



**California Department of Fish and Wildlife
North Central Region
1701 NIMBUS ROAD
RANCHO CORDOVA, CA 95670**

**California Endangered Species Act
Amended Incidental Take Permit No. 2081-2019-063-02
(Amendment No. 1)**

LOWER ELKHORN BASIN LEVEE SETBACK

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

Permittee:	California Department of Water Resources (DWR)
Principal Officer:	Mary Jimenez
Contact Person:	Josh Brown, (916) 480-5346
Mailing Address:	3464 El Camino Avenue, Suite 210 Sacramento, CA 94236

Amended ITP³ Background:

On December 23, 2019, DWR submitted a CESA ITP application to 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. DWR sought take coverage authorization for CESA listed species associated with project-related impacts from the Lower Elkhorn Basin Levee Setback (LEBLS) in Yolo County, California (Project).

On May 19, 2020, CDFW issued ITP No. 2081-2019-063-02 to DWR (Permittee) authorizing take of giant garter snake (*Thamnophis gigas*) and Swainson's hawk (*Buteo swainsonii*)

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

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.

³ When this incidental take permit and attachments refer to the "ITP", it means the "Amended ITP" unless the context dictates otherwise.

(collectively, the Covered Species) associated with and incidental to the LEBLS Project. The Project as described in the ITP originally issued by CDFW includes new setback levees in the Yolo Bypass, along the Lower Elkhorn Basin, and the Sacramento Bypass North Levee thereby expanding the Sacramento Bypass. In issuing the ITP, CDFW found, among other things, that Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate impacts to the Covered Species and would not jeopardize the continued existence of the Covered Species.

On June 29, 2020, DWR submitted a request for a "major amendment" to CESA ITP No. 2081-2019-063-02 (See Cal. Code Regs., § 783.6(c)(5)). Since the issuance of the ITP, design refinements have occurred that have changed the Project description and expanded the Project footprint. The amended Project description and Project footprint include refinements to the staging areas, detention pond, storm drain pipe construction, widening of existing Ditches 10, 12, and 13, concrete erosion control at the North Cross Canal Culvert, new ditch access crossings, new culvert crossing in Ditch 13, haul crossing across Ditch 13, and additional grading at the South Cross Canal. The amendment updates the direct impacts of the Project based on the refined Project description, Project footprint, and an updated assessment of Covered Species habitat impacts.

CDFW now reissues this ITP including the revised provisions in this first major amendment (Collectively, the Amended ITP). The Amended ITP includes all of the operative provisions as of the effective date of this Amended ITP. Attachment 6 to this Amended ITP shows the specific red-line changes made to the original ITP as a result of this major amendment. Figures 1 and 2 show the amended project maps and plans.

Effective Date and Expiration Date of this Amended ITP:

The original ITP was executed in duplicate original form and became effective when a duplicate original was acknowledged by signature of the Permittee on the last page of the original ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. The original ITP's effective date was May 19, 2020. This remains the effective date for the original take authorization. The Amended ITP shall be executed in the same manner and shall become effective when CDFW's Habitat Conservation Planning Branch receives the signed Amended ITP. This Amended ITP's authorization to take the Covered Species shall expire **50 years** from May 19, 2020, when it was originally signed by CDFW so long as the Permittee satisfies the 10-year review process described in the Permit Term section below. This Amended ITP shall become effective when 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.

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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 the original ITP. 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 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 GIS mapping depicting impacts to Covered Species habitat(s) over the last ten years;
3. Total acres and GIS mapping depicting Habitat Management lands that were preserved both during the last 10-year period and since the permit was executed;
4. Total acres and GIS mapping depicting onsite restoration of temporarily impacted Covered Species habitat pursuant to Condition of Approval 8.13;
5. Number of individuals of the Covered Species taken during the last 10-year period;
6. A copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure;
7. An assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing, and mitigating Project impacts;
8. An assessment of whether the Covered Activities and Project Description for Operations and Maintenance are still valid;
9. Any new information relevant to the conservation of the Covered Species and/or to the Project Area.

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

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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 7.7 of this ITP.

Project Location:

The Lower Elkhorn Basin Levee Setback Project (Project) is adjacent to the Sacramento Bypass and Yolo Bypass, in the County of Yolo, State of California (See Figure 1). The Project site is bounded by Interstate 5 (I-5) to the North, the Sacramento Bypass to the South, the Sacramento River to the East, and the Tule Canal to the West; at Latitude and Longitude: 38.682958, -121.642058; 38.638491, -121.619252; 38.639425, -121.612811; 38.598855, -121.590231; 38.607036, -121.560168; Townships 9 North and 10 North, Ranges 3 East and 4 East, U.S. Geological Survey (USGS) maps Sacramento West, Taylor Monument, and Gray's Bend.

Project Description:

The Project includes a new setback levee in the Yolo Bypass, along the Lower Elkhorn Basin, aligned north to south, which will be set back approximately 1,500 feet east of the existing alignment. It will begin just south of I-5 and continue approximately 5.5 miles south ending at the new Sacramento Bypass North Levee. The Sacramento Bypass would be expanded by the construction of a new setback levee approximately 1,500 feet north of the existing levee and will be approximately 1.6 miles long. Most of the existing Yolo Bypass East Levee and Sacramento Bypass North Levee will be degraded following construction of the new levees. However, up to 4,500 feet of the Yolo Bypass East Levee will have segments left in place (Remnant Levee) to provide upland habitat refugia for wildlife. Segments of the Remnant Levee will be spaced approximately 2,500 feet apart and will be approximately 500 feet long. One section of Remnant Levee will be augmented with additional riprap to enhance upland refugia for giant garter snake (GGS). Additionally, the Project includes relocation of various above ground utility infrastructure, such as power poles and below-ground infrastructure; relocation and reconstruction of portions of County Roads 124 and 126; construction of a new drainage canal (toe drain) on the east side of the new Yolo Bypass East Levee setback; reconfiguration of drainage canals within the proposed project footprint; relocation and consolidation of existing pump stations on the landside of the existing levee; and installing riparian plantings within the footprint of the existing Sacramento Bypass North Levee (after portions of the existing levee is degraded). (Collectively, the Project Area)

Landside Grading: Borrow Area and Setback Levee Footprint Preparation

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Soil will be extracted from the borrow location between the new setback levee alignment and the existing Yolo Bypass East and Sacramento Bypass North Levees. Borrow material extraction will require the grading and excavation of soil from these lands, including the field irrigation ditches within the agricultural parcels, as well as portions of the North Cross Canal and South Cross Canal. In total, approximately 647 acres (4.4 million cubic yards) of soil material will be extracted from the borrow area for constructing the new setback levee and seepage berm. Soil will be excavated throughout the borrow area to a maximum depth of approximately 7 feet. Borrow material will be transported from the excavation areas to the setback levee alignment from within the borrow area thereby no haul routes for borrow material will be needed outside of the Project site. Following the completion of each of the construction seasons, borrow sites will be seeded with sterile wheat grasses to reduce erosion during winter and returned to agriculture. Agricultural fields will be restored after the new setback levee has been constructed and certified. Final elevations of the agricultural fields will drain north to south and east to west. The new setback levees will be approximately 27 feet high, as determined by the 100-year water surface elevation plus a minimum 6 feet of freeboard, and approximately 244 feet wide at the base, with a crown width of approximately 28 feet. The levee slopes will be 4H:1V (horizontal: vertical) on the waterside and 3H:1V to 4H:1V on the landside. Tied concrete block mat (TCBM) will be placed along all seven (7) miles of the waterside slopes (slopes facing the bypass) of the new setback levees, above the ordinary high-water mark. To understand the most effective way to establish native perennial grassland cover over the TCBM, the Permittee shall conduct a seeding trial. Based on the native perennial grassland establishment trial, the most effective method for establishing vegetative cover to prevent exposure of the geogrid shall be implemented.

Two agricultural areas within the Project boundary have been designated as staging areas for the Project. One area is located at the northern end of the Project boundary, south of Interstate 5 and west of County Road 122. The other area is within the southern portion of the Project boundary, north of the future pump station and west of the South Cross Canal. This southern staging area encompasses approximately 221.7 acres and comprises the upper portion of the agricultural parcel above the future pump station. The staging area will be graded level and crushed rock may be added to the top surface of the ground to accommodate the weight of heavy equipment. Once Project construction is completed, the staging areas will be cleared of all construction material and prepared for agricultural production to resume.

Based on hydraulic and hydrologic studies of the post-construction drainage flow conditions during heavy storm events (10-year minimum), the future pump station may not be able to accommodate the volume and rate of discharge from the post-construction ditches. To prevent the pump station from being overwhelmed and allow efficient discharge of flows into the expanded Sacramento Bypass, the lower portion of the agricultural parcel in which the southern staging area will be located will be constructed as a detention pond that will capture and hold excess water temporarily until the pump station can discharge the water and flows

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normalize in the ditches. During relatively large infrequent winter storm events, the detention pond area will be used to receive stormwater overflow for several days at a time when precipitation volumes in the Lower Elkhorn Basin temporarily exceed the discharge capacity of the pump station, which is anticipated to occur at least once every few years.

The detention pond will require a footprint of approximately 170 acres and will generate 730,000 cubic yards of excavated material while providing 450-acre-feet of temporary storage. The existing ground elevations in this area range from approximately 13- to 15-feet. The design grades for the detention pond bottom will range from 10- to 12-feet. Post-construction, the detention pond area will continue to be used for agriculture operations.

Construction of New Ditches on the Landside of the Setback Levee

From south to north along the alignment of the Project, the first segment of constructed ditches will be a segment running east-to-west on the landside of the new setback levee from the southern end of the setback levee, adjacent to the Sacramento Weir, to the South Cross Canal (Ditch 20) and a segment running east-to-west from the South Cross Canal to just north of the new pump station (Ditch 25). The ditch will carry flow and runoff from the new Sacramento Bypass North Levee from the Sacramento Weir area to the pump station, to be drained into the Sacramento Bypass via the new pump station. This ditch will be excavated within existing agricultural lands except for the portion that crosses the South Cross Canal. This segment of the ditch is approximately 8,000 linear feet in length with an average width of 40 feet, 3H:1V side slopes, and will have an earthen bank and bottom. Upon completion of construction of the ditch segment, the ditch slopes will be hydroseeded with a native seed mix.

The second segment of constructed ditch is a segment that runs north-to-south on the west side of the new pump station, which will be an extension of Ditch 13, south of Ditch 25 and north of the setback levee. This 800 linear foot segment of ditch will be widened and modified to hold and discharge drainage. The ditch segment will be modified from 48 feet wide at the top of the bank to approximately 96 feet wide at the top of the bank, and the wide slopes will be lined with approximately 8 inches of $\frac{3}{4}$ -inch riprap. The lower portion of the channel and bed of the ditch will be lined with TCBM or other concrete or rock material.

The third segment of constructed ditch (Ditch 24) is a segment that runs north-to-south on the land side of the new setback levee, between the southern end of the North Cross Canal and the existing drainage ditch, Ditch 10. This ditch will be excavated within existing agricultural lands. This segment of Ditch 24 is approximately 7,000 linear feet in length with a width varying between 2H:1V and 3H:1V. Ditch 10 will have an earthen bank and bottom. Upon completion of the construction of the ditch segment, the ditch slopes will be hydroseeded with a native seed mix.

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The fourth segment of constructed ditch is a segment that runs north-to-south on the land side of the new setback levee, between County Road 122 and the North Cross Canal. This ditch (Ditch 23) will be excavated within existing agricultural lands and has a small 890 linear foot feeder ditch that connects into it (Ditch 22). These segments of constructed ditches are approximately 6,680 linear feet in total length with an average width between 45 and 60 feet and 2.5H:1V up to 3.5H:1V side slopes. This ditch will have an earthen bank and bottom. Upon completion of the ditch segment, the ditch slopes will be hydroseeded with a native seed mix.

The final segment of constructed ditch is a segment that runs north-to-south on the land side of the new setback levee, between the northern limits of the Project and County Road 122. This ditch (Ditch 26) will be excavated within existing agricultural lands. This segment of the ditch is approximately 2,600 linear feet in length with an average width between 35 and 40 feet and 3H:1V side slopes. This ditch will have an earthen bank and bottom, except for a 200 square foot area at the northern end of the ditch, which will be lined with TCBM. Upon completion of the ditch segment, the ditch slopes will be hydroseeded with a native seed mix.

To connect existing drainages to newly constructed drainages, twenty-five (25) storm drain pipe connections will be installed. These storm drain pipe connections will facilitate water flowing from existing irrigation ditches on the land side of the Lower Elkhorn Basin into the newly constructed ditches, and storm water runoff from the re-located County Road 124 into the newly constructed ditches.

The storm drain pipe connections will consist of three types. The first type of storm drain pipe connection will be from existing irrigation ditches into the newly constructed ditches and will be constructed of high density polyethylene (HDPE) pipe. The pipes will be installed through trench excavation, placement of the pipes, backfill surrounding the pipes with ½" crushed rock, and then a native material (soil) backfill to match finished grade. On the outfall side of the drains, approximately 100 square feet of Caltrans Class 2 rock will be placed below the outfalls within the newly constructed ditches. The rock will be placed on Caltrans Class 8 rock slope protection (RSP) fabric and over-excavation of the newly constructed ditch bottoms will occur so the top of the Class 2 rock will be flush with finished grade at the bottom of the ditches.

The second type of storm drain pipe connection will be storm drains directing runoff from County Road 124 into the widened existing Ditches 10, 12, and 13. This storm drain pipe connection type will be constructed of reinforced concrete pipe (RCP) and will be installed through trench excavation, placement of the pipes, backfill surrounding the pipes with ½" crushed rock, and then cement backfill under the road alignment and native material (soil) backfill between the edge of the road and the drain outfall in the ditches. On the outfall side of the drains, approximately 100 square feet of Caltrans Class 2 rock will be placed below the outfalls within the widened ditches. The rock will be placed on Caltrans Class 8 RSP fabric

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and over-excavation of the ditch bottoms will be done so the top of the Class 2 rock will be flush with finished grade at the bottom of the ditches.

The third type of storm drain pipe connection consists of extension of existing drain pipes (corrugated metal pipe [CMP]) from one irrigation ditch and one well pump into the widened section of Ditch 13. The extended irrigation ditch pipe outfall will drain to the widened ditch in an area where an additional culvert crossing and erosion control will be constructed (described in more detail in a following section). The well pump pipe will discharge to the widened ditch to the south of the additional culvert crossing and will include Class 2 rock erosion control as described above.

Approximate locations of the storm drain pipe installations, diameter and type of pipes, and lengths of storm drain pipes are shown in the following table.

Approximate Location (Project Station)	Pipe Diameter and Material	Pipe Length (linear feet)
Station 25+30	36-inch HDPE	90
Station 58+40	18-inch HDPE	45
Station 61+55	36-inch HDPE	73
Station 82+20	18-inch HDPE	44
Station 93+90	18-inch HDPE	43
Station 106+50	12-inch HDPE	41
Station 156+00	36-inch HDPE	53
Station 169+40	24-inch HDPE	41
Station 193+10	18-inch RCP	99
Station 199+50	12-inch HDPE	37
Station 202+95	12-inch HDPE	36
Station 203+10	18-inch RCP	89
Station 211+85	12-inch HDPE	36
Station 213+10	18-inch RCP	94
Station 223+10	18-inch RCP	87
Station 230+75	Extend existing 54-inch CMP	35
Station 232+15	Extend existing 12-inch CMP	35
Station 233+10	18-inch RCP	87
Station 243+10	18-inch RCP	89
Station 253+10	18-inch RCP	93

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Station 253+10	18-inch HDPE	56
Station 263+10	18-inch RCP	91
Station 273+10	18-inch RCP	87
Station 283+10	18-inch RCP	86
Station 328+00	24-inch HDPE	39

Source: Adapted by GEI Consultants, Inc., 2020 from Design Sets from DWR and Laugenour and Miekle, 2020

Ditch 24 will connect into an existing ditch, Ditch 10. From there, flows will go through the existing ditches 10, 12, and 13 and then into the new pump station ditch. Based on hydrologic analysis of expected flows through the newly constructed ditch, the existing Ditches 10, 12, and 13 will need to be widened to meet the capacity of the water coming from the newly constructed ditch and the North Cross Canal. Therefore, approximately 8,000 linear feet of Ditches 10, 12, and 13 (from the convergence with the third segment of the newly constructed ditch to the new pump station ditch) will be graded and widened by 25 feet. Temporary cofferdams will be installed at the upstream and downstream limits of this widening to facilitate dewatering for the grading work. The upstream cofferdam will be installed first and water in the ditch will be pumped through the existing Reclamation District (RD) 785 pump station into the Sacramento Bypass. Once water levels recede enough in the ditch at the downstream end, the downstream cofferdam will be installed to ensure any potential backflow into the ditch widening area does not occur.

Construction of New Ditch Culverts

Culverts to be installed include sixteen (16) on the landside of the levee, four (4) on the waterside of the levee, and five (5) at the outfall of the pump station. All of the culverts on the land side and the culverts at the pump station outfall will be constructed in the new constructed landside ditches, except culvert set 2, which is installed in the North Cross Canal.

The culverts are all prefabricated and will be inserted into the ditches. The landside culverts are all concrete box culverts and will be placed on a bed of 18-inch-thick aggregate base (totaling 105 cubic yards). The culverts on the waterside of the setback levee are all corrugated metal pipes and will be placed over native soil. All culverts will have soil backfill on top of the culverts. At the outfall for the pump station into Ditch 13, the area beneath the five metal outfall pipes will be reinforced with controlled low strength material. In addition, erosion control structures will be constructed at the inlet and outlet at each set of culverts. The erosion control structures will consist of a 10-foot-long, 40-foot wide concrete apron (400 square feet total) placed under the pipes and at least 10 feet of riprap will be placed at the end of the concrete apron approximately 8-inches thick (400 square feet total). One additional erosion control structure will be constructed at the outfalls of the culverts that discharge into the North Cross Canal (Culvert Set 2 in the following table). This erosion control structure will consist of a 10-foot long, 50-foot wide concrete apron (500 square feet total) that is 1-foot

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thick and poured over 4-inches of $\frac{3}{4}$ " Class 2 aggregate base. The concrete will be keyed in at the end of the apron approximately 2.5 feet below finished ground surface.

Culvert Set	Number of Culverts	Culvert Length	Culvert Dimensions	Culvert Type	Material Type
Landside of Setback Levee					
1	3	154 feet	10' X 8'	Box	Concrete
2	3	94 feet	10' X 8'	Box	Concrete
3	2	213 feet	8' X 6'	Box	Concrete
4	2	161 feet	8' X 6'	Box	Concrete
5	2	114 feet	8' X 5'	Box	Concrete
6	1	247 feet	10' X 5'	Box	Concrete
10	3	94 feet	10' X 8'	Box	Concrete
Pump Station Outfall					
7	5	500 feet	2 22-inch diameter 3 38-inch diameter	Pipe	Metal
Waterside of Setback Levee					
8	2	69 feet	48-inch diameter	Pipe	Corrugated Metal
9	2	54 feet	30-inch diameter	Pipe	Corrugated Metal

Source: Adapted by GEI Consultants, Inc., 2020 from Design Sets from DWR and Laugenour and Mickle, 2020

When the new landside ditches are constructed, they will cut off existing access from landside parcels to the new County Road 124. Two access crossings will be constructed across Ditch 24 below the North Cross Canal to maintain access for landowners between their lands and County Road 124. The first crossing will be installed across Ditch 24 connecting the new County Road 124 to the existing levee patrol road on the east side of the North Cross Canal above the project limits. The second crossing will be installed across the

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Ditch 24 where the new re-aligned Country Road 124 meets with the old alignment of County Road 124. These crossings will be constructed using 3 8-foot wide and 5.5-foot tall concrete box culverts over aggregate base in the bed of the constructed ditch with compacted soil cover over the culverts to complete the base of the crossings. The crossings will be a total of 150 feet wide.

The detention pond mentioned previously will generate approximately 730,000 cubic yards of soil. This material will be used as part of construction of the setback levee. As such, the material will need to be relocated to the borrow area to the west of County Road 124 (and across Ditch 13). To facilitate the transport of the excavated material, a temporary haul crossing will be constructed within Ditch 13 adjacent to the top of the detention pond. This haul crossing will be constructed using 3 48-inch HDPE culverts over aggregate base in the bed of the constructed ditch with compacted soil cover over the culverts. The crossing will be a total of 200 feet wide at the base and a 160-foot wide top surface.

Culvert Set	Number of Culverts	Culvert Length	Culvert Dimensions	Culvert Type	Material Type
Landside of Setback Levee					
1	3	154 feet	10' X 8'	Box	Concrete
2	3	94 feet	10' X 8'	Box	Concrete
3	2	213 feet	8' X 6'	Box	Concrete
4	2	161 feet	8' X 6'	Box	Concrete
5	2	114 feet	8' X 5'	Box	Concrete
6	1	247 feet	10' X 5'	Box	Concrete
Pump Station Outfall					
7	5	500 feet	2 22-inch diameter 3 38-inch diameter	Pipe	Metal
Waterside of Setback Levee					
8	2	69 feet	48-inch diameter	Pipe	Corrugated Metal
9	2	54 feet	30-inch diameter	Pipe	Corrugated Metal

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Fill a Portion of the North Cross Canal and Pump Station Removal

Borrow operations, grading of the borrow area and setback levee footprint, and construction of new landside ditches will result in the filling of the portion of the North Cross Canal within the Project Area. Approximately 6 acres of the existing North Cross Canal will be filled in to create the construction footprint for the borrow area, setback levee, seepage berm, new County Road 126, and new landside drainage ditch. Dewatering will be accomplished through installation of earthen dams or sheetpiling at the upstream construction limit and dewatering of the canal within the work area by running the pump station to drain the water below the sheetpile wall. Approximately 48,000 cubic yards of soil from the borrow area will be placed into the North Cross Canal to bring the profile within the canal to match the grade of the surrounding area. With the removal of the portion of the North Cross Canal landward of the pump station, the pump station is no longer functional and will be decommissioned and removed. Removal of the pump station will involve the excavation and removal of the pump and pumphouse within the North Cross Canal and removal of the pipe and outfall in the Tule Canal.

Fill a Portion of the South Cross Canal and Pump Station Removal

Borrow operations, grading of the borrow area and setback levee footprint, and construction of new landside ditches will result in the filling of the portion of the South Cross Canal within the Project Area. Approximately 5.4 acres of the existing South Cross Canal will be filled in to create the construction footprint for the borrow area, setback levee, seepage berm, new County Road 126, and new landslide drainage ditch. Approximately 50,000 cubic yards of soil from the borrow area will be placed into the South Cross Canal to bring the profile within the canal to match the grade in the surrounding area. As part of the constructed ditch improvements, approximately 900 square feet of Caltrans Class 2 rock will be placed over Class 8 RSP fabric and excavated so the rock face is flush with finished grade at the intersection of the eastern section of the landside ditch and the South Cross Canal. This will be placed to prevent any erosion or scour of flow in the South Cross Canal from the landside ditch.

An additional approximate 1.13-acre section of the South Cross Canal will be temporarily disturbed for construction access and dewatering to facilitate construction of the flood remediation structures. Dewatering will be accomplished through installation of earthen dams or sheetpiling at the upstream construction limit and dewatering of the canal within the work area by running the pump station to drain the water below the sheetpile wall.

Once the South Cross Canal area is filled in, the existing Reclamation District 537 pump station and associated pipes will be decommissioned and removed. The existing set of 198

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linear foot, 24-inch diameter metal pipes connecting the pump station to the outfall in the Sacramento Bypass will also be removed through excavation of the pipes through the degraded levee footprint and pulling the pipes through the excavated trench.

Ditch 13 Outfall Construction at the Sacramento Bypass and Realignment of Ditch 17

Ditch 13 will convey drainage from the pump station that consolidates all drainage on the land side of the new setback levee and discharge the drainage into the Sacramento Bypass via a new earthen outfall ditch that will be constructed through the footprint of the removed Sacramento Bypass North Levee. Additionally, drainage from the Western Drainage Ditch will converge into Ditch 13 before the outfall. Approximately 1,400 linear feet of the existing Ditch 13 will be modified and expanded with a wider bottom width and 3H:1V side slopes between the south end of the setback levee and pump station, and the outfall ditch. Construction of the outfall ditch will consist of excavation of the ditch geometry within the footprint of the removed levee and the toe road on the waterside of the levee to achieve positive flow of the outfall ditch into the Sacramento Bypass. The new outfall ditch segment will be approximately 150 feet long and 80 feet wide (0.3 acres). As part of this construction, an existing pump station belonging to Reclamation 785 will also be removed, as well as the three 183 linear foot 20 inch diameter metal pipes that outlet into the Sacramento Bypass will also be removed through excavation of the pipes through the degraded levee footprint and pulling the pipes through the excavated trench.

Ditch 17 will be filled and removed when the levee is degraded. A new earthen Ditch 21 will be constructed landward of the existing Ditch 17. Ditch 21 will serve as a drainage ditch for flood waters in the expanded Sacramento Bypass and as a fish passage route to reduce the potential for stranding in the expanded bypass as flood waters recede. Ditch 21 will be constructed to converge with Ditch 13 just north of the outfall ditch and will add to the overall drainage of the expanded Bypass within the one outfall ditch. Construction of Ditch 21 will be conducted by excavating the new ditch within existing agricultural and non-agricultural uplands. Ditch 21 will be approximately 5,500 feet long, 42 feet wide, and 4 feet deep (5.3 acres total).

Modification of the Western Drainage Ditch

The Western Drainage Ditch will be widened and enhanced by approximately 3 acres. The existing ditch is on average 45 feet wide, with 2H:1V to 3H:1V slopes and is approximately 3 acres. The modified ditch will be 54 feet wide, with 3H:1V slopes and will be approximately 4-5 feet deep. In total, approximately 30,000 linear feet of the Western Drainage Ditch will be modified. The construction will require excavation within the existing channel of the ditch to widen and re-create the slopes. The Western Drainage Ditch is expected to be dry during construction, due to farming practices being suspended during this Project. If water is present during construction, dewatering will be accomplished through installation of earthen dams or

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sheetpiling at the upstream construction limit and dewatering of the canal within the work area by running the pump station to drain the water below the sheetpile wall.

Degrade of the Existing Yolo Bypass East Levee and Sacramento Bypass North Levee

Degrade of the existing Yolo Bypass East Levee will result in excavation of the levee prism to a point where the waterside limit of excavation will be at least 2 feet above the top of the bank of the Tule Canal (approximate elevation of 15-22 feet). The remainder of the levee prism will be excavated to approximately 13-foot elevation. Approximately 5.8 miles (3.4 million cubic yards) of soil material will be removed within the footprint of the existing Yolo Bypass East Levee. While most of the existing Yolo Bypass East Levee will be degraded after the new setback levee is certified, segments of the Yolo Bypass East Levee will be left in place to act as upland refugia habitat for various sensitive species. The existing levee segments are approximately 25 feet high, and approximately 120 feet wide at the base, with a crown width of approximately 20 feet. Segments will be spaced approximately 2,500 feet apart and will be approximately 500 feet long.

Degrade of the Sacramento Bypass North Levee will result in the full excavation of the levee prism to the elevation of approximately 20 feet. Approximately 1.72 miles (1 million cubic yards) of soil material will be removed within the footprint of the existing Sacramento Bypass North Levee. Soil material removed from the levee footprints will be transported to the borrow area to backfill the borrow area after borrow materials have been excavated.

Construction of Levee Degrade Erosion Control Features

Three (3) erosion control features will be located along the alignment of the degraded Yolo Bypass East Levee. The erosion control features will measure approximately 180 feet long and 400 feet wide for the northernmost feature and 180 feet long and 250 feet wide for the remaining two features. Construction of the erosion control features will result in the placement of RSP along sections of the footprint of the degraded Yolo Bypass East Levee and into the Western Drainage Ditch. The northernmost feature will have an approximate total of 5,300 cubic yards of 18-inch-minus RSP, and the southernmost two features will have an approximate total of 6,700 cubic yards of 18-inch-minus RSP.

Erosion Control Along the Sacramento Bypass

Erosion control may be placed along the waterside slope of the new Sacramento Bypass North Levee. If constructed, a 715 linear foot section of the waterside levee slope of the new Sacramento Bypass North Levee will be lined with concrete to provide erosion control. The concrete will be 6 inches thick and poured over the constructed slope bank of the new North levee.

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A variety of earthmoving equipment such as graders, scrapers, loaders, excavators, backhoes, haul trucks, cement trucks, and bulldozers will do most of the earthmoving work within the Project Area. Water trucks, service trucks, and other typical construction vehicles will be present.

Access to the site will occur via I-5 and I-80, Highway 50, Reed Avenue, Old River Road, Harbor Boulevard, Tule Jack Road, Yolo County Roads 124 and 126. Once the trucks access the action area, they will travel along the existing levee to Project construction areas.

Figure 1 shows the Amended Map of Project Overview.

Figures 1A-1G shows the Project plans, including Ditch numbers.

Giant Garter Snake Remnant Levee

This Remnant Levee segment has existing riprap, which will be retained. Approximately three to four GGS hibernacula (i.e., rock piles keyed into the Remnant Levee) will be placed along the remnant levee upland (Labeled “Retained Upland” on Figure 1). Hibernacula strips will be approximately 30–50 feet wide and placed in the upper portion of the retained levee to maximize refugia space during flood events. There will be two hibernacula strips placed along the south bank, with the largest on the southeast facing bank; this aspect maximizes basking potential for GGS. The remaining rock strips will be located along the center and/or north end of the Remnant Levee. Rock strips will be comprised of rock rip rap, sized to withstand hydraulic pressures during flood events. No geotextile fabric will be placed under the rock strips and voids between riprap will purposefully be retained within the rock to provide interstitial space for GGS to use.

Riparian Plantings

After the existing Sacramento Bypass Levee is degraded, approximately 18 acres of new riparian plantings will be established within its footprint to mitigate for loss of tree canopy and riparian habitat, during construction and/or during future operation and maintenance (O&M) activities. Establishing woody vegetation will likely include a combination of planting nursery stock, live cuttings, and acorn planting in winter, and will be sustained by flood irrigation, drip, or agricultural-scale spray heads.

Operations and Maintenance (O&M)

DWR has channel jurisdiction and maintenance responsibility for the Sacramento Bypass and the Yolo Bypass between the levees. Operating as the Local Maintaining Agency (LMA), DWR’s Sacramento Maintenance yard maintains the north and south levees of the Sacramento Bypass. DWR does not have maintenance responsibility of the Yolo Bypass

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East levee. Therefore, for the purposes of O&M, the Yolo Bypass East levee O&M will not be performed by DWR and are not considered Covered Activities. Regular O&M activities in the Project Area include inspections, rodent abatement and damage repair (including grouting of rodent holes), vegetation management and weed abatement (including herbicide), encroachment removal, sediment removal around structures and in canals, mowing, strip disking, controlled burning, trimming/limbing/cutting of woody vegetation, grazing, masticating, bulldozing for channel vegetation management, levee grading, aquatic vegetation removal, culvert and pipe repair, replacement, or abandonment, erosion control and repair to ensure levee integrity and adequate levee access along the toe road of the setback levees. Attachment 1 provides more specific details about maintenance locations and activities. O&M activities will consist of a patrol vehicle traveling along the setback levees, and machinery for weed abatement, such as mowers (i.e., standard riding lawnmower, specialized slope mower, and tractor with a mower boom), herbicide applicator trailers, weed whackers/trimmers, hand-held manual tools, power tools, backhoe, or other equipment. Channel and vegetation maintenance activities may require the use of an excavator, chippers, masticators, haul trucks, and skid-steer loader/compact tractors. Erosion control and repair activities will occur less frequently, involving the use of a heavy equipment to fill eroded areas and place gravel, riprap, or soil along the levee slope, crest shoulder of the setback levees to reestablish and maintain the minimum crown width, as well as trailers to mix grouting materials. O&M activities will not introduce substantial new land uses into the area. Existing gates in the area will be removed temporarily to undertake levee construction but will be replaced following construction completion to restrict public access. The patrol road will be used, as currently used, to access the length of the setback levees during these activities and during high-flow events for flood-fighting purposes. "Stationary maintenance activities" are activities where maintenance crews spend several hours or more in a discrete location or where a discrete location is used for access, equipment and material staging and storage, etc. Stationary maintenance activities do not include activities such as mowing or disking of channels for herbaceous vegetation management and limbing of woody vegetation; these activities are conversely classified as "transitory maintenance activities."

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Giant garter snake (<i>Thamnophis gigas</i>)	Threatened ⁴
2. Swainson's hawk (<i>Buteo swainsoni</i>)	Threatened ⁴

⁴See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(E).

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

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above that are expected to result in incidental take of individuals of the Covered Species include: clearing and grubbing; grading; excavating; disking; capture and relocation; crushed by vehicles or heavy equipment; entombed in burrows; sediment deposition; tree and vegetation removal; cut and fill; installation of Covered Species fencing; placement of revetment; trenching; relocation and installation of utilities; materials stockpiling, laydown, and transport; roadbed demolition; roadway and temporary work pad construction; removal of the temporary work pad; heavy equipment staging and operations; the use of generators; surveying or monitoring activities; and hand crews (Covered Activities).

Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from operating equipment; capture and relocation; disruption of feeding, nesting, sheltering behavior from exposure to noise, vibration, and dust; long-term effects due to increased pollution; displacement from preferred habitat; disruption to hydrology; reduction in available upland refugia including burrows; increased competition for food and space; and increased vulnerability to predation.

Impacts are described in more detail by Covered Species below:

Swainson's Hawk Incidental Take

Construction Impacts: Incidental take of individuals of the Covered Species 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 the Covered Species nesting season. Incidental take of individuals of the Covered Species may also occur through capture when eggs or individuals of the Covered Species are salvaged after parental nest abandonment has occurred. The chance of viability of eggs and/or survival for the Covered Species in this circumstance is greatly reduced. Potential indirect impacts to the Covered Species 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

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with breeding and cause a loss of fitness in dependent young resulting from interruptions to brooding and/or feeding schedules. Individuals of the Covered Species 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 of the Covered Species. In addition, suitable nesting habitat for the Covered Species occurs within 0.5 mile of the Project Area so Covered Species nesting outside the Project Area could be impacted by Covered Activities. As requested by the Permittee, this ITP only authorizes the abandonment of one (1) Covered Species nest during Project construction.

Giant garter snake (GGS) Incidental Take

Construction Impacts: Incidental take of individuals of the Covered Species may occur from Covered Activities during construction by permanent habitat modification and direct mortality of individuals. The Covered Species could be injured or killed by construction equipment working in suitable aquatic and upland habitat or construction vehicles traveling through the Project Area. Disturbance or degradation of suitable aquatic habitat for the Covered Species in the Project Area could occur if soil or other materials are sidecast or fall into the habitat. Mortality could result from being crushed by vehicles or equipment or becoming trapped or crushed within a burrow or other refugia. Fuel or oil spills from construction equipment into aquatic habitat could also cause illness or mortality of the Covered Species. Trenches left open could trap Covered Species moving through the Project Area. Noise and vibrations from construction equipment, and presence of human activity during Covered Activities may also disturb the Covered Species within the Project Area. Most Covered Activities will occur during the Covered Species' active period (May 1 through October 1) when the potential for direct mortality is reduced because they are generally more active and may be able to move and avoid danger. Even with Covered Activities limited to the Covered Species' active period, direct take may occur as they use burrows while shedding, digesting, birthing, or thermoregulating (to warm up or cool off), at which time they are less mobile and may not readily move even when disturbed.

O&M Impacts: Some O&M activities occurring within potentially suitable habitat will only result in indirect impacts to the Covered Species, including mowing and grazing. Human activity, noise, equipment vibrations, and soil disturbance could affect the ability of the Covered Species to conduct essential life history functions, such as dispersal, movement, or foraging, and could increase competition for food and space and vulnerability to predation. Some O&M activities may result in injury or mortality to the Covered Species through use of maintenance equipment during Covered Activities. O&M equipment includes a patrol vehicle traveling along the setback levees, and machinery for weed abatement (including herbicide), such as mowers (i.e., standard riding lawnmower, specialized slope mower, and tractor with a mower boom), herbicide applicator trailers, weed whackers/trimmers, hand-held manual

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tools, power tools, or other equipment. Channel and vegetation maintenance activities may require the use of an excavator, chippers, masticators, haul trucks, and skid-steer loader/compact tractors. Erosion control and repair activities will involve the use of a backhoe to fill eroded areas and place gravel, riprap, or soil along the crest shoulder of the setback levees to reestablish and maintain the minimum crown width, as well as trailers to mix grouting materials. The amount of soil disturbance involved in Covered Activities increases the risk of collapsing a burrow or crushing and/or entombing individuals. These activities include sediment and aquatic vegetation removal from canals, sediment removal around culverts, and pipe/culvert repair and replacement. In particular, disturbance to the canal banks and placement of removed sediment and vegetation could result in crushed or entombed burrows.

GGs Habitat Impacts: During construction, the Project is expected to cause 12.82 acres (7.55 acres aquatic and 5.27 acres upland) of permanent loss, the conversion of 3.82 acres of canal to rice, and 133.25 acres (31.66 acres aquatic and 101.59 acres upland) of temporary loss of GGS habitat. O&M activities are estimated to temporarily impact 184.70 acres (39.40 acres of aquatic and 145.30 acres of upland) of GGS habitat.

In total, the Project is anticipated to permanently impact 12.82 acres, convert 3.82 acres from canal to rice, and temporarily impact 317.95 acres of GGS habitat.

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/will 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.

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2. **CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (EIR) (SCH No.: 2016092015) certified by the California Department of Water Resources (DWR) on March 18, 2019, and subsequent Addenda 1 - 4, 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. 1600-2019-0204-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 Lower Elkhorn Basin Levee Setback, Yolo County, California (Biological Opinion No. 08ESMF00-2018-F-0479-1) 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 2 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(s). Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biologist (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) is 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

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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. CDFW will provide written response within 15 business days of submittal. **(Construction and O&M)**

6.2.1. Biological Monitors. The Designated Biologist may authorize Biological Monitors to assist in ITP compliance efforts, led by the Designated Biologist(s). The Designated Biologist(s) is responsible for assuring that any Biological Monitors working under his or her lead are knowledgeable and experienced in the biology and natural history of the Covered Species, the Conditions of Approval of this ITP, the definition of "take" in CESA, and in implementation of standard avoidance and minimization measures used on construction projects in Covered Species' habitat. Permittee shall provide a description of the Biological Monitor duties, for CDFW approval, prior to the start of Covered Activities. **(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. Biologists Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist(s), Biological Monitors, and the Capture Designated 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. Additionally, Permittee shall conduct this training at least once annually for long-term

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and/or permanent employees that will be conducting work in the Project Area. The program shall consist of a presentation from the Designated Biologist(s) 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. The Program shall also inform all participants on weed biology, identification, and invasive plant prevention. 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 make available a fact sheet containing this information for workers to reference in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. 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 hard copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW. **(Construction)**

6.7. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and mitigation lands under Permittee control, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of Conditions of Approval 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)**

6.8. 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 Project-related 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)**

6.9. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse,

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including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

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- 6.10. 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)**
- 6.11. Erosion Control. Permittee shall actively implement best management practices (BMPs) to minimize turbidity and siltation and prevent erosion and the discharge of sediment where it may pass into waters of the state (Fish & G. Code § 89.1) during Covered Activities. 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 Covered Activities; 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)**
- 6.11.1. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament or jute netting (found in fiber rolls and erosion control matting) or similar material, in potential Covered Species' habitat. Permittee shall monitor the erosion control materials for effectiveness and maintain them throughout the Covered Activities. Permittee shall immediately repair or replace any erosion control feature that is not functioning effectively. **(Construction and O&M)**
- 6.11.2. Implementation. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance of erosion control features includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes. **(Construction and O&M)**
- 6.12. 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)**

6.13. Delineation of Project Boundaries. Where Covered Species habitats exist outside of but adjacent to Project Boundaries, Permittee shall clearly delineate the boundaries of the Project to ensure additional impacts to Covered Species habitats do not occur. Permittee shall delineate Project boundaries before starting Covered Activities. Permittee shall restrict all Covered Activities to within the Project Areas, unless otherwise agreed to with CDFW in writing. Permittee shall maintain all markers (e.g. fencing, stakes, and flags) until the completion of Covered Activities in those portions of the Project Area. Permittee may use physical barriers (e.g. Interstate 5) instead of markers where the physical barriers coincide with the limits of the Project Boundaries if approved by CDFW in writing. **(Construction)**

6.13.1. Demarcate Work Area. For stationary O&M Covered Activities, Permittee shall clearly mark Project Area limits (e.g. with flagging or fencing), including access roads; staging and equipment storage areas; stockpile areas for spoil disposal, soil, and materials; fueling and concrete washout areas; and equipment exclusion zones prior to commencement of the Covered Activity. Permittee shall restrict all Covered Activities to within the Project Area, unless otherwise agreed to with CDFW in writing. Permittee shall maintain all markers (e.g. fencing, stakes, and flags) until the completion of Covered Activities in those portions of the Project Area. **(O&M)**

6.14. Delineation of Environmental Sensitive Areas (ESAs). For Construction and stationary O&M Covered Activities, Permittee shall establish ESAs in the Project Area, by installing orange construction barrier fencing or other delineation method, to prevent encroachment of construction or maintenance personnel and equipment into areas of Covered Species habitat that will not be impacted. Permittee shall delineate ESAs no more than five (5) days prior to the commencement of Covered Activities. All potential Covered Species habitat that can be reasonably avoided during construction activities shall be identified as ESAs. All construction and maintenance personnel shall avoid ESAs. The Permittee shall avoid ESAs when siting all Staging Areas, spoils disposal areas, and construction equipment access routes. The Designated Biologist shall inspect the ESA limits before the start of each workday and the Permittee shall maintain the ESA limits until the completion of the Project. Permittee shall remove all delineation materials upon completion of the Construction-related Covered Activities and any applicable O&M Covered Activities. **(Construction and O&M)**

6.15. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict

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Project-related vehicle traffic to identified haul routes, established roads, staging, and parking areas, unless approved in writing by CDFW. Permittee shall ensure that Project related vehicle traffic does not exceed 15 miles per hour (mph) 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 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, among other reasons, if additional take of Covered Species will occur as a result of the Project modification. **(Construction and O&M)**

- 6.16. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.13 of this ITP. **(Construction and O&M)**
- 6.17. Inspect Equipment and Materials for Wildlife. Permittee shall inspect under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight. Additionally, Permittee shall look for wildlife in all pipes, culverts, and similar structures that have been stored on-site for one or more nights before being buried, capped, or moved. **(Construction and O&M)**
- 6.18. Trenches. Permittee shall ensure all excavated, steep-walled holes or trenches will be covered with appropriate covers (thick metal sheets or plywood) at the end of each workday. Permittee shall place covers so trench edges are fully sealed with rock bags or sand. Alternatively, Permittee may install one or more escape ramps such as fill dirt or wood planking at an angle no greater than 30 degrees to allow wildlife to escape. Before holes or trenches are filled, sealed, or collapsed, Permittee shall thoroughly inspect for trapped animals. Any Covered Species discovered will be allowed to escape voluntarily or shall be removed by the Capture Biologist(s). **(Construction and O&M)**
- 6.19. 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

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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)**

6.20. Vehicles and Equipment Maintenance. Permittee shall properly maintain all construction vehicles and equipment to prevent contamination of soil or water from external grease, oil, hydraulic fluid, or fuel. Permittee shall refuel or service vehicles and equipment at staging areas or on the crown or landside of the levee at least 50 feet from active or dry stream channels, canals and other waterbodies. Permittee shall ensure that vehicles and equipment are checked at least daily for leaks. Any vehicles or equipment found to be leaking shall be repaired on site or removed to an appropriate area to be repaired and any contamination shall be cleaned up immediately. Equipment shall be stored and repaired in areas that any possible contamination from the equipment would not pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, or channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, other sensitive habitat. **(Construction and O&M)**

6.21. Stockpiling of Soil. Permittee shall stockpile soil or grading spoils in designated staging areas, maintenance toe roads, and crown roads to avoid affecting previously undisturbed areas. Permittee shall install sediment barriers (e.g., silt fences, fiber rolls, and straw bales) as described in Condition of Approval 6.11 around the base of the stockpiles to intercept runoff and sediment during storm events. If necessary, Permittee shall also cover stockpiles to provide additional protection against wind and water erosion. **(Construction and O&M)**

6.22. Water Quality. Permittee shall retain runoff from dust control, oil, and other chemicals used in Covered Activities at the Project location and prevent it from flowing into areas containing Covered Species habitat. Permittee shall retain the runoff in the construction areas by creating small earthen berms, installing silt fences or hay-bale dikes, or implementing other measures on the construction site to prevent runoff from entering Covered Species aquatic habitat. **(Construction and O&M)**

6.23. Vegetation Removal. Permittee shall keep disturbance or removal of vegetation to the minimum necessary to complete Covered Activities. Except for tree removal already described in the Project Impacts, Permittee shall not remove or damage trees with a trunk diameter at breast height (DBH) in excess of four (4) inches without prior consultation and approval from CDFW. Where native trees or woody riparian vegetation split into several trunks at or near ground level, but originate from a single trunk, the DBH shall be measured for each trunk and calculated as one tree.

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Vegetation marked for protection may only be trimmed with hand tools to the extent necessary to gain access to the work sites. **(Construction and O&M)**

6.24. Invasive Species Management. To minimize the potential for invasive plants to be introduced or spread during Covered Activities, the Designated Biologist(s) shall work with Permittee staff to develop an invasive species management plan that shall include invasive plant prevention BMPs, based on *Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers* (Cal-IPC 2012). **(Construction)**

6.25. Invasive Species Decontamination. Prior to transporting equipment to a new Project site, Permittee shall remove all visible soil/mud/plant materials, and animal remnants on equipment. If any signs of invasive species are found, the equipment shall be cleaned to remove those species. Permittee shall clean/disinfect the equipment upon exiting the Project site or between use in waterways that are hydrologically disconnected. Prevention BMPs and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: <http://www.cal-ipc.org/ip/prevention/index.php> and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: <http://www.protectyourwaters.net/>. **(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. **(Construction)**

7.1.1. Notification for CDFW-Managed Lands. If Permittee plans to conduct Project activities within 500 feet of CDFW-managed lands on September 1-2 and/or on weekends within the months of September-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 O&M Commencement. Unless the Covered Activity has already been approved by CDFW in an Annual Maintenance Plan, Verification Request Form, or other mechanism that provided CDFW authorization, the Permittee shall notify CDFW 10 business days before starting Covered Activities. Permittee shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities. **(O&M)**

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7.1.3. Coordination for CDFW Managed Lands. Permittee and CDFW shall coordinate on Projects occurring on CDFW-managed lands prior to commencing work. **(O&M)**

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

7.3. Compliance Monitoring. 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 and their signs of presence, survey results, and monitoring activities required by this ITP. The Designated Biologist(s) shall conduct compliance inspections as described in Conditions of Approval 8.5, 8.6, and 8.19. Permittee shall submit daily monitoring reports once per week with a summary of the week's monitoring activities, unless another schedule is proposed by the Permittee and approved in writing by CDFW. **(Construction and O&M)**

7.3.1. Monitor Frequency Planning during Construction. Once per week, the Designated Biologist(s) shall consult with the Project team regarding the upcoming week's Project schedule. The Designated Biologist(s) shall evaluate the proposed schedule to determine the frequency of Compliance Monitoring described in Conditions of Approval 8.5 and 8.19. **(Construction)**

7.3.2. Monitor Frequency Planning during O&M. Within 14 calendar days prior to the commencement of O&M Covered Activities, Permittee shall consult with the Designated Biologist(s) on the proposed maintenance schedule to determine which Covered Activities will require monitoring. The Designated Biologist shall evaluate the proposed schedule to determine the frequency of Compliance Monitoring described in Condition of Approval 8.6. **(O&M)**

7.4. Monthly Construction Compliance Report. 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

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status of each mitigation measure. Monthly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP, the CDFW's Regional Representative and Headquarters CESA Program via e-mail. At the time of this ITP's approval, the CDFW Regional Representative is the R2CESA Desk (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/Quarterly Compliance Reports for that year identified in Condition of Approval 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species. **(Construction and O&M)**

7.6. CNDDDB Observations. The Designated Biologist(s) shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist(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. Final Mitigation Report. No later than 60 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist(s) shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species;

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(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)**

7.8. Notification of Take or Injury. The Designated Biologist(s) shall be immediately notified by Project personnel if a Covered Activity has taken or injured a Covered Species. The Designated Biologist(s) shall immediately notify CDFW and the Capture Biologist(s) 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 (2081-2019-063-02). Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, 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)**

7.9. CDFW Reinitiation. If the Permittee causes abandonment of one Swainson's hawk nest during Construction or takes two (2) GGS during Construction and/or O&M, reinitiation with CDFW is required to ensure that all prudent and feasible measures have been implemented to minimize and fully mitigate the take that has occurred or will likely continue to occur. Permittee shall notify the CDFW Regional Representative at R2CESA@wildlife.ca.gov to request reinitiation. **(Construction and O&M)**

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:

GGs Measures

8.1. Timing of Work. Permittee shall conduct all earthmoving Covered Activities within suitable Covered Species aquatic and upland habitat (areas within 200 feet of aquatic habitat) during the Covered Species active period (May 1-October 1). Applicant may conduct work between October 2 and October 31, or April 1 and April 30 provided the

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ambient air temperatures exceed 75 degrees Fahrenheit (F) during work and maximum daily air temperatures have exceeded 75 degrees F for at least three 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 O&M)

8.2. Work Period in Low Rainfall / Dry Weather Only. The work period for Covered Activities within 200 feet of canals and ditches shall be restricted to periods of low rainfall (less than ¼-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 (NWS) 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 O&M)**

8.3. Pre-Construction Survey and Refugia Flagging. No more than 24 hours prior to commencement of Covered Activities within 200 feet of Covered Species aquatic habitat, the Project Area shall be surveyed for the Covered Species by the Designated Biologist(s). The Designated Biologist(s) shall survey all upland habitat within 200 feet of Covered Species aquatic habitat for burrows, soil cracks, and crevices that may be suitable for use by Covered Species. 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(s) shall be onsite to monitor during ground disturbing activities. If Covered Activities stop for more than 14 calendar days, the Designated Biologist shall repeat surveys for burrows, soil cracks and similar features as described above, prior to resuming the Covered Activity. **(Construction)**

8.3.1 Pre-Maintenance Survey and Refugia Flagging. No more than 24 hours prior to commencement of Covered Activities within 200 feet of Covered Species aquatic habitat, the Project Area shall be surveyed for the Covered Species by the Designated Biologist(s). The Designated Biologist(s) shall survey all upland habitat within 200 feet of Covered Species aquatic habitat for burrows, soil cracks, and crevices that may be suitable for use by Covered Species. 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. Covered Activities that require flagging include ground disturbing

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activities where subsurface soil is disrupted (e.g. excavation, bulldozing, spoils placement from sediment or aquatic vegetation removal, pipe/culvert work, erosion repair, encroachment removal, strip disking, levee grading, and dragging). If Covered Activities stop for more than 14 calendar days, the Designated Biologist shall repeat surveys for burrows, soil cracks and similar features as described above, prior to resuming the Covered Activity. **(O&M)**

8.4. Clearing the Project Area of Vegetation. Permittee shall ensure the air temperature has reached 75 degrees F before starting ground-disturbing activities.

Permittee shall set mowing deck height to six inches or higher on all adjustable equipment. If non-adjustable equipment must be used, the Permittee shall use the equipment closest to a six-inch mowing deck height. Permittee may clear vegetation to the ground by burning, weed whacking, tractor mowing, or boom mowing.

(Construction and O&M)

8.5. GGs Compliance Monitoring during Construction. The Designated Biologist(s) shall monitor on-site daily when ground disturbing Covered Activities which disrupt subsurface soil occur within 200 feet of aquatic habitat for GGS. The Designated Biologist(s) shall also monitor on-site daily when Covered Activities which may alter Covered Species hibernacula/refugia (rip rap, burrows, etc.) occur within 200 feet of aquatic habitat for GGS. The Designated Biologist(s) shall monitor a minimum of weekly during periods of inactivity. **(Construction)**

8.6. GGs Compliance Monitoring during O&M. The Designated Biologist shall be on-site daily when Covered Activities occur within 200 feet of aquatic habitat for GGS. Covered Activities that require monitoring include aquatic vegetation removal, sediment removal, spoils placement, and ground disturbing activities that disrupt subsurface soil including, but not limited to: excavation, bulldozing, pipe/culvert work, erosion repair, encroachment removal, strip disking, levee grading, and dragging. **(O&M)**

8.7. Dewatering Aquatic Habitat. Permittee shall dewater the Project Areas potentially providing aquatic habitat for GGS to the extent feasible prior to commencing Covered Activities in those Project Areas. If the Permittee cannot remove all water, the Designated Biologist(s) with all appropriate permits shall remove all potential GGS prey (e.g. fish and tadpoles) from the canal so GGS are not attracted to the Project Area. Once dewatered, the Permittee shall ensure the canal remains dry for at least 15 consecutive days prior to excavating or filling, unless the Permittee consults with and obtains approval from CDFW. **(Construction and O&M)**

8.8. Dewatering/Diversion Plan(s). Permittee shall submit for review a detailed water diversion/dewatering plan to CDFW for Project Areas potentially providing aquatic

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habitat for GGS that will be dewatered. CDFW shall review the proposed water diversion/dewatering method, to approve the plan or provide requirements for that approval within seven calendar days of receipt. The Permittee may not commence the dewatering of the channel or the diversion of water without written approval from CDFW. When a temporary dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream to maintain aquatic life below the obstruction, pursuant to Fish and Game Code § 5937. Permittee shall ensure any temporary dam or other artificial obstruction constructed only be built from clean materials such as sandbags, gravel bags, bladder dams, or clean/washed gravel which will cause little or no siltation. Permittee shall remove channel diversions prior to the winter period and upon completion of the Covered Activity. Flow diversions are not necessary when hand tools, equipment buckets, arms, or claws are used in a flowing channel, but the main hull of the equipment is parked in an upland or dry portion of channel area.

(Construction and O&M)

8.9. Sediment Removal in Wetted Channel. If Project Areas cannot be dewatered, Permittee shall visually scan aquatic areas for Covered Species immediately preceding work within Covered Species aquatic habitat. Permittee shall ensure excavator operators minimize disturbance to Covered Species in aquatic habitat by lightly brushing the bucket across the surface of the water and any associated aquatic vegetation in an effort to encourage the Covered Species to leave the area. The excavator bucket shall then be slowly lowered into the water until the bottom of the canal is encountered and raised vertically and slowly so that the canal banks and bank vegetation are not disturbed to the maximum extent possible. A Designated Biologist(s) shall survey and flag Covered Species burrow entrances, to the greatest extent possible, prior to sediment removal activities. A Designated Biologist(s) shall visually inspect excavated spoils for Covered Species while spoils are deposited. Permittee shall deposit spoils on compacted or gravel roadbeds and recently disked farm fields to the greatest extent possible. Permittee shall not deposit spoils in Environmentally Sensitive Areas previously identified by the Designated Biologist(s), where feasible. Once dry, Permittee shall grade spoils on the road or remove the spoils offsite. **(Construction and O&M)**

8.10. Grading Sediment Spoils. Immediately preceding grading deposited spoil piles, a Designated Biologist shall survey planned work areas for Covered Species and burrows. Additionally, a Designated Biologist(s) shall monitor all grading as it occurs. Grading of deposited spoils piles shall only occur during periods when Covered Species are likely to be active in aquatic habitat. **(Construction and O&M)**

8.11. Relocation Plan. Permittee shall develop a Relocation Plan for the Covered Species and submit it to CDFW for approval prior to initiating Covered Activities. Permittee

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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. Due to genetically distinct populations, relocation areas should be within the same watershed as the Project Area and must be pre-approved in writing by the CDFW. **(Construction and O&M)**

8.12. GGS Exclusion Fencing. The Designated Biologist(s) shall determine where installation of exclusionary fencing will minimize impacts to GGS with approval by CDFW. The Permittee shall install exclusionary fencing linearly where installation is physically feasible and safe to do so along the aquatic source to help prevent the Covered Species from traveling toward the Project Area, as determined by the Designated Biologist(s). Exclusionary fencing shall be constructed 5 days prior to beginning Covered Activities. The exclusionary fencing shall consist of 3-foot tall silt fencing buried 6-inches below ground level. Permittee shall install the fencing at least 10 feet from aquatic habitat to reduce the hazard of trenching to the Covered Species. If trenching is not feasible, Permittee shall place contiguous sandbags on the bottom of the fence to anchor it in place. The Designated Biologist(s) shall check the fencing daily to verify the condition and function of the fence and to ensure no Covered Species have moved into the Project Area. **(Construction)**

8.12.1. GGS O&M Exclusion Fencing. For stationary maintenance work areas with a discrete footprint smaller than 0.25-acre, Permittee shall install Covered Species exclusion fencing, as determined by the Designated Biologist(s) and approval by CDFW, around planned maintenance areas. Exclusionary fencing shall be constructed 5 days prior to beginning Covered Activities. The exclusionary fencing shall consist of 3-foot tall silt fencing buried 6-inches below ground level. Permittee shall install the fencing at least 10 feet from aquatic habitat to reduce the hazard of trenching to the Covered Species. If trenching is not feasible, Permittee shall place contiguous sandbags on the bottom of the fence to anchor it in place. The Designated Biologist(s) shall check the fencing daily to verify the condition and function of the fence and to ensure no Covered Species have moved into the Project Area. **(O&M)**

8.13. Habitat Restoration. Permittee shall restore all temporarily disturbed Covered Species habitat. Permittee shall re-contour and revegetate these areas with appropriate locally available native plant species. Permittee shall determine the precise planting timelines based on the availability of planting materials, appropriate timing for taking cuttings, capabilities for storage of plant materials, and appropriate timing for planting. Permittee is likely to plant between October 1 and December 30. Permittee shall plant native grasses, native perennial grasses, or emergent vegetation based upon the zone of the bank. When applicable, Permittee shall install plants with hand tools.

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- 8.13.1. Restoration Plan. Permittee shall prepare a Vegetation Restoration Plan as described in Section 9.6 of this ITP. **(Construction)**
- 8.13.2. Restoration Success. Permittee shall ensure that vegetation plantings are successful and that aquatic resource functions are enhanced or restored. The percent relative cover shall equal 80 percent five years after implementation (areas seeded with native grasses are not subject to native species cover requirement). Maintenance activities such as replanting and weeding that focus on maintaining restoration plantings shall be conducted for five (5) years, or longer as necessary, until final success criteria are met and CDFW has provided written approval. If success criteria have not been achieved by the end of the fifth year monitoring period, annual monitoring shall continue until these criteria have been met unless CDFW determines that modification of the success criteria or off-site compensatory mitigation is warranted based on continued failure after implementation of remedial actions. **(Construction)**
- 8.14. Tied Concrete Block Mat (TCBM). Permittee shall establish vegetation to cover TCBM to minimize exposed geogrid between the concrete blocks. Once native perennial grassland is established, the Permittee shall routinely, and after large flood events, inspect the TCBM to confirm that no part of the geogrid is visible. If the geogrid is exposed, Permittee shall immediately implement remedial measures (e.g. cover with soil and reseed). **(Construction and O&M)**
- 8.15. Geotextile Fabric. Permittee shall not use geotextile fabric or “RSP fabric” under GGS hibernacula rock placed along portions of the remnant levee (Labeled “Retained Upland” on Figure 1). **(Construction)**
- 8.16. Use of Herbicides. Permittee shall use all herbicides to control non-native vegetation in accordance with label instructions and the laws and regulations administered by the Department of Pesticide Regulation. **(Construction and O&M)**

Swainson’s Hawk Measures

- 8.17. Covered Species Protocol Survey. Starting in 2020 and in each year in which Covered Activities occur, the Designated Biologist shall conduct a Covered Species survey within a minimum 0.5-mile radius around the Project Area. The Designated Biologist shall conduct the appropriate technique in each of the five (5) periods below in accordance with the methodology described in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*

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(Swainson's Hawk Tech. Advis. Comm., 5/2000):

- January to March 20- One (1) Survey, All Day
- March 20 to April 5- Three (3) Surveys, Sunrise to 1000 / 1600 to Sunset
- April 5 to April 20- Three (3) Surveys, Sunrise to 1200 / 1630 to Sunset
- April 21 to June 10- Monitoring
- June 10 to July 30- Three (3) Surveys, Sunrise to 1200 / 1600 to Sunset

Results of each period survey shall be submitted to CDFW with the appropriate monthly compliance report. **(Construction)**

8.18. Covered Species Buffer. If a Covered Species 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). The appropriate size and shape of the buffer shall be determined by a Designated Biologist(s), in coordination with CDFW, and may vary, 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 a 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 Covered Species are no longer dependent on the nest, as determined by a Designated Biologist(s). **(Construction)**

8.19. Swainson's Hawk Compliance Monitoring. If a nesting Covered Species is found at or within 0.5 miles of the Project Area, the Designated Biologist(s) shall monitor the active nest(s) to confirm Covered Activities are not resulting in detectable adverse effects on Covered Species or their active nest(s). The Designated 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 Covered Species 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 Covered Species (e.g., nest abandonment). 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

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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. If no occupied Covered Species nests initially occur at or within 0.5 miles of the Project Area any discovery of Covered Species nests shall trigger the monitoring and reporting required under this Condition of Approval and Condition of Approval 7.3. **(Construction)**

8.20. Covered Species Mortality Reduction and Relocation Plan. The Designated Biologist(s) shall prepare a Covered Species 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 Covered Species prior to egg-laying
- Mortality or injury of adult Covered Species during egg-laying
- Mortality or injury of adult Covered Species after egg-laying
- Abandonment of Covered Species nest prior to egg-laying
- Abandonment of Covered Species nest during egg-laying
- Abandonment of Covered Species nest after egg-laying
- Abandonment of Covered Species nest after egg-hatching
- Damage or destruction of nest tree with eggs or juvenile Covered Species
- Mortality or injury of juvenile Covered Species

The Plan shall include, but not be limited to, identification of capture methods, handling methods, methods to return Covered Species 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 Covered Species. **(Construction)**

8.21. Tree Removal. All Project-related tree removal work shall be conducted between September 15 and February 15 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

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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)

8.22. Artificial Lighting at Night. Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting that casts light on Covered Species habitat beyond the Project Area of Covered Activities between sunset and sunrise. Nighttime construction lighting shall be shielded and oriented downward to minimize effects on any nearby Covered Species. **(Construction)**

8.23. 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 credit from a CDFW-approved habitat conservation bank and either (1) provide for both the permanent protection and management of 133.64 acres (131.64 acres of preserved rice and 2.00 acres of upland refugia along Tule Canal) 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, (2) purchase Covered Species credits from a CDFW-approved mitigation or conservation bank (Condition of Approval 9.2) OR (3) a combination of both. 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. The Permittee shall also restore on-site 133.25 acres of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.6 below.

GGs Mitigation - Project Construction

To fully mitigate for impacts during Project construction, compensatory mitigation for giant

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garter snake includes the restoration of 133.25 acres of habitat (i.e., relocated canals, associated upland), the enhancement of 2.00 acres of habitat (i.e., upland refugia along the Tule Canal), and the preservation of 80.74 acres of habitat (i.e., rice fields). This totals 215.99 acres of mitigation for giant garter snake to offset construction impacts.

GGS Mitigation – O&M Activities

To fully mitigate for impacts from O&M Covered Activities, compensatory mitigation for giant garter snake will be the preservation of 50.90 acres of habitat (i.e., rice fields).

In total, 266.89 acres of GGS habitat will be restored, enhanced or preserved.

Swainson's Hawk Mitigation

Unavoidable impacts to nesting Swainson's hawks during construction, estimated to be take of one Swainson's hawk nest, will be compensated through the purchase of one Swainson's hawk credit from a CDFW-approved habitat conservation bank pursuant to Condition of Approval 9.2 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 \$2,261,000;
- 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 **\$459,000**;
- 9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **\$385,000**;
- 9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at: **\$1,600,000**. 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 **\$318,000**;

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9.1.6. Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at **\$208,000**.

9.2. Covered Species Credits. Permittee shall purchase one Swainson's hawk 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 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. The number of credits and specific mitigation or conservation bank shall be approved by CDFW in advance of any credit purchase.

OR:

9.3. Habitat Acquisition and Protection. 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 the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a 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. If CDFW does not hold fee title to the HM lands, 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

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Acquisition Form (see Attachment 3B) 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 3A). 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://wildlife.ca.gov/Conservation/Planning/Banking>); (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

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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. 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)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its

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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)(4).

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

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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 133.25 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Within 12 months of issuance of this ITP, the Permittee shall prepare a Vegetation Restoration Plan to facilitate revegetation of the 133.25 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 **\$5,231,000**. 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 4) 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 5) or by way of an approved instrument such as escrow, irrevocable letter of credit, or

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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

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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

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by 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 (2081-2019-063-02) 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
Fax (916) 358-2912

and a copy to:

Habitat Conservation Planning Branch

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

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
Fax (916) 358-2912

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, DWR (See generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the Lower Elkhorn Basin Levee Setback Project EIR, (SCH No.: 2016092015) dated March 2019, that DWR certified for the Lower Elkhorn Basin Levee Setback Project on March 18, 2019, and subsequent Addenda 1 - 4. 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)-

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(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, associated attachments, Lower Elkhorn Basin Levee Setback Project 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 measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly/Quarterly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 131.64 acres of preserved rice habitat, restoration of 133.25 acres of temporarily impacted areas, the enhancement of 2.0 acres of the Remnant Levee, the purchase of one SWHA credit, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and

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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.

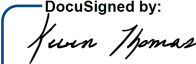
Attachments:

FIGURE 1	Amended Map of Project Overview
FIGURE 1A	Project Plans
FIGURE 1B	Project Plans
FIGURE 1C	Project Plans
FIGURE 1D	Project Plans
FIGURE 1E	Project Plans
FIGURE 1F	Project Plans
FIGURE 1G	Project Plans
FIGURE 2	Amended Map of Post-Construction Land Cover Types
ATTACHMENT 1	Table of Maintenance Activities
ATTACHMENT 2	Amended Mitigation Monitoring and Reporting Program
ATTACHMENT 3A, 3B	Habitat Management Lands Checklist; Proposed Lands for Acquisition Form
ATTACHMENT 4	Funding Assurances Letter
ATTACHMENT 5	Funding Assurances Budget
ATTACHMENT 6	Major Amendment No. 1 with Track Changes

Amended Incidental Take Permit
No. 2081-2019-063-02
(Amendment No. 1)
DEPARTMENT OF WATER RESOURCES
LOWER ELKHORN BASIN LEVEE SETBACK PROJECT

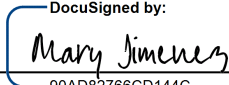
ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 7/29/2020

DocuSigned by:

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:  Date: 7/29/2020

Printed Name: Mary Jimenez Title: Acting Chief, SMI Branch DWR

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