of the Designated Biologist(s) including monitoring, reporting, or other requirements of this ITP. ***(Construction and O&M)***

6.4. Designated Biologist and Capture Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist(s) and Capture Biologist(s) 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. ***(Construction and O&M)***

6.5. 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 a 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. 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. Prior to the start of Covered Activities, Permittee shall provide copies of environmental permits and training materials to the Permittee's construction lead, construction foreman, crew leader and any contractors participating in Project activities. ***(Construction and O&M)***

6.6. Construction Monitoring Notebook. The Designated Biologist(s) shall maintain an electronic or hard copy 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. ***(Construction)***

6.7. Project-Related 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 during O&M Covered Activities and at least once a week during construction to avoid attracting opportunistic predators such as ravens, coyotes, and feral animals. ***(Construction and O&M)***

6.8. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist(s). Permittee shall keep the amount of water used to the minimum amount needed, and shall not allow water to form puddles. ***(Construction)***

6.9. Delineation of Property Boundaries. 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. ***(Construction)***

6.10. Delineation of Habitat. For construction and stationary maintenance Covered Activities, 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. "Stationary maintenance activities" are activities where maintenance crews spend several hours or more in a discrete location. Stationary maintenance activities do not include activities such as mowing or discing of channels for herbaceous vegetation management and limbing up of woody vegetation; these activities are conversely classified as "transitory maintenance activities." ***(Construction and Maintenance)***

6.11. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in **Figure 5**, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to the Project Area, established or designated roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 15 miles per hour within 200 feet of GGS aquatic habitat and within 1000 feet of nesting SWHA or within the no-disturbance buffer (whichever is greater) to avoid Covered Species on or traversing the roads and to reduce impacts from dust. Permittee shall clearly post signage specifying speed limits on all routes entering and exiting reduced speed areas. Paved public roads outside of the Project Area are excluded from the 15mph speed limit. 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 if additional take of Covered Species will occur as a result of the Project modification. ***(Construction and O&M)***

6.12. 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 in this ITP. ***(Construction and O&M)***

6.13. Hazardous Waste. Permittee shall ensure any hazardous materials are properly handled and stored at the staging areas and with an impermeable membrane between the ground and hazardous material and that it is bermed to prevent the discharge of pollutants to groundwater and runoff water. Permittee shall immediately

stop and, pursuant to pertinent state and federal statutes and regulations, report the spill to the appropriate agencies, 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 notify CDFW immediately of any leaks or spills. Permittee shall properly contain and dispose of any unused or leftover hazardous products off-site. ***(Construction and O&M)***

6.14. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project Area and mitigation lands under Permittee control and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP. CDFW will coordinate with Permittee in advance to gain access to the Project site, follow all Permittee instructions for access, and follow all safety-related directions and requirements provided by Permittee while on-site. ***(Construction and O&M)***

6.15. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and 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. ***(Construction and O&M)***

7. Monitoring, Notification and Reporting Provisions:

7.1. Notification Before Commencement. 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 submitted to R2CESA@wildlife.ca.gov. ***(Construction)***

7.1.1. Notification for CDFW-Managed Lands. If Permittee plans to conduct Project activities on or within 500 feet of CDFW-managed lands on September 1 or 2 and/or on weekends within the months of September through January of any given year during the term of this Agreement, Permittee shall notify CDFW annually, thirty (30) calendar days prior. ***(Construction)***

7.1.2. Notification Before Maintenance Commencement. Permittee shall notify CDFW 10 business days before starting planned maintenance Covered Activities. Permittee shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities. If unplanned maintenance Covered Activities become necessary, Permittee shall notify CDFW within two (2)

business days of starting the activity. Notification shall be submitted to R2CESA@wildlife.ca.gov. ***(Maintenance)***

7.2. 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 of discovery of non-compliance. Notification shall be submitted to R2CESA@wildlife.ca.gov. ***(Construction and O&M)***

7.3. Compliance Monitoring. The Designated Biologist(s) shall be on-site daily when Covered Activities associated with Project construction or maintenance occur. The Designated Biologist(s) 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(s) shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species or any sign of their presence, survey results, and monitoring activities required by this ITP. While the Project is in its construction phase, the Designated Biologist(s) shall conduct compliance inspections a minimum of weekly during periods of inactivity during each construction season or stationary maintenance project. ***(Construction and Maintenance)***

7.4. Monthly Compliance Report. During the construction period, the Designated Representative or Designated Biologist(s) shall compile the observation and inspection records identified in Condition of Approval 7.3 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 R2CESA@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. ***(Construction)***

7.5. 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 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 (6) information about other Project impacts on the Covered Species. ***(Construction and Maintenance)***

7.6. CNDDB Observations. The Designated Biologist(s) shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist(s) shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation. ***(Construction and O&M)***

7.7. 10-Year Compliance Report. Permittee shall prepare and submit to CDFW a 10-year compliance report at least 180 days prior to each 10-year anniversary of the effective date of this ITP, as described in the Permit Term section of this ITP. ***(Construction and O&M)***

7.8. Post-Construction Mitigation Report. No later than 60 days after completion of all construction Covered Activities, Permittee shall provide CDFW with a Post-Construction Mitigation Report. The Post-Construction Mitigation Report shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs submitted so far; (2) a copy of the table in the MMRP with notes showing which of the mitigation measures has been implemented and when; (3) all available information about Project-related incidental take of the Covered Species so far; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of completed 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 during the construction phase of the Project; (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. ***(Construction)***

7.9. Final Mitigation Report. No later than 60 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Final Mitigation Report shall include, at a minimum: (1) a copy of the Post-Construction Mitigation Report (see Condition of Approval 7.8); (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. ***(Construction and O&M)***

7.10. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist(s) 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(s) shall immediately notify CDFW of the injured Covered Species and have the injured Covered Species transported to a CDFW-approved wildlife rehabilitation or veterinarian facility. The Designated Biologist(s) or Designated Representative shall notify CDFW within 24 hours by calling the Regional Office at (916) 358-2930 and emailing R2CESA@wildlife.ca.gov. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number (2081-2020-034-02). Following initial notification, Permittee shall send CDFW a written report within two business days. The report shall include the date and time of the finding or incident, location of the animal or carcass, a photograph, explanation as to cause of take or injury, name and phone number of the facility where the animal was taken, and any other pertinent information. Permittee shall identify the wildlife rehabilitation or veterinarian facility that will receive and treat any injured or dead Covered Species and provide their authorizations to handle the Covered Species before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. ***(Construction and O&M)***

7.11. Reevaluation of Avoidance and Minimization Measures after Take. If the Covered Activities result in (1) the abandonment of one SWHA nest during construction, (2) take of two GGS during construction and/or O&M, or (3) the mortality of one adult winter-run or spring-run Chinook salmon during dewatering for construction or maintenance, the Permittee shall contact CDFW to reevaluate the minimization measures in this ITP and ensure that all prudent and feasible measures have been implemented. Covered Activities may continue during reevaluation. Permittee shall

notify the CDFW Regional Representative at R2CESA@wildlife.ca.gov to request reevaluation. ***(Construction and O&M)***

7.12. Yolo Bypass Coordinated Operations Team. Beginning no later than November 1 each year during Project operations, Permittee shall convene the Yolo Bypass Coordinated Operations Team (YBCOT) on a weekly basis until May 31, or the end of the gate operations for the season, whichever is later, except when all members of the YBCOT agree a meeting is not warranted. The YBCOT shall consist of two representatives each from the Permittee and CDFW. It may also include representatives from the Bureau of Reclamation, U.S. Fish and Wildlife Service, and National Marine Fisheries Service (NMFS). Permittee shall work collaboratively with CDFW to implement the Big Notch Project Operations Plan (Condition of Approval 7.13) through the YBCOT. Each week the YBCOT shall review and evaluate operational advice, discuss potential changes to Project operations, and make final determinations about gate operations.

If YBCOT representatives do not achieve a consensus regarding gate operations, Permittee and CDFW shall prepare written summaries of their operational recommendations and elevate the decision to their respective managers, up to their Department Directors if necessary, for discussion and final decision.

(Operations)

7.13. Big Notch Project Operations Plan. Each year, starting when the Project first becomes operational, Permittee shall initiate the process to develop a plan to operate the Project. The Project Operations Plan shall be consistent with the operations described in the Yolo Bypass Adult Fish Passage Coordinated Operations Plan (Attachment 5). Permittee shall meet and confer with CDFW within thirty days of the start of construction to determine actions to implement from November – June annually to improve Chinook salmon habitat to the maximum extent feasible. Each year during the Project operations, Permittee shall:

- By August 1 annually, convene the YBCOT to discuss the development of the Big Notch Project Operations Plan (Operations Plan);
- Hold meetings as needed to develop the Operations Plan, and distribute a meeting agenda to YBCOT group members at least five (5) business days prior to each meeting;
- Record and distribute regular meeting notes within two (2) business days of each meeting to YBCOT members for review;

- By August 15 annually, submit a draft Operations Plan to the YBCOT group members for review. The Operations Plan shall include:
    - Planned operations, maintenance, and monitoring of the gates for the coming season;
    - A summary of any Chinook salmon mortality during fish rescues and an evaluation of the avoidance and minimization measures in this ITP to ensure that all prudent and feasible measures have been implemented;
    - An overview of any studies and monitoring that the Permittee plans to conduct within the Yolo Bypass related to Project operations during the coming year;
        - Planned studies should include hypotheses to be tested through ongoing monitoring and scientific investigations, the suite of actions and operations conducted to test hypotheses, and the expected outcomes. This ITP does not provide take authorization for any studies or monitoring outside the scope of the Project Description.
    - Habitat conditions expected to be achieved through use of the gates;
    - The conditions and status of Project facilities; and
    - Information learned from the previous season's monitoring and maintenance, data and the prior years' Operation Reports (Condition of Approval 7.14)
- Work collaboratively within the YBCOT to address comments and incorporate them into a final Operations Plan; and
- No later than October 15 annually, submit a final Operations Plan to the YBCOT group members for approval per Condition of Approval 7.12.

(Operations)

7.14. Big Notch Project Annual Operations Report. No later than June 30 annually, Permittee shall submit a Big Notch Project Annual Operations Report to the YBCOT group members covering the season before last (November of two years prior through May of the prior year) that: (1) synthesizes operations and study results from

abiotic and biotic monitoring conducted during the covered season; (2) includes an analysis of the take of Chinook salmon during the covered season; and (3) includes a review of the operations and lessons learned from the covered season. ***(Operations)***

8. 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:

Chinook Salmon Measures

8.1. Monitoring and Fish Rescue During and After Project Operations. As flows in channels constructed for the Project subside such that pools become isolated, the Permittee shall visually inspect the Fremont Weir stilling basin, the deep pond, Tule Pond, Tule Canal downstream to Agricultural Road Crossing 3, Oxbow Pond, and all channels constructed for the Project for stranded fish (see **Figure 1** for the locations of the channels constructed for the Project and **Figure 6** for the locations of the Fremont Weir stilling basin, the deep pond, Tule Pond, Tule Canal downstream to Agricultural Road Crossing 3, and Oxbow Pond).

8.1.1. If stranded fish are present in Fremont Weir stilling basin, the deep pond, Tule Pond, Tule Canal downstream to Agricultural Road Crossing 1, and all channels constructed for the Project, the Permittee shall coordinate with CDFW to move fish out of harm's way. Permittee shall ensure that fish rescue personnel have the necessary expertise, permits, and experience to successfully conduct fish rescue. To the greatest extent possible and as applicable, fish rescues shall be conducted in accordance with the Fish Rescue and Relocation Plan (Condition of Approval 8.2). Every 10 years, as part of the Project's 10-year compliance report, Permittee shall submit a summary of the results of fish rescues associated with Project Operations over the prior 10-year period, including the number and location(s) of any spring- and/or winter-run Chinook salmon encountered during these fish rescues, and an assessment of whether monitoring and fish rescues are likely to be necessary during the next 10 years. Based on the information provided in the report, CDFW may determine that monitoring is no longer needed. ***(O&M)***

8.2. Fish Rescue and Relocation Plan. Permittee shall prepare and implement or cause to be implemented on Permittee's behalf a Fish Rescue and Relocation Plan to limit the number of Chinook salmon that may be entrained and/or stranded during construction, maintenance, and operations. The plan shall include, at minimum: 1) a

list of fish species that may be encountered, 2) descriptions of the proposed methods and equipment to be used to prevent fish stranding, 3) the proposed timing of fish relocation activities, 4) the proposed location where captured fish will be released, and 5) the qualifications of the Capture Biologist(s) implementing the plan. Permittee shall submit the Fish Rescue and Relocation Plan to CDFW **no less than ten (10) business days** prior to planned dewatering for construction and maintenance activities. During Project operations, Permittee shall submit annually a Fish Rescue and Relocation Plan to CDFW **no later than October** 15. Permittee shall obtain CDFW's written approval of the Fish Rescue and Relocation Plan prior to starting project activities. For the purposes of this ITP, the requirements described in this Condition of Approval apply only to the rescue and relocation of Covered Species (Chinook salmon) and not to other species of fish.

Permittee shall incorporate, but not be limited to, the following requirements into the Fish Rescue and Relocation Plan:

- Permittee shall conduct fish capture and relocation efforts in accordance with all required state and federal permits.

- Fish capture and relocation operations shall occur at all in-water construction or in-water maintenance sites where dewatering and resulting isolation of fish may occur.

- The Capture Biologist(s) shall, in consultation with CDFW, determine appropriate site-specific procedures for excluding fish from construction/maintenance areas, removing fish from construction/maintenance areas should they become trapped, and preventing fish from reentering construction/maintenance areas prior to dewatering based on site-specific conditions and construction/maintenance activities.

- Each team conducting fish capture and relocation efforts shall include at least one approved Capture Biologist.

- To avoid and minimize the risk of injury to fish and where it can be safely done, attempts to seine and/or net fish shall always precede the use of electrofishing equipment. Electrofishing shall be conducted in accordance with National Marine Fisheries Service electrofishing guidelines (NMFS 2000) and other appropriate fish and wildlife agency guidelines. One or two teams, consisting of three to four people each, shall conduct electrofishing, with each team having an electrofishing unit operator and two or three netters.

- Permittee shall include the results of all fish capture and relocation efforts in the Annual Status Report described in Condition of Approval 7.5, including, but not limited to, date, time, location, comments, method of capture, fish species, number of fish, life stage, condition, release location, and release time.

- The Capture Biologist(s) shall place dead Covered Species in sealed plastic bags with labels indicating species, location, date, and time of collection, store them on ice then freeze as soon as possible. Permittee shall notify both NMFS and CDFW to determine which agency will receive the frozen specimens. Deposition of biological samples shall be coordinated with the CDFW Region 2 District Fisheries Biologist for Yolo County.

- Unless otherwise agreed-upon in writing by CDFW, fish capture, release, and relocation measures in the Fish Rescue and Relocation Plan shall be consistent with the following general guidelines:

    - Begin fish capture and relocation operations as soon as fish stranding is discovered and when conditions are safe enough to do so, and complete within 48 hours after isolation of a construction/maintenance site to minimize potential predation and adverse water quality impacts (high water temperature, low dissolved oxygen) associated with confinement.

    - Install cofferdams, block nets, or other exclusion methods to exclude fish from the construction/maintenance site prior to the fish removal process.

    - When monitoring for stranded fish, record dissolved oxygen, temperature, flow, and turbidity/conductivity at any pool with stranded fish to prioritize relocation efforts. Record these parameters again immediately prior to any fish relocation effort.

    - Use dip nets made of soft (nonabrasive) nylon material and small mesh size (0.125 inch) to collect small fish.

    - After conducting herding and netting operations use electrofishing, as needed, to remove as many fish as possible from the enclosure.

    - Make at least three passes through enclosed areas to be dewatered to remove as many fish as possible.

- Initially place captured fish in containers filled with water obtained from the immediate area.
- Transfer captured fish into 5-gallon buckets (or larger) equipped with a lid and an aerator and filled with clean river water at ambient temperature. Add fresh river water or small amounts of ice if the water temperature rises to more than two (2) degrees Fahrenheit (2°F) warmer than ambient river waters.
- Maintain low densities of captured fish in holding containers to avoid overcrowding.
- Use water-to-water transfers whenever possible.
- Release captured fish at predetermined locations approved by CDFW with appropriate habitat upstream or downstream of the construction/maintenance site with similar water temperature to the area from which fish were captured and a low likelihood of fish reentering the construction/maintenance site or being impinged on exclusion nets/screens.
- Segregate larger fish from smaller fish to minimize the risk of predation and/or injury.
- Limit holding time to about ten minutes, to the extent possible.
- Avoid handling fish during processing unless absolutely necessary. Use wet hands or dip nets if handling is necessary. Handle fish with hands that are free of potentially harmful products, including but not limited to sunscreen, lotion, and insect repellent.
- Avoid anesthetizing or measuring fish.
- Note the date, time, and location of fish collection; species; number of fish; approximate age (e.g. young-of-the-year, yearling, adult); fish condition (e.g. dead, visibly injured, healthy); and water temperature.
- If positive identification of fish cannot be made without handling fish, note this and release the fish without handling.

- In notes, indicate the level of accuracy of visual estimates to allow appropriate reporting to CDFW (e.g., “approx.. 10-20 young-of-the-year steelhead”).

- Note the fish release date, time, and location.

(Construction and O&M)

8.3. Sound Attenuation. If in-water impact pile driving is conducted during installation of the cofferdam, Permittee shall reduce underwater noise by placing a bubble curtain or similar sound attenuation structure around the area of disturbance. Permittee shall monitor underwater noise during pile driving to ensure that it does not exceed 206 decibels (dB) peak Sound Pressure Level (SPL) and 150 dB cumulative Sound Exposure Level (SEL). ***(Construction)***

8.4. Soft Start Pile Driving. In-water pile driving and pile driving within 200 linear feet of the water’s edge shall not commence until warning noises and vibrations are provided in an escalating series to reach the maximum sound levels as described in Condition of Approval 8.3, providing aquatic species a warning to evacuate the area. ***(Construction)***

8.5. Instream Woody Material. Permittee shall avoid moving or altering instream woody material (IWM) within the Sacramento River and/or Tule Canal/Pond to the greatest extent possible. If IWM must be moved or altered, Permittee shall notify CDFW prior to moving or altering it and provide a plan to either move the IWM back to its original location or replace it with a functional equivalent as soon as possible. ***(Construction and O&M)***

8.6. Erosion Control. Permittee shall actively implement best management practices (BMPs) to minimize turbidity and siltation and prevent erosion and the discharge of sediment into the Sacramento River, Tule Canal, or other waterways. Precautions shall include, but are not limited to: pre-construction planning to identify site specific turbidity and siltation minimization measures; best management erosion control practices during project activity; and settling, filtering, or otherwise treating silty and turbid water prior to discharge into a stream or storm drain. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. ***(Construction and O&M)***

8.7. Gate Maintenance Work Period. Routine maintenance on the gate structure shall occur when the site is dry or Chinook salmon are not likely to be present (June 1 – August 31), unless otherwise approved in writing by CDFW. Permittee may conduct

maintenance while water is present if necessary to address a gate failure or clear blockages in the passage channel. ***(Maintenance)***

GGS Measures

8.8. Giant Garter Snake Capture and Relocation Plan. Prior to the start of Covered Activities, Permittee shall develop and obtain CDFW's written approval of a Giant Garter Snake Capture and Relocation Plan describing how and where GGS will be captured and relocated if it becomes necessary to move them to avoid injury or mortality. All GGS capturing and handling shall be conducted by a Capture Biologist(s) with experience and expertise in handling GGS. The Giant Garter Snake Capture and Relocation Plan shall include the name and qualifications of the Capture Biologist(s) responsible for capturing and handling GGS, the methods that will be used to capture and relocate GGS, and a map showing where GGS will be released. Permittee shall quantify the amount, relative location, and quality of suitable habitat (aquatic and terrestrial) for relocation areas, including invasive and non-native species present, available upland burrows, suitable prey items, and potential barriers for movement. Permittee shall also identify a wildlife rehabilitation or veterinary facility that will be used if any captured GGS are injured. Relocation areas should be within the same watershed as the Project Area. ***(Construction and O&M)***

8.9. Timing of Work. Permittee shall conduct all Covered Activities within suitable GGS aquatic and upland habitat (areas within 200 feet of aquatic habitat) during the GGS active period (May 1 through October 1). Permittee may conduct work between October 2 and October 31, or April 1 and April 30 provided the ambient air temperatures exceed 75 degrees F during work and maximum daily air temperatures have exceeded 75 degrees F for at least three (3) consecutive days immediately preceding work. CDFW may consider requests to work outside of this work window on an activity-by-activity basis. The Permittee shall submit these requests in writing for review and approval by CDFW. Requests shall include a justification for the request and any additional information CDFW deems necessary. ***(Construction and Maintenance)***

8.10. Work Period in Low Rainfall / Dry Weather Only. The work period for Covered Activities within suitable GGS aquatic and upland habitat shall be restricted to periods of low rainfall (less than 1/2-inch per 24-hour period) and periods of dry weather (with less than a 50% chance of rain). Permittee shall monitor the National Weather Service 72-hour forecast for the Project Area. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be provided to CDFW upon request. ***(Construction and Maintenance)***

8.11. Pre-Construction/Maintenance Survey and Refugia Flagging. No more than 24 hours prior to commencement of Covered Activities within 200 feet of GGS aquatic habitat, the Project Area shall be surveyed for GGS by the Designated Biologist(s). The Designated Biologist(s) shall survey all upland habitat within 200 feet of GGS aquatic habitat for burrows, soil cracks, and crevices that may be suitable for use by GGS. Any identified burrows, soil cracks, crevices, or other habitat features that are outside of the area planned for direct disturbance (e.g. grading, excavation, etc.) shall be flagged or marked by the Designated Biologist(s). Permittee shall avoid flagged locations during Covered Activities to the maximum extent feasible. In areas planned for direct disturbance, a Designated Biologist shall be onsite to monitor during ground disturbing activities. If Covered Activities stop for more than 14 calendar days, the Designated Biologist(s) shall repeat surveys for burrows, soil cracks and similar features as described above, prior to resuming the Covered Activity. ***(Construction and Maintenance)***

8.12. Giant Garter Snake Exclusion Fencing. Prior to the start of any construction ground disturbance, Permittee shall install exclusion fencing around the perimeter of all work areas that include or fall within 200 feet of identified potential GGS aquatic habitat. Vegetation removal or excavation needed to install the exclusion fencing may occur first. The Designated Biologist(s) shall survey the areas to be fenced to ensure that no GGS are present and become trapped within the fenced area. The bottom edge of the fencing shall be installed at least six inches below the ground surface to prevent snakes from entering the Project area under the fence. The Designated Biologist(s) shall ensure that the exclusion fencing is maintained and that any necessary repairs are implemented immediately. If exclusion fencing is found to be compromised, construction within the fenced area shall immediately stop and the Designated Biologist(s) shall survey the fenced area for GGS. Any GGS found within the fenced area shall be allowed to leave on their own or captured and relocated following the methods described in the Giant Garter Snake Capture and Relocation Plan described in Condition of Approval 8.8. Pre-construction tree removal is not confined to this measure. ***(Construction)***

8.13. Dewatering Aquatic Habitat. Permittee shall dewater areas of GGS aquatic habitat prior to starting construction or sediment removal in those areas. Once dewatered, Permittee shall allow the area to dry out for 15 consecutive days before starting Covered Activities in the area, unless otherwise agreed upon in writing by CDFW. If groundwater begins to percolate into the dewatered area during the 15-day dry out period, Permittee may place a layer of clean fill material on top of the dewatered area to prevent ponding. The 15-day dry out period will not start over if groundwater percolates into the previously dewatered area. Prior to the placement of any fill, the Designated Biologist(s) shall visually survey the area for GGS. The Designated

Biologist(s) shall monitor during fill placement to ensure that no wildlife is buried, injured or trapped by the fill. If a GGS is observed in the area, it shall be captured and relocated following the methods described in the Giant Garter Snake Capture and Relocation Plan described in Condition of Approval 8.8. ***(Construction and Maintenance)***

8.14. Sediment Removal in Wetted Channel. If Project Areas cannot be dewatered prior to maintenance sediment removal, the Designated Biologist(s) shall visually scan aquatic areas for GGS immediately preceding work within GGS aquatic habitat. Permittee shall encourage GGS to leave the area prior to beginning sediment removal by gently disturbing the area by, for example, lightly brushing the excavator bucket across the surface of the water and any associated aquatic vegetation or performing a similar activity. The Designated Biologist(s) shall monitor excavation and shall ensure that no spoils are placed on top of burrows, soil cracks, or crevices that may be used by GGS as refugia. ***(Maintenance)***

8.15. Grading Sediment Spoils. Immediately preceding grading deposited spoil piles, a Designated Biologist shall survey planned work areas for GGS and burrows. Additionally, a Designated Biologist(s) shall monitor all grading of deposited soil piles as it occurs. Grading of deposited spoils piles shall only occur during periods when GGS are likely to be active in aquatic habitat (May 1 through October 1). ***(Construction and Maintenance)***

8.16. Open Pits and Trenches. At the end of each workday, Permittee shall place an escape ramp at each end of any open trench/pit to allow any animals that may have become trapped to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees. Alternatively, Permittee may cover open pits/trenches and secure the material(s) used to cover the opening to prevent GGS from accessing the hole or trench. The Designated Biologist(s) shall check all excavated open holes and trenches for GGS at the beginning and end of each day, and immediately before the holes and trenches are filled. If a GGS is found, it shall be captured and relocated following the methods described in the Giant Garter Snake Capture and Relocation Plan described in Condition of Approval 8.8. ***(Construction)***

8.17. Erosion Control Materials. Permittee shall ensure that all fiber rolls and erosion control blankets or netting is made of loose-weave mesh that is not fused at the intersections of the weave, such coconut (coir) fiber, or other products without welded weaves. Permittee shall not use products with plastic monofilament or jute netting or any material with cross joints in the netting that are bound/stitched (such as that found in straw wattles/fiber rolls and some erosion control blankets), which

may cause entrapment of GGS. Permittee shall cover the edges of erosion control blankets or netting with soil, sandbags, or similar materials to prevent GGS from crawling underneath the material and becoming trapped. ***(Construction and O&M)***

8.18. Seeding. Permittee shall restore all temporarily impacted GGS upland habitat by seeding with a locally native seed mix, unless otherwise agreed upon with CDFW. Revegetation shall be completed as soon as possible after construction activities. Permittee shall provide a proposed seed list to CDFW for review and approval prior to applying seed. ***(Construction)***

SWHA Measures

8.19. Pre-Construction/Maintenance Surveys. If Project construction or maintenance work is scheduled between February 1 and August 31, the Designated Biologist(s) shall conduct a series of focused surveys for active SWHA nests prior to beginning Covered Activities. The Designated Biologist(s) shall follow the timing and methodology described in the Swainson's hawk Technical Advisory Committee's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*, which is available at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline. The surveys shall be conducted in all suitable SWHA nesting habitat within a minimum 0.25-mile of the project area. Areas that are not accessible without trespassing shall be surveyed as thoroughly as possible from accessible areas using binoculars and spotting scopes. Results of the surveys shall be submitted to CDFW. ***(Construction and Maintenance)***

8.20. Nest Buffer. If a SWHA nest has been identified by a Designated Biologist in or adjacent to the Project Area, the Permittee shall initially establish a no-disturbance buffer with a 0.25-mile radius for Covered Activities that would potentially affect the nesting bird(s). A smaller buffer may be approved by CDFW on a case-by-case basis, depending on the nest location, nest stage, and Covered Activities. Permittee shall not conduct Covered Activities within the buffer, and any variance to the buffer shall be established by the Designated Biologist(s), in consultation with CDFW. Buffers shall be marked in the field by the Designated Biologist(s) using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the buffers. Permittee shall maintain buffers until young have fledged, are feeding independently, and the SWHA are no longer dependent on the nest, as determined by the Designated Biologist(s). ***(Construction and Maintenance)***

8.21. Swainson's Hawk Compliance Monitoring. If a nesting SWHA is found at or within 0.25-mile of the Project Area either during initial surveys or at any time during Covered Activities, the Designated Biologist(s) shall monitor the active nest(s) to confirm Covered Activities are not resulting in detectable adverse effects on SWHA or their active nest(s). The Designed Biologist(s) shall monitor either continuously or periodically depending on the Covered Activities and level of disturbance until young have fledged, are feeding independently and the SWHA are no longer dependent on the nest. The Designated Biologist(s) shall have authority to stop Covered Activities that, in the Designated Biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on nesting SWHA (e.g., nest abandonment beyond the one nest covered by this ITP). The Designated Biologist(s) shall have the authority to stop work if any Covered Activities cause the bird(s) to exhibit distress and/or abnormal nesting behavior (swooping/stooping, excessive vocalization (e.g., distress calls), agitation, failure to remain on nest, failure to deliver prey items for an extended time period, failure to maintain nest, etc.) which may cause reproductive failure (nest abandonment and loss of eggs and/or young). If Covered Activities are stopped, the Designated Biologist(s) shall consult with CDFW to determine appropriate measures the Permittee shall implement to avoid adverse effects. Permittee shall not resume any ceased Covered Activities without approval from CDFW. ***(Construction and Maintenance)***

8.22. SWHA Mortality Reduction and Relocation Plan. The Designated Biologist(s) shall prepare a SWHA Mortality Reduction and Relocation Plan (Plan) and submit it to CDFW for review and written approval prior to commencing Covered Activities in the nesting season. CDFW will provide a written response within 15 business days of submittal. The Plan shall describe mortality reduction strategies and buffer sizes that the Permittee shall implement and shall describe the response procedure for each of the following scenarios:

- Mortality or injury of adult SWHA prior to egg-laying
- Mortality or injury of adult SWHA during egg-laying
- Mortality or injury of adult SWHA after egg-laying
- Abandonment of SWHA nest prior to egg-laying
- Abandonment of SWHA nest during egg-laying
- Abandonment of SWHA nest after egg-laying
- Abandonment of SWHA nest after egg-hatching
- Damage or destruction of nest tree with eggs or juvenile SWHA

- Mortality or injury of juvenile SWHA

The Plan shall include, but not be limited to, identification of capture methods, handling methods, methods to return SWHA individuals back into the wild, and the identification of a wildlife rehabilitation center or veterinary facility. Only the Capture Biologist(s) shall handle and relocate eggs, hatchlings, or injured SWHA. ***(Construction)***

8.23. Work During Daylight Hours. Construction and maintenance activities shall be limited to daylight hours whenever possible. If nighttime activities are unavoidable, then Permittee shall direct all lights for nighttime lighting into the work area and away from the tree canopy. ***(Construction and Maintenance)***

8.24. Artificial Lighting at Night. Between sunset and sunrise, the Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting that casts light on SWHA habitat beyond where Covered Activities are occurring. Nighttime construction lighting shall be shielded and oriented downward to minimize effects on any nearby SWHA or other Covered Species. ***(Construction and Maintenance)***

8.25. Fence and Signpost Considerations. Permittee shall cap the top opening or fill the three holes on the top (e.g., with a bolt and nut), of any of u-channel posts, signs, or vertical poles installed temporarily or permanently throughout the course of the Project to prevent entrapment of the Covered Species. Permittee shall ensure fence posts, signs, or vertical poles comply with this requirement at the completion of the Project. ***(Construction and O&M)***

8.26. Tree Removal. All Project-related tree removal work shall be conducted between September 1 and January 31 to avoid impacting nesting individuals of the Covered Species, unless a request is submitted to and approved in writing by CDFW. The Designated Biologist shall inspect any trees marked for removal for evidence of Covered Species' nests. If a nest is found, the Permittee shall submit the results of the nest inspection and consult with CDFW regarding appropriate action to comply with the Fish and Game Code prior to commencing tree removal activities. ***(Construction)***

8.27. High Impact Covered Activities. To the maximum extent feasible, Permittee shall coordinate with the Designated Biologist(s) and/or CDFW to time the loudest or otherwise most disruptive Covered Activities outside periods where the Covered

Species, its nest, its eggs, or its young are most vulnerable to disturbance. ***(Construction)***

9. **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 purchase one Swainson's hawk nest buffer credit from a CDFW-approved mitigation or conservation bank (Condition of Approval 9.2) AND shall either (1) purchase 50.89 GGS credits from a CDFW-approved mitigation or conservation bank (Condition of Approval 9.2) OR (2) provide for both the permanent protection and management of a minimum of 50.89 acres of Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below, OR (3) a combination of both (1) and (2) totaling a minimum of 50.89 acres of permanent habitat protection. Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 24 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations. Permittee shall also restore on-site 9.66 acres of temporarily impacted Covered Species upland habitat pursuant to Condition of Approval 9.6 below.

   9.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:

   9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at $83,412.75/acre for 50.89 acres: **$4,244,875.00**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;

   9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at **$2,546,925.00**;

   9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **$424,487.50**;

9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at $20,111.26/acre for 50.89 acres: **$1,023,462.00**. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.5, estimated at **$250,000.00**.

9.1.6. Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at $3,000/acre for 9.66 acres: **$28,980.00**.

9.2. Covered Species Credits. Permittee shall purchase one Swainson's hawk nest buffer credit from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 24 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below.

AND

Permittee shall purchase 50.89 GGS credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 24 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below. Alternatively, with CDFW's written approval, Permittee may either (1) provide for the acquisition and perpetual protection and management of a minimum of 50.89 acres of HM lands as described in Condition of Approval 9.3, Condition of Approval 9.4, and Condition of Approval 9.5 below, or (2) provide a combination of credits and the acquisition and perpetual protection and management of HM lands totaling a minimum of 50.89 acres. Permittee shall obtain CDFW's written approval of the specific mitigation or conservation bank in advance of any credit purchase.

OR:

9.3. Habitat Acquisition and Protection. This Condition of Approval only applies if Permittee will provide HM lands in lieu of or in combination with purchase of GGS credits as described in Condition of Approval 9.2. To provide for the acquisition and perpetual protection and management of the HM lands, the Permittee shall:

9.3.1. Fee Title/Conservation Easement. Transfer fee title to a CDFW- approved governmental entity, special district, non-profit organization, for-profit entity,

person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e);

9.3.2. HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 2B) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;

9.3.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 2A). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;

9.3.4. Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified.

9.3.5. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see

https://www.wildlife.ca.gov/Conservation/Planning/Banking/Templates) (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;

9.3.6. Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide a security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

9.4. Endowment Fund. If the Permittee will permanently protect and perpetually manage compensatory habitat as described in Condition of Approval 9.2 and Condition of Approval 9.3, the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plan(s) required by Condition of Approval 9.3.5. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.

9.4.1. Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(3).;

9.4.2. Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) or PAR-equivalent analysis (hereinafter "PAR") to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.

9.4.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.

9.4.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use

that will substantially ensure long-term viability and security of the Endowment:

9.4.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

9.4.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

9.4.2.2.3. Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.

9.4.3. Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

9.5. Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.

9.6. Habitat Restoration. Permittee shall restore on-site the 9.66 acres of GGS upland habitat that will be temporarily disturbed during construction to pre-project or better conditions. Within 6 months of issuance of this ITP, the Permittee shall prepare a Vegetation Restoration Plan to facilitate revegetation of the 9.66 acres of temporary construction disturbance on-site and shall ensure that the Plan is successfully implemented by the contractor. 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. Plantings shall include regular watering, if necessary, to ensure adequate growth.

10. Performance Security: The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

10.1. Security Amount. The Security shall be in the amount of **$8,489,750.00**. This amount is based on the cost estimates identified in Condition of Approval 9.1 above.

10.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 3) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.

10.3. 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.

10.4. Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.

10.5. Security Transmittal. If CDFW holds the Security, Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 4) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other.

10.6. 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.

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:

- Written documentation of the acquisition of the HM lands;
- Copies of all executed and recorded conservation easements;
- Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and
- 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 24 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 (2081-2020-034-02) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Kevin Thomas, Regional Manager
c/o CESA Desk
California Department of Fish and Wildlife
North Central Region
1701 Nimbus Road
Rancho Cordova, CA 95670
Telephone (916) 358-2930
R2CESA@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:

CESA Desk
California Department of Fish and Wildlife
1701 Nimbus Road
Rancho Cordova, CA 95670
Telephone (916) 358-2930
R2CESA@wildlife.ca.gov

Compliance with CEQA:
CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the

lead agency, the California Department of Water Resources (DWR). (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Final Environmental Impact Statement/Environmental Impact Report (EIR) (SCH No.: 2013032004) dated May 2019 that DWR certified for the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project on July 19, 2019. At the time the lead agency certified the EIR and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's EIR for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

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 & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, the Yolo Bypass Salmonid Habitat Restoration and Fish Passage EIR, the results of site visits and 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 the Project, as well as the 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; (4) monthly compliance reports; (5) pre-activity surveys; (6) monitoring by Designated Biologist(s); (7) establishment of seasonal work periods; and (8) preparation and implementation of a

Fish Rescue and Relocation Plan. 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 or enhance the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the purchase of one Swainson's hawk nest buffer credit, the protection and management in perpetuity of 50.89 acres of compensatory GGS habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project and the restoration of 9.66 acres of temporarily impacted habitat, along with the benefits of the Project to Chinook salmon as described in the Project Description, and 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 section 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 Map of Project

FIGURE 2	Intake Channel, Headworks Structure, and Transport Channel
FIGURE 3	Tule Channel & Agricultural Road Crossing 1
FIGURE 4	Supplemental Fish Passage Facility
FIGURE 5	Access Routes
FIGURE 6	Additional Fish Stranding Survey Locations
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2A, 2B	Habitat Management Lands Checklist; Proposed Lands for Acquisition Form
ATTACHMENT 3	Letter of Credit Form
ATTACHMENT 4	Mitigation Payment Transmittal Form
ATTACHMENT 5	Yolo Bypass Adult Fish Passage Coordinated Operations Plan
ATTACHMENT 6	Works Cited List

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

On 7/20/2021

DocuSigned by:
Kelley Barker for
778EDA8AE45F4C9...

Kevin Thomas, 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 this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: DocuSigned by: Dean Messer 6D4D1F2F06684AA... Date: 7/20/2021

Printed Name: Dean Messer Title: Chief, DES