Attachment 7
AMENDMENTS

Amended Incidental Take Permit No. 2081-2024-018-00-A1
(Amendment No. 1)

The ITP is amended as follows (amended language is contrasted in blue with underline depicting new language and deleted language shown with ~~strikethrough~~).

1. **The Amended ITP Background section has been inserted preceding the Effective Date and Expiration section as follows:**

Amended ITP[3] Background:
On April 9, 2024, California Department of Water Resources (Permittee) 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. and 786.9, subdivision (b). Permittee sought take coverage authorization for CESA-listed species associated with project-related impacts from the Delta Conveyance Project within the legal Sacramento-San Joaquin Delta (Delta) and Suisun Marsh and a portion of Alameda County (Project).

On February 14, 2025, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit (ITP) No. 2081-2024-018-00 to California Department of Water Resources (Permittee), authorizing the take of California tiger salamander (CTS, *Ambystoma californiense*), Giant garter snake (GGS, *Thamnophis gigas*), Swainson's hawk (SWHA, *Buteo swainsoni*), Tricolored blackbird (TRBL, *Agelaius tricolor*), Crotch's bumble bee (CBB, *Bombus crotchii*), Mason's lilaeopsis (MALI, *Lilaeopsis masonii*), Delta smelt (DS, *Hypomesus transpacificus*), Longfin smelt (LFS, *Spirinchus thaleichthys*), Winter-run Chinook salmon (CHNWR, *Oncorhynchus tshawytscha*), Spring-run Chinook salmon (CHNSR, *Oncorhynchus tsawytscha*), and White sturgeon (WS, *Acipenser transmontanus*) (collectively, the Covered Species) associated with and incidental to the preconstruction, construction and maintenance, and operations of the Delta Conveyance Project (Project).

The Project as described in the ITP as originally issued by CDFW includes the phased construction and operation of a conveyance facility to divert water from two new intake facilities on the Sacramento River in the north Delta and move it to south Delta pumping plants. The Project includes preconstruction activities, the construction and maintenance of new facilities and, once those facilities become operational, up to two years of operations and maintenance. The principal components of the Project are the construction and operation of the two intake facilities, the tunnel, and tunnel shafts, pre-construction geotechnical and field investigations, accrual and disposal of Reusable Tunnel Material, and construction and operation of the Bethany Complex, access roads,

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

electrical and SCADA facilities, fencing and lighting, park-and-ride lots, and other construction support facilities. In issuing the ITP, CDFW found, among other things, that the Permittee's compliance with the Conditions of Approval of the ITP would fully mitigate Project impacts of the taking on the Covered Species and that issuance of the ITP would not jeopardize the continued existence of the Covered Species.

In an application dated September 16, 2025, Permittee requested changes to the ITP Project Description to 1) reflect project refinements resulting in engineering modifications to select project facilities, 2) exclusion of small diameter land-based geotechnical soil borings and soil borings with water quality testing as well as land-based cone penetration tests (CPTs) conducted before and inclusive of December 31, 2029 from Covered Activities, and 3) the addition of western burrowing owl (BUOW, *Athene cunicularia hypugaea*) as an additional Covered Species, for which the Fish and Game Commission posted notice of its designation as a candidate species on October 25, 2024.

2. The Effective Date and Expiration Date of this ITP, Section II, has been amended to read as follows:

The original ~~This~~ ITP became ~~is~~ effective as of the date signed by CDFW, which was ~~below~~ February 14, 2025. This remains the effective date for the original take authorization and the implementation schedule of the MMRP Table of Mitigation Measures, unless amended otherwise. This Amended ITP shall become effective upon execution by CDFW. Unless renewed by CDFW, this ITP and its authorization to take the Covered Species shall expire on October 30, 2045.

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 7.5 and all Final Phase Mitigation Reports required by Condition of Approval 10.15 of this ITP.

3. Table 1, Summary of Intake Characteristics in Section IV Project Description Subsection 3, North Delta Intakes, shall be revised to read:

Table 1. Summary of Intake Characteristics (Table 3.2-1 from ITP Application)

Feature*	Intake B	Intake C
Maximum physical capacity (cubic feet per second).	3,000	3,000
Total size of construction site (maximum), does not include haul road	242 acres	239 acres

Feature*	Intake B	Intake C
Total size of postconstruction site (maximum), does not include haul road	123 acres	109 acres
Intake structure length	1,574 feet along river including training walls 964 feet along river for concrete structure only	1,528 feet along river including training walls 964 feet along river for concrete structure only
Cylindrical tee screen assembly	30 fish screen units	30 fish screen units
Area of cylindrical tee screen (including fish screen and manifold assembly and mounted on the face of the structure)	Each unit: 8 feet in diameter and 30 feet long	Each unit: 8 feet in diameter and 30 feet long
Gantry Crane on top of Intake Structure	35 feet wide with a top elevation of 69 feet (40 feet above intake structure)	35 feet wide with a top elevation of 69 feet (40 feet above intake structure)
Discharge pipes from the intake structure to the outlet structures in the sedimentation basins	~~30~~15 discharge pipes ~~60-~~84-inch diameter and approximately 255 feet long (including the gate box)	~~30~~15 discharge pipes ~~60-~~84-inch diameter and approximately 260 feet long (including the gate box)
Sedimentation basin dimensions (basin would be divided into two cells by a turbidity curtain)	Each cell: 1,300 feet long and 650 feet wide at the top of the embankment; Each cell: 990 feet long and 500 feet wide at the bottom of the embankment; Water surface elevation would vary from about 3 to 27 feet	Each cell: 1,300 feet long and 645 feet wide at the top of the embankment; Each cell: 990 feet long and 495 feet wide at the bottom of the embankment; Water surface elevation would vary from about 3 to 26 feet
Sediment basin radial gate flow control structure at the junction with the outlet structure and intake outlet shaft	Four large radial gates: 30 feet wide and 40 feet tall, each; One small radial gate: 15 feet wide and 8 feet tall; Top elevation of flow control structure: 30.3 feet; Bottom elevation of flow control structure: - 8.8 feet	Four large radial gates: 30 feet wide and 40 feet tall, each; One small radial gate: 15 feet wide and 8 feet tall; Top elevation of flow control structure: 29.3 feet; Bottom elevation of flow control structure: - 9 feet
Sediment drying lagoons dimensions (four sediment drying lagoons at each intake)	Each approximately 146 feet wide and 350 feet long at the bottom of the embankment;	Each approximately 146 feet wide and 350 feet long at the bottom of the embankment;

Feature*	Intake B	Intake C
	Each approximately 15 to 18 feet deep, containing an average of 10 to 12 feet of water when in use	Each approximately 15 to 18 feet deep, containing an average of 10 to 12 feet of water when in use
Sediment drying lagoons outlet structure (to convey water from the lagoons to a pump to return any water to the sediment basin)	Each lagoon outlet structure: approximately 15 feet wide by 15 feet tall; Top elevation measured at the top of lagoon embankment. Bottom elevation 20 to 25 feet below top elevation	Each lagoon outlet structure = approximately 15 feet wide by 15 feet tall; Top elevation measured at the top of lagoon embankment. Bottom elevation 20 to 25 feet below top elevation
Intake outlet channel from flow control structure to intake outlet shaft	Bottom and inside of embankment: 750 feet long and 146 feet wide	Bottom and inside of embankment: 750 feet long and 146 feet wide
Length of temporary State Route 160 levee	4,250 feet along the centerline	4,200 feet along the centerline
Length of permanent levee	7,600 feet along the centerline	6,200 feet along the centerline
Top elevation of permanent levee	30.3 feet (20 to 23 feet above toe of temporary levee fill)	29.3 feet (20 to 23 feet above toe of temporary levee fill)
Ground improvement under the levees and facilities embankments	Approximately 1.5 to 2.0 million cubic yards of DMM wall sections and approximately 250,000 to 350,000 tons of cement	Approximately 1.5 to 2.0 million cubic yards of DMM wall sections and approximately 250,000 to 350,000 tons of cement
Cofferdam	Length: 2,942 feet (including sheet piles and DMM wall); Elevation at the top of cofferdam: approximately 20 feet	Length: 2,897 feet (including sheet piles and DMM wall); Elevation at the top of cofferdam: approximately 20 feet
Cofferdam impact pile driving duration (total hours) (vibratory pile driving hours not included)	15 hours	14 hours
Onsite electrical substations facilities footprint	Facilities contained within a 75-foot-wide by 125-foot-long enclosure with a separate safety and security fence; Smaller transformers less than 10 feet wide by 10 feet long	Facilities contained within a 75-foot-wide by 125-foot-long enclosure with a separate safety and security fence; Smaller transformers less than 10 feet wide by 10 feet long

Feature*	Intake B	Intake C
	will be positioned at several locations around the site	will be positioned at several locations around the site
Standby engine generator/fuel tank—during construction and operation phases	1 megawatt standby engine generator with a 1528 horsepower engine, installed inside a fenced area of about 30 feet by 30 feet at each electrical building, including both the generator and the fuel tank	1 megawatt standby engine generator with a 1528 horsepower engine, installed inside a fenced area of about 30 feet by 30 feet at each electrical building, including both the generator and the fuel tank
Log Boom	A log boom will consist of a series of 18- to 24-inch diameter pipe piles to guide its position. It will be installed immediately in front of the entire length of fish screens along the face of the structure. On the upstream end, the log boom will tie into and extend off the end of the debris fender. 32 log boom piles will be installed during the last in-river work window during the construction phase.	A log boom will consist of a series of 18- to 24-inch diameter pipe piles to guide its position. It will be installed immediately in front of the entire length of fish screens along the face of the structure. On the upstream end, the log boom will tie into and extend off the end of the debris fender. 32 log boom piles will be installed during the last in-river work window during the construction phase.
Appurtenant structures dimensions—during construction phase	Office trailers, showers/ washrooms, canteen and common area, and bus shelter: these structures will be 100 feet wide by 50 feet long and 15 feet tall or less (one story); other buildings for warehousing for materials and temporary work enclosures will be less than 20 feet tall	Office trailers, showers/ washrooms, canteen and common area, and bus shelter: these structures will be 100 feet wide by 50 feet long and 15-feet tall or less (one story); other buildings for warehousing for materials and temporary work enclosures will be less than 20 feet tall
Appurtenant structures dimensions—during operations phase	One of the construction buildings (maximum 100 feet wide by 50 feet long and 15	One of the construction buildings (maximum 100 feet wide by 50 feet long and 15

Feature*	Intake B	Intake C
	feet tall) will be converted for indoor storage of portable equipment and vehicles used for maintenance of all intakes	feet tall) will be converted for indoor storage of portable equipment and vehicles used for maintenance of all intakes
Land reclamation	Approximately 119 acres	Approximately 130 acres

*All values utilize the North American Vertical Datum of 1988 [NAVD88].

4. The first paragraph of Subsection 3.1 *Cylindrical Tee Fish Screens* in Project Description Subsection 3, *North Delta Intakes*, shall be revised to read:

3.1 Cylindrical Tee Fish Screens.
The intake cylindrical tee fish screens are part of an overall intake facility that includes the screen units and an integrated screen cleaning system, piping, and flow control features. The "tee-shaped" screen units will consist of two fish screen cylinders installed on either side of a center manifold that will be connected to the facility's intake opening. Each intake fish screen will extend about 12 feet from the vertical face of the north Delta intake structure into the river. During diversion operations, water will flow from the Sacramento River through the fish screens and an ~~60~~ 84-inch diameter pipe and discharge into the sedimentation basins. Control gates will regulate the flow through each screen unit to the sedimentation basin.

Installing the intake facility will require construction of a temporary cofferdam for in-river portions of intake construction to divert water and aquatic organisms around the work site and create a dry work area. Portions of the cofferdam will consist of interlocking steel sheet piles installed using a combination of vibratory and impact pile driving. Each intake sheet pile construction period will be staggered by about one year.

5. Subsection 4, *Tunnels*, of Section IV Project Description shall be revised to read:

4. Tunnels
The tunnel from the north Delta intakes to the Bethany Complex will have an inside diameter of 36 feet and outside diameter of about 39 feet and extend about 45 miles from the north Delta intakes to the surge basin at the Bethany Reservoir Pumping Plant. The bottom elevations of the tunnel from the north Delta intakes to the tunnel reception shaft at the Bethany Complex Surge Basin will range from -140 feet to ~~-164~~ -183.5 feet (North American Vertical Datum of 1988 [NAVD88]).

6. Subsection 4.1.4, *Reception and Maintenance Shafts*, in Section IV Project Description shall be revised to read:

4.1.4 Reception and Maintenance Shafts. Reception and maintenance shafts will have finished inside diameters of ~~70~~66 feet except at the intakes where the inside diameter will be ~~83~~70 feet. Tunnel reception and maintenance shaft sites will include areas for the tunnel shaft with adjacent areas for equipment to excavate the shaft, and cranes and appurtenant items to move equipment into and out of the tunnel shaft. Reception shaft sites will be larger than maintenance shaft sites because of the area needed to disassemble the TBM equipment prior to removal from the construction site. Construction activities at the maintenance and reception shaft sites will continue for approximately two years, and for another six to 12 months to allow TBM maintenance when the tunnel is constructed through the shaft. Reception and maintenance shaft sites will not require areas for storing tunnel liner segments or RTM handling. Shafts will have ready-mix concrete hauled in. These shafts will be powered by new power lines extending from existing, local distribution networks, and will not need an electrical substation.

7. Table 3, *Description of Bethany Complex Facilities*, in Project Description Subsection 5, *Bethany Complex*, shall be revised to read:

Table 3. Description of Bethany Complex facilities. (Table 3.2-8 in the ITP Application)

Feature	Item	Quantities
Bethany Reservoir Pumping Plant and Surge Basin	Total size of construction site (approximately)	213 acres
	Total size of postconstruction site (approximately)	184 acres
	Land reclamation (approximately)	29 acres
	Pumping plant pad site	1,166 feet wide x 1,260 feet long
	Surge basin site	Surge basin size: 815 feet wide x 815 feet long; Overflow shaft diameter: 120 feet; Overflow weir wall diameter: 180 feet; Six 5 feet x 5 feet vertical sluice gates within the perimeter of the overflow weir will allow stored water from a surge event to drain into the overflow shaft
	Diaphragm walls	Pumping plant: Approximately 6 feet wide x 252 feet deep x 1,438 feet long; 5-feet wide x 100-feet deep x 1,750 feet long; and 5 feet wide x 252 feet deep x 630 feet long;

Feature	Item	Quantities
		~~Wet well inlet conduit: Approximately 6 foot wide x 252 feet deep x 800 feet long; and 5 foot wide x 100 feet deep x 160 feet long columns below foundation;~~ Surge basin: Approximately 3 feet wide x 137 feet deep x 3,260 feet long with two levels of tiebacks
	Pumping Plant Foundational Piles	~~Pumping plant:~~ Approximately 53 drilled piers installed 50 feet deep below the pump discharge isolation gate valve gallery~~;~~ ~~Surge Basin: Approximately 2,530 drilled piers installed 60 feet deep below the surge basin base slab~~
	Surge Basin Tiedown Anchors	Approximately 6,500 six-strand tiedown anchors installed 60 feet deep below the surge basin base slab
	Pumping Plant Structure	Area of Structure: 412 feet wide x 503 feet long; Top of slab of ~~wet well, wet well inlet conduit~~ tiedown anchors and pumping plant dry pit pump bays: 47 feet; Top of canopy structures on the north end of each pumping plant dry pit above pad: 74.5 feet
	Pumps	Pumping plant: 14 pumps at 500 cfs each, includes two standby pumps; Surge basin: 4 rail-mounted pumps at 100 cfs each, for dewatering surge basin 2 vertical submersible pumps at 60 cfs each, for dewatering main tunnel
	Surge tanks for aqueduct to Bethany Reservoir Discharge Structure	Area of tank: 75-foot diameter x 20 feet high; Total number of tanks: 4
	Bethany Reservoir Surge Basin Tunnel Reception Shaft	Shaft depth during construction: 209 feet (depth from existing ground

Feature	Item	Quantities
		surface prior to excavation or fill); Shaft depth during operations: 199 feet
	Concrete batch plants	2 batch plants in an area approximately 11.5 acres in size
Bethany Reservoir Aqueduct	Total size of construction site (approximately)	128 acres
	Total size of postconstruction site (approximately)	68 acres
	Land reclamation (approximately)	60 acres
	Aqueduct trench (excludes tunneled portions of aqueduct)	Aqueduct trench from the Bethany Reservoir Pumping Plant to the tunnel under Jones Penstock: 7,900 feet long; Aqueduct trench from the tunnel under Jones Penstock to the tunnel under the Bethany Reservoir Conservation Easement: 3,700 feet long; note that the tunnel underneath the Conservation Easement begins approximately 2,000 feet northeast of the Conservation Easement boundary. Each aqueduct trench approximately ~~115~~ 77 feet wide at the bottom, to accommodate 4 pipes ~~180~~166-inches in diameter and ~~30~~ 21 feet on center; A 24-foot-wide permanent gravel-surfaced patrol road placed on the completed fill in the center of the aqueduct
	Tunneled portions of aqueduct	Tunnel under Jones Penstock: Four parallel tunnels (one per pipeline) 200 feet long with 20-foot diameter, separated by 40 feet between the center of each tunnel; Tunnel under Bethany Reservoir Conservation Easement: Four parallel tunnels (one per pipeline) 3,064 feet long with 20-foot diameter, separated

Feature	Item	Quantities
		by 40 feet between the center of each tunnel at the entrance portal end to about 80 feet at the shaft end
	CLSM processing area	2 batch plants, each 100 feet wide x 100 feet long x 50–75 feet high.
Bethany Reservoir Discharge Structure	Total size of construction site (approximately)	15 acres
	Total size of postconstruction site (approximately)	13 acres
	Land reclamation (approximately)	None anticipated
	Tunnel shaft connection to the Bethany Reservoir Discharge Structure	Each of the four tunnels would extend upward vertically through shafts to discharge water into the Bethany Reservoir Discharge Structure; No tunnel shafts between the tunnel portal and the discharge structure shafts (within the Bethany Reservoir Conservation Easement)
	Discharge structure channels	Four channels extending from the vertical shaft to the bank of the Bethany Reservoir, ranging in width from 80 feet at the vertical shaft to approximately 40 feet at the bank of the Bethany Reservoir

CLSM = controlled low strength backfill material

8. Subsection 5.1, *Bethany Reservoir Pumping Plant*, of Section IV Project Description shall be revised to read:

5.1 Bethany Reservoir Pumping Plant.

The Bethany Reservoir Pumping Plant will lift the water from the tunnel to Bethany Reservoir. The main tunnel from the intakes will terminate at a reception shaft within the surge basin on the north side of the Bethany Reservoir Pumping Plant. Water will enter the Bethany Reservoir Pumping Plant ~~wet well~~ inlet tunnel via a ~~box conduit~~ pump intake conduit pipeline connected to the tunnel reception shaft and be conveyed directly to Bethany Reservoir in a cement-mortar-lined, welded steel aqueduct system.

The Bethany Reservoir Pumping Plant will be a multilevel underground structure with its roof at grade. Flow capacity will range from a minimum of 300 cfs to a maximum of 6,000 cfs. Twelve 500-cfs pumps and two standby pumps combined would achieve the maximum flow of 6,000 cfs. In addition to the below-ground pumping plant and ~~wet well~~ inlet tunnel, the site will include aboveground water storage tanks for hydraulic transient-surge protection of the discharge pipelines, electrical building with variable speed drives and switchgear, heating and air conditioning mechanical equipment yard, transformer yard, electrical substation adjacent to the electrical building, standby engine generator building with an isolated and fully contained fuel tank, equipment storage building with drive- through access, offices, welding shop, machine shop, storage area for spare aqueduct pipe sections and accessories, and a walled enclosure/storage facility for bulkhead panel gates that will be used to isolate portions of the Bethany Reservoir Pumping Plant during maintenance procedures. The pumping plant will include two separate dry-pit pump bays adjacent to the ~~wet well~~ inlet tunnel.

Electrical, generator, and maintenance buildings, an electrical substation, surge tanks, and protective canopies on the site will be aboveground structures. The finished site pad elevation of 46.5 feet above mean sea level, at about existing grade, will be above the elevation required to protect the facilities from surge events and the 200-year flood event including sea level rise in 2100, calculated to be a water surface elevation of 27.3 feet within the surge basin.

9. Subsection 19, *North Delta Intake Operations and Maintenance*, of Section IV Project Description, shall be revised to read:

19. North Delta Intake Operations and Maintenance

The north Delta intakes will operate in conjunction with the existing SWP and potentially CVP intakes in the south Delta. Operations of the existing SWP facilities, and in coordination with CVP operations pursuant to the COA, will be governed by the applicable regulatory requirements specified under D-1641, the State Water Board Water Quality Control Plan for the San Francisco Bay/Sacramento–San Joaquin Delta Estuary (Bay-Delta Plan) and assigned to the SWP in the applicable water right decision, applicable biological opinions under ESA, applicable ITP(s) under CESA, and USACE Clifton Court diversion limits. The operations of the north Delta intakes will remain consistent with these existing and future regulatory requirements. Diversions at the north Delta intakes will be consistent with the criteria described in Conditions of Approval of this ITP and occur in two phases: Phase 1 Operations and Phase 2 Operations. As described in Condition of Approval 11.~~110~~121 Phase 1 Operations include the Bethany Reservoir Pumping Plant Contractor's Test (Section 19.2.1), the Intake B and C Operational Performance Testing (Section 19.2.2), and Pump Maintenance Activities (Section 19.4). Phase 2 Operations include the Systemwide Commissioning Test (Section 19.2.3), Pump Maintenance Activities (Section 19.4), and subsequent full operations.

10. Subsection 19.1, *Integration of North Delta Intakes with South Delta Facilities*, of Section IV Project Description, shall be revised to read:

19.1 Integration of North Delta Intakes with South Delta Facilities.

The north Delta intakes will operate in conjunction with the existing Banks Pumping Plant and Bethany Reservoir facilities. The north Delta intakes will improve the flexibility of the SWP operations to meet existing regulatory requirements, such as D-1641 Delta salinity requirements. Upstream of Delta facilities will continue to be operated to meet regulatory, environmental, and contractual obligations consistent with existing operations. The Project will not increase the total quantity of water permitted for diversion under Permittee's existing water rights.

During excess conditions in the winter and spring:

- The SWP will first use south Delta facilities to export water up to what is permitted under the existing water rights and all applicable state and federal law and regulations. If operators determine water is available in excess of the amount required to meet state and federal law and regulations consistent with the COA, the north Delta intakes will be used to capture these additional flows. SWP operations will be consistent with existing water rights for total SWP exports (i.e. the existing 10,350-cfs limitation in Permittee's water right will remain and govern combined north and south Delta SWP diversions).
- There will be conditions when diversions through the north Delta intakes are not maximized even when the bypass flow requirements identified in this ITP allow greater diversions. For example, this could occur when operational criteria in other regulatory authorizations are controlling SWP operations, or when south of Delta storage is full.

During balanced conditions in the late spring, summer, and fall, when the SWP is typically operating to meet D-1641 salinity requirements in the Delta:

- Both the existing south Delta intakes and the north Delta intakes will be operated together to meet the D-1641 salinity requirements.
- Some level of combined SWP and CVP south Delta exports will be needed to manage salinity in the Old River and Middle River corridor. If the combined SWP and CVP south Delta exports are less than 3,000 cfs, SWP water will not be diverted through the north Delta diversions.
- Permittee will balance and adjust south Delta exports and the north Delta diversions to meet the State Water Board D-1641 salinity requirements at the western Delta stations on the Sacramento and San Joaquin rivers (e.g., increasing salinity at Jersey Point would cause a shift in diversions from south Delta to north Delta, whereas increasing salinity at Emmaton would cause a shift from north Delta to south Delta). This operation is expected to result in a system operation where less water may be required to meet the same water quality standards and will be studied as required by Condition of Approval 10.21.8.

- Upstream SWP storage operations will continue to be managed under the existing and future regulatory and contractual obligations of the SWP in determining the amount of stored water available for exports.

Shifting from south Delta intakes to north Delta intakes is associated with trade-offs and may be conducted when there is an operational advantage to do so (e.g., to provide additional real-time south Delta fish protections; or to reduce salinity at Jersey Point) and will be consistent with Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125 in this ITP and as informed by Condition of Approval 10.21.8.

11. Subsection 19.2, *Startup and Commissioning Tests*, of Section IV Project Description, shall be revised to read:

19.2.1 Bethany Reservoir Pumping Plant Contractor's Functional Test. The Contractor's Functional Test will occur when the Project's main conveyance tunnel is not yet connected to the Bethany Reservoir Pumping Plant (BRPP), during Phase 1 Operations. Each BRPP discharge aqueduct pipeline will be filled with water either from the Bethany Reservoir or the Bethany Complex construction water pumping station. Permittee will operate the main pumps within the BRPP, recirculating pump discharge flows from the aqueduct back into the BRPP wet well. The Contractor's Functional Test will consist of running each main BRPP pump for six hours, up to three times each. The time to complete this test will be about 13 days total. No more than the volume of the four aqueduct pipelines (approximately 400 acre-feet) of water will be used. Filling of the aqueducts will be performed by the aqueduct contractor as part of leak testing for the pipelines. The Contractor's Functional Test will also be performed consistent with requirements in Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125 in.

19.2.2 Intake B and C Operational Performance Testing. The Intake B and C Operational Performance Test will occur once the BRPP is connected to the main Project conveyance tunnel and Intakes B and C, during Phase 1 Operations. Performance testing is needed for each intake and pumping plant as part of the construction contract(s) and will be performed concurrently. During each performance test Permittee will operate the pumping plant and intake facilities for up to 28 consecutive days without a major failure occurring within each facility. Should a major failure occur during this test, the facility component that failed will be repaired, adjusted, or replaced and Permittee will restart the test, where the failure occurred from the beginning of the 28-day period. Permittee will operate the pumping plant and Intakes B and C together until successful completion of each 28-day performance test has been achieved for each intake.

For these tests, Sacramento River diversion flows will be used to fill the sedimentation basins at Intakes B and C, the main Project conveyance tunnel, and the BRPP's wet well area. Once the Project system is filled, performance testing of the intakes and pumping plant will occur over a 28-day period

at the same 500 cfs constant diversion flow rate, if possible. If mechanical failures occur, the time needed for correctional shutdowns and restarts associated with the BRPP equipment and controls due to major failures plus the time required to initially fill the Project system is estimated to be 7 days. The fourteen BRPP main pumps, each with a flow capacity of 500 cfs, will be operated sequentially, and one at a time (with 48 hours of continuous operation per pump), over the total test period. Pumped flows will discharge into the Bethany Reservoir. Diversion periods for this testing must be scheduled when river sweeping velocities are not expected to fall below operational requirements and be consistent with operational criteria in this ITP (see Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125).

19.2.3 Systemwide Commissioning Tests. Permittee will conduct systemwide commissioning tests within the warranty period of the Project construction contracts, during Phase 2 operations, as described in this ITP. A two-year commissioning period, with Sacramento River diversions available to perform all the testing, is necessary for this testing to be completed. As a result, full systemwide commissioning tests may extend beyond the term of this ITP and necessitate further CESA authorization for additional years of operations to complete. All diverted flows associated with commissioning will be discharged into the Bethany Reservoir. It is expected that Sacramento River diversions up to 6,000 cfs, will occur for short durations during the systemwide commissioning tests, and will be subject to operational criteria in this ITP (see Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125).

Commissioning testing of the Project will be performed to accomplish the following, while maintaining compliance with Conditions of Approval in this ITP (including Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125)

A. Demonstrate hydraulic performance compliance with the fish screen facilities criteria at Intakes B and C, in collaboration with fisheries agencies. Average diversions from the north Delta intakes for testing of the fish screens will range between 1,500 and 3,000 cfs to adequately conduct full system performance conditions. Testing will be limited to 8 - 10 hours per day and conducted over a period of two to three weeks per intake. Permittee will perform these tests over a range of river flow and stage conditions. Because individual screens may be lifted to the surface frequently between performance monitoring and because watercraft and diver activities may be occurring during these tests, fisheries monitoring may not be advisable during these hydraulic testing periods.

B. Operate north Delta intakes to establish and maintain north Delta intake diversion flow capacities to flush sediment within the Project main conveyance tunnel. A minimum diversion rate of 3,000 cfs for a period of seven days is required to flush the tunnel. Permittee will coordinate flushing the Project conveyance tunnel with hydraulic compliance testing of the fish screens at Intakes B and C.

C. Conduct operational sequencing of the BRPP main pumps and connect pumping equipment and controls within the BRPP to demonstrate they correctly and reliably function as required and identify and perform all warranty work required under the construction contract(s). Testing will include full-time operation of the main BRPP pumps when diversions from the north Delta intakes are allowed. Pumps will be sequenced such that all pumps receive a similar operating duration over the entire commissioning period, to the extent possible.

D. Conduct operational sequencing of the fish screens, control and isolation sluice gates systems, radial gates, and control systems at Intakes B and C to demonstrate they correctly and reliably function as required and identify and perform all warranty work required under the construction contract(s).

E. Confirm all control time delays and related set-points to operate the Project correctly. Perform adjustments and testing as required, and as much as possible, during commissioning.

Items C, D and E above are expected to take approximately three to six months. However, a 2-year period could be needed for the overall commissioning period because the activities would not necessarily be contiguous depending on the seasonal ability to divert higher flows. The range of north Delta diversions (total divisions from both Intake B and C, collectively referenced as NDD) for these tests will be 500 to 6,000 cfs and will conform to operational criteria as set forth in Conditions of Approval in this ITP (see Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125). Commissioning testing will require diversion volumes of 270 to 540 TAF to complete the series of systemwide commissioning tests (over an assumed two-year period). For this commissioning period it is assumed that NDD of up to 4,500 cfs will be available for 8-10 hours per day over a total of 14 non-consecutive days and NDD of up to 6,000 cfs will be available for 8-10 hours per day over a total of 4 non-consecutive days.

12. Subsection 19.4, *Pump Maintenance Activities*, of Section IV Project Description, shall be revised to read:

19.4 Pump Maintenance Activities.

Maintenance diversions may be necessary on approximately a monthly basis throughout the year to perform routine maintenance and testing of the main water supply pumps during Phase 1 and Phase 2 operations. The maintenance flow diversion rate is one-half of a pump's rated capacity for one day per month per unit (up to a maximum of 300 cfs). Maintenance diversions will meet the approach and velocity requirements and operating criteria described in Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125). If the pumps in the BRPP are not able to operate at least once a month during normal operations, maintenance diversions may be needed.

If Permittee is operating the system for water supply, maintenance diversions and the associated maintenance activities will already be occurring during operations.

13. Subsection 20, *Operational Decision Making Process*, of Section IV Project Description, shall be revised to read:

The operations criteria (Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125) are intended to minimize the impacts of operating the north Delta intakes. Real-time discussions specific to the north Delta intake operations will incorporate review of real-time abiotic and fish monitoring data and ensure proposed weekly, daily, and sub-daily operations are consistent with the Conditions of Approval in this ITP.

20.1 Studies and Monitoring to Inform Phase 2 Operations.
During the time from ITP issuance through Phase 1 Operations, Permittee will conduct studies as required by Conditions of Approval in this ITP. The required studies and monitoring will gather additional information and be used consistent with Conditions of Approval 10.18.

20.2 Real-Time Decision-Making Framework.
Under the 2024 ITP, during periods of fishery concern for Delta SWP operations, operators and fishery biologists meet frequently (typically weekly). Forecasted conditions and projected operations for the week ahead are presented to Salmon, Smelt and White Sturgeon technical monitoring teams and are considered in real-time while taking into account fish monitoring data and other relevant information. With this weekly outlook, any potential concerns or real-time operational considerations are developed and presented to a Water Operations Management Team comprised of representatives from six agencies: CDFW, Permittee, Reclamation, USFWS, NMFS, and State Water Board. This general process will continue during Phase 1 and Phase 2 operations as follows:

- **Daily**—During the winter and spring period, Permittee and CVP operators (schedulers) will assess the hydrologic and Delta conditions to determine if excess flows are present (e.g., flows exceeding what is required to meet applicable state and federal regulatory requirements). If additional flows are available, Permittee will schedule a daily diversion volume from the north Delta intakes, consistent with the Project operational criteria (Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125). Permittee's combined existing south Delta and north Delta diversions will not exceed total SWP export limits permitted under existing water rights (Condition of Approval 11.~~114~~125). Scheduled diversion volumes from the north Delta intakes will be coordinated with other SWP and CVP operations.

- **Sub-Daily**—Permittee will operate the north Delta intakes within the physical constraints at each intake and consistent with Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122,

11.~~112~~123, 11.~~113~~124, and 11.~~114~~125, including minimum sweeping velocities and allowable approach velocities.

- **Delta Monitoring Workgroup** - Permittee will convene the Delta Monitoring Workgroup (DMW) each week that the North Delta Diversion Monitoring Team (NDDMT) meets to discuss risk assessments and available modeling and hydrologic and biological data. Interested parties as a part of the DMW may provide information and supporting documentation for Permittee WOMT representative to share with CDFW WOMT representative. If WOMT representatives do not reach consensus on an operational outcome, interested party supporting documentation will be provided to the Directors for consideration of their final decision.

20.2.1 Real-Time Actions.

Near Field: Permittee will adhere to fish screen performance criteria, including facility performance in meeting approach velocity compliance and sweeping velocity necessary to minimize entrainment and impingement impacts and consistent with requirements in Conditions of Approval 10.27, 10.27.1, 10.27.2, 10.27.3, 10.28, and 11.~~109~~120.

- Permittee will provide and monitor real-time flows through each of the north Delta intake screen units to demonstrate approach velocity compliance. Intake design will incorporate computational modeling to demonstrate compliance with operating criteria. Permittee will conduct field measurements and baffle adjustments during commissioning and Phase 1 and Phase 2 operations consistent with Conditions of Approval 10.27 and 10.28, to ensure compliance with Project operating criteria (Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125). Individual intake screen unit flows will also be quantified and summed to determine the full diversion flow at each intake.

- Permittee will provide and monitor a velocity/flow gage upstream of each intake facility. Additionally, a flow gage downstream of Intake C will be installed and maintained consistent with Condition of Approval 10.20.1 in this ITP. All flow gages installed upstream and downstream of intakes will be used to demonstrate sweeping velocity performance.

    - Permittee will install and maintain velocity/flow gages (i.e., Acoustic Doppler Current Profilers) downstream of each intake facility, along with an additional acoustic fish monitoring station (similar to side-scan sonar technology as described below in Far Field), to investigate fish distribution within the river's flow/velocity field. Permittee will also install a new velocity/flow gage downstream of Intake C consistent with Condition of Approval 10.20.1. Gages and fish acoustic monitoring stations will be installed and operated consistent with Conditions of Approval 10.19.1, 10.19.3, and

10.20.1 in this ITP. In conjunction with the intake facility flow measurements, these velocity/flow gauges will be used during facility operations to demonstrate screen sweeping-velocity performance. For example, following planned full-facility velocity performance evaluations, the average downstream river velocity will be correlated to each intake facility's sweeping-velocity performance and diversions adjusted as needed to meet criteria.

- Permittee will calculate flow variables necessary to implement operating criteria in Conditions of Approval 11.~~109~~120, 11.~~110~~121, 11.~~111~~122, 11.~~112~~123, 11.~~113~~124, and 11.~~114~~125 according to the plan per Conditions of Approval 10.20.1 and 11.~~109~~120.

- As part of compliance monitoring, Permittee will conduct sub-sampling at each intake to assess the level of protection provided by fish screens for Covered Fish Species[50] consistent with Project design/assumptions and Condition of Approval 10.21.3.

- Permittee will use side-scan sonar technology (e.g., biosonic) to estimate presence and movement of migrating juvenile Chinook Salmon-sized fish.

Far Field: Permittee will implement information sharing to facilitate communication regarding north Delta diversion operations as follows.

Weekly, Permittee will provide the following to CDFW for the previous week:

- Daily and 3-day average Wilkins Slough, Freeport, and bypass flows including the daily NDD rates.
- Identification of the operating criteria in effect on each day.
- Modeled Chinook salmon through-Delta survival values.
- Fish monitoring data (e.g., Knight's Landing Rotary Screw Traps catch index) in addition to CHNWR and CHNSR juvenile production estimate and migration status (e.g., estimated fraction of population upstream, in Delta, past Chipps).

Weekly, Permittee will provide the following to CDFW for the upcoming week:

- Forecasted range of daily average Wilkins Slough and Freeport flows.
- Estimated range of NDD rates.
- NDD criteria that will likely be in effect.
- Modeled through-Delta survival estimates for the likely bypass flows.

- Data from side-scan sonar technology (e.g., biosonic) to estimate presence and movement of migrating juvenile Chinook salmon-sized fish.

14. Subsection 21, *The Following Components Are Not Included as Covered Activities*, of Section IV Project Description, shall be revised to add the exclusion of small diameter land-based soil borings and land-based CPTs conducted through December 31, 2029:

21. The Following Components Are Not Included as Covered Activities.

Activities not covered by this ITP and its take authorization include, but are not limited to, the following:

- Flood control.
- Execution of SWP contracts.
- Any previously identified or potential future habitat restoration.
- SWP south Delta facilities, operations, and agreements.
- SWP Curtis Landing Release site and SWP little Baja and Manzo Ranch Release Sites.
- SWP Barker Slough Pumping Plant fish screen cleaning, sediment removal, and / or aquatic weed removal.
- CVP facilities, operations, and agreements.
- Existing ongoing monitoring programs or modifications to existing ongoing monitoring programs.
- Operations and maintenance activities beyond the term of this ITP.
- Use of rodenticides within the Project Area during any Project Phase, including preconstruction, construction, maintenance, or operation (Condition of Approval 11.5).
- CCWD operations or operations of the Rock Slough Intake.
- Actions to abandon or relocate wells identified through the underground well detection plan (Condition of Approval 11.24).
- Oroville Dam and Feather River operations.
- Road modifications or subsequent actions on roads where asphalt overlays are planned. These locations include W. Peltier Road, W. Eight Mile Road, the 0.2-mile segment of Dierssen Road west of the Twin Cities Complex, the portions of SR 160 outside of the north Delta intake construction footprint, Bonetti Road, Clifton Court Road, Hood Franklin Road, and Port of Stockton Expressway.
- Initial mitigation sites identified for Project Activities and their impacts expected to cause incidental take of Covered Species.
- Installation of small diameter (less than 8-inch diameter) land-based soil borings and land-based soil borings with water quality testing using auger and/or mud rotary drill and soil and rock sampling, and land-based CPTs using a truck-mounted rig equipped with a one-to-two-inch diameter cone, conducted prior to and inclusive of December 31, 2029. Geotechnical

investigations excluded by this bullet do not include activities conducted in or over water, within 200 feet of suitable Covered Species aquatic habitat, on levees, within identified geological faults, or after December 31, 2029, nor will the activities involve excavations larger than eight inches.

15. The Covered Species Subject to Take Authorization Provided by this ITP section has been amended to read as follows:

This ITP covers the following species:

Name	CESA/NPPA Status[18]
1. California tiger salamander (*Ambystoma californiense*)	Threatened[19]
2. Giant garter snake (*Thamnophis gigas*)	Threatened[20]
3. Swainson's hawk (*Buteo swainsoni*)	Threatened[21]
4. Tricolored blackbird (*Agelaius tricolor*)	Threatened[22]
5. Crotch bumble bee (*Bombus crotchii*)	Candidate[23]
6. Mason's lilaeopsis (*Lilaeopsis masonii*)	Rare[24]
7. Delta smelt (*Hypomesus transpacificus)*	Endangered[25]
8. Longfin smelt (*Spirinchus thaleichthys*)	Threatened[26]
9. Winter-run Chinook salmon (*Oncorhynchus tshawytscha*)	Endangered[27]

[18] Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species. Under the NPPA, a plant species may be designated as endangered or rare.
[19] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(3)(G)
[20] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(3)(E)
[21] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(5)(A)
[22] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(5)(H)
[23] Take of this species is prohibited, unless otherwise authorized by the Department, during the period that the Fish and Game Commission considers a petition seeking its listing as an endangered or threatened species and determines whether the petitioned action is warranted. (See Cal. Reg. Notice Register 2019, No. 45-Z p. 1986 [Crotch bumble bee]**,** ~~and~~ Cal. Reg. Notice Register 2024, No. 28-Z p. 591 [White sturgeon], and Cal. Reg. Notice Register 2024, No. 43-Z, p.1400 [Western burrowing owl].) The status of either species may change following the decision of the Fish and Game Commission to designate the species as threatened or endangered but if there is such a designation, the species will remain a Covered Species. If there is no such designation and the species is removed from candidacy, this ITP will be amended accordingly.
[24] See Cal. Code Regs. tit. 14 § 670.2, subd. (c)(3)(A)
[25] See Cal. Code Regs. tit. 14 § 670.5, subd. (a)(2)(O)
[26] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(E)
[27] See Cal. Code Regs. tit. 14 § 670.5, subd. (a)(2)(M)

10. Spring-run Chinook salmon (*Oncorhynchus tshawytscha*)	Threatened[28]
11. White sturgeon (*Acipenser transmontanus*)	Candidate[23]
12. Western burrowing owl (*Athene cunicularia hypugaea*)	Candidate[23]

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

16. The Impacts of the Taking on Covered Species section has been amended as follows:

10. Western burrowing owl (*Athene cunicularia hypugaea*)
Project activities and their resulting impacts are expected to result in the incidental take of BUOW individuals. The Covered Activities expected to result in the incidental take of BUOW individuals include Project preconstruction activities, construction, maintenance, and operational activities including: 1) field investigations and geotechnical explorations, 2) construction of the north Delta intakes, 3) tunnel conveyance and facility construction and maintenance, 4) construction and maintenance of the Bethany Complex, 5) construction and maintenance of construction support facilities, 6) construction of the CCWD interconnection facilities, 7) RTM placement and storage, 8) construction or improvement of access roads, 9) construction and maintenance of electrical and SCADA facilities, 10) construction and maintenance of no activity buffers, and 11) site reclamation. These activities specifically include initial site preparation; heavy equipment movement and operations; groundwater testing and monitoring; site and soil clearing; grubbing, grading, drilling, boring, excavating, trenching, and backfilling; in-water and on-land pile driving; soil compaction, tilling, and rotation; levee, railroad spur, and minor bridge construction; overland vehicle and foot traffic; installation and/or removal of cutoff walls, equipment, and other structures; handling of stockpiles, stored materials, and placement of fills; utility potholing; tower and pole construction; line stringing; nighttime lighting; construction and operational spoil removal, maintenance, and repair; vegetation clearing and maintenance (mowing, trimming, application of herbicides or pesticides); access road widening, paving, repaving, and/or grading; and capture, handling, and relocation of injured BUOW or abandoned nestlings.

Incidental take of BUOW in the form of mortality ("kill") may occur as a result of construction equipment, vehicle strikes, and/or materials or spoils placement (crushing or entombment of individuals and/or burrows, occupied burrow nests, and foraging resources); electrocutions from transmission lines and transmission line poles; construction disturbance from clearing, excavating, grading, grubbing, drilling, trenching, laying of foundations, backfilling, pile driving, vehicle and foot traffic, helicopters, and light disturbances (direct contact with sharp objects and/or blunt-force trauma, burrow disturbance, abandonment, damage, or collapse, entrapment, and exposure to

[28] See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C)

predation and the elements, energetic expenses, foraging and nesting behavior disruption, nesting habitat quality reduction); entanglement in erosion control materials, exclusion fencing, construction staging materials, and construction debris (strangulation, immobility); placement of construction material and structures providing perches to predators; vehicles, equipment, workers, monitors; passive relocation from burrows, and biologists approaching burrows too closely and/or disturbing the burrow/burrow complex (obstructing burrow entrances, nest/burrow abandonment, eggs and/or nestlings exposure to predation and elements); increased light, noise, and vibration (inappropriate emergence or flush from burrows, energetic expenses affecting mating and foraging, exposure of individuals and/or nestlings to predation and the elements and subsequent loss of eggs, young, or fledglings due to nest abandonment); and poisoning from construction-related contaminants such as fuels, oil, and steering fluid, herbicides or pesticide exposure (suffocation, immobility, illness or injury, reduction in prey resources). Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so when BUOW individuals or abandoned eggs/nestlings are salvaged, collected for identification, and/or relocated out of harm's way as required by this ITP.

Impacts of the authorized taking also include adverse impacts to BUOW related to temporal losses, increased habitat fragmentation and edge effects, lighting at night, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: the removal of burrows/burrow complexes during the nonbreeding season (September 1 – January 31) used for shelter, reproduction, and escape cover (displacement from preferred habitats associated with strong site fidelity, increased vulnerability to predation and the elements); increased competition for suitable, protective burrow sites; stress and displacement resulting from human or equipment presence (visual disturbance), traffic, odor disturbance, noise, and/or vibrations from ground disturbance, light disturbance, ongoing O&M-related noise, and vehicle and equipment operation causing potential migration interference and displacement from preferred habitat to less protective habitat and interference with breeding (inappropriate emergence from burrows, nest abandonment, energetic expenses, habitat degradation, increased vulnerability to predation and elements, and loss of fitness in dependent young from interruptions in brooding and/or feeding schedules); disturbances, alterations, or removal of foraging habitat (degradation of adjacent nesting habitat suitability, starvation, energetic expenses from further foraging distances); stress resulting from capture and relocation; increased exposure or stress from disorientation; direct or secondary poisoning from construction-related contaminants in contaminated water or substrates, hazardous materials, and vehicle and equipment fuels and fluids (illness or injury, habitat degradation); introduction or spread of invasive species (loss of appropriate vegetation around nesting habitat, introduction to disease and parasites, competition for food and space, loss of foraging resources); increased pollution, fugitive dust, or release of other contaminants affecting the health and long-term survival of BUOW. Lastly, a fire sparked as a result of a battery or other equipment could result in burning or loss of habitat and food supplies. Individuals displaced due to habitat loss and

degradation may be unable to survive in adjacent areas if these areas are at carrying capacity or are unsuitable for colonization.

The Project is expected to cause the permanent loss of 2,068.11 acres of BUOW nesting, foraging, wintering, and dispersal habitats on non-CDFW lands and 7.39 acres on CDFW lands. The Project is also expected to cause the temporary loss of 208.05 acres of BUOW nesting, foraging, wintering, and dispersal habitat on non-CDFW lands and 1.60 acres on CDFW lands. Consistent with the expected Project footprint for preconstruction field investigations, the 100-foot corridor along the surface of the conveyance tunnels is considered a permanent impact where it crosses BUOW habitat, due to the continued need for site access from Project vehicle and foot traffic for monitoring and maintenance activities for a duration greater than one year. Authorized take of BUOW individuals is expected to occur within the Project components in Sacramento County, San Joaquin County, Alameda County, and Contra Costa County.

17. Condition of Approval 6.1, *Pre-implementation Phase Authorization Package*, shall be amended to include western burrowing owl as follows:

6.1 Pre-implementation Phase Authorization Package.
Prior to initiation of any Covered Activity, Permittee shall submit a complete Pre-implementation Phase Authorization Package for CDFW's review and approval. The Pre-implementation Phase Authorization Package shall include a completed Phase Authorization Form (ITP Attachment 6), monitoring and management plans as described in this ITP (e.g., Conditions of Approval 10.17, 11.19.1,11.23, 11.24, 11.30, 11.31.1, 11.34, 11.36) and final protocol-level species and habitat survey methodology for CTS, GGS, SWHA, TRBL, CBB, ~~and~~ MALI, and BUOW consistent with Condition of Approval 11.38. Permittee shall submit the completed Pre-implementation Phase Authorization Package no less than one year before initiation of preconstruction activities, regardless of whether preconstruction activities will have temporary or permanent impacts.

18. Condition of Approval 6.2, *Construction Phase Authorization Package*, shall be amended to include western burrowing owl as follows:

6.2 Construction Phase Authorization Package.
For each Construction Phase of the Project, including all stages of construction (preconstruction including field investigations, geotechnical exploration, and on-site restoration; construction or improvements of access roads; construction and maintenance of electrical and SCADA facilities; tunnel conveyance and facility construction and maintenance; construction and maintenance of the north Delta intakes; construction and maintenance of the Bethany Complex; construction and maintenance of construction support facilities; construction and maintenance of CCWD interconnection facilities; RTM placement and storage; and site reclamation), Permittee shall submit a complete Construction Phase Authorization Package for CDFW's review and approval 90 days prior

to the commencement of Covered Activities defined in that Phase. The Construction Phase Authorization Package shall be submitted to WBSWPPermitting@wildlife.ca.gov. This process ensures appropriate minimization measures are identified and implemented as Permittee develops and undertakes specific Covered Activities and Project details are better known. The Construction Phase Authorization Package shall include:

- A completed Phase Authorization Form (ITP Attachment 6), including an annual schedule of the specific Covered Activities to be implemented, their locations, and expected permanent and temporary impacts on Covered Species and their habitats associated with the proposed Construction Phase as well as calculations of the amounts of compensatory mitigation due for that Phase.

- A biological report assessing the Construction Phase Project Site(s) and describing the methodology used to conduct site specific surveys, as approved in the Pre-implementation Phase Authorization, including a discussion of any CDFW-approved plans or protocols as applicable.

- A habitat delineation showing both land cover types and the specific Covered Species habitats that will be impacted within the Construction Phase Project Site(s). The delineation shall also identify where specific Covered Activities will occur and include any areas where maintenance activities may occur within the Construction Phase or succeeding it.

- Baseline preconstruction species survey results (Conditions of Approval 11.42, 11.56, 11.71, 11.84, 11.96, 11.97, 11.105, 11.111) completed in accordance with the CDFW-approved Pre-implementation Phase Authorization (Condition of Approval 6.1).

- An engineering plan showing all activities to occur within the Construction Phase Project Sites. Engineering plans shall be at 95% design complete, unless otherwise agreed upon by CDFW in writing.

- Any required site-specific plans for management and/or monitoring required by this ITP (e.g., Conditions of Approval 10.8, 10.11, 11.21, 11.22, 11.25, 11.26, 11.29, 11.30, 11.33, 11.34, 11.35, 11.37, 11.51, 11.67, 11.73, 11.80, 11.92, 11.98, 11.102, 11.108, 11.115, 11.117, 12.3.3, 12.4).

- A complete description of all avoidance, minimization, and mitigation measures that are applicable to the Phase, including site specific information as required by Conditions of Approval in this ITP, identification and justification for site-specific deviation from species avoidance measure(s) (e.g., Conditions of Approval 11.39, 11.40, 11.49, 11.54, 11.55, 11.60, 11.69, 11.76, 11.82, 11.89, 11.95, 11.100, 11.109) ~~or,~~ buffer zone(s) (e.g., 11.43, ~~11.57,~~ 11.62, 11.72, ~~11.83,~~ 11.85, 11.87, 11.94, ~~11.97,~~ 11.98, 11.100, 11.106, 11.114), or seasonal work windows (e.g., Conditions of Approval 11.31, 11.31.1, 11.31.2, 11.44, 11.58, 11.70, 11.95, 11.113) as a result of

property and/or Project access limitations, calculation of necessary compensatory mitigation acreages or other actions in response to impacts of the Phase activities, and schedules that will be implemented to ensure that compensatory mitigation measures required by Condition of Approval 12 are implemented in accordance with time limitations in this ITP, and updated estimated costs of minimization and mitigation implementation.

The Phase Authorization Form shall remain in substantially the same form as the template in Attachment 6. Any changes to the Phase Authorization Form shall be approved by CDFW, in writing.

19. Condition of Approval 10.4, Suitable Habitat Monitoring, shall be amended to read as follows:

Permittee shall track suitable habitat for the Covered Species in each Project construction site and surrounding species-specific buffers. Suitable habitat shall include but not be limited to the following habitat features. These features may be modified with written approval from CDFW:

Species	Habitat type	Habitat features included
California tiger salamander	Aquatic ~~Aquatic continued~~	• Vernal pools • Natural and artificial swales • Seasonal ponds • Seasonal wetland/vernal pool complex • Perennial ponds such as stock ponds • Other ephemeral or permanent waterbodies that support inundation during winter rains and hold water a minimum of 12 weeks/year in a year of average rainfall
	Upland Upland continued	• Grassland: native, ruderal, or annual grasses, weeds, and forbs • Pasture • Undisked barren • Undisked fallow field • Degraded vernal pool complex • Alkali seasonal wetland complex • Within 1.3 miles of suitable aquatic breeding habitat • No impermeable barriers to CTS movement between the potential upland refugia and suitable aquatic habitat • Contains burrows, cracks, crevices, or other habitat (or presence of ground squirrels or gophers) that CTS depend on for food, shelter, and protection from elements
Giant garter snake	Aquatic (active season)	• Freshwater perennial aquatic – all types • Freshwater emergent wetland

Species	Habitat type	Habitat features included
		• Marshes, sloughs, ponds, small lakes, low gradient streams, wetlands, other waterways • Rice fields • Managed wetland • Emergent, herbaceous wetland vegetation (e.g., cattails, bulrushes) • Agricultural ditches and irrigation canals

	Upland (active and inactive seasons – year-round)	• Within 200 feet of suitable aquatic habitat
		• Contains burrows, cracks, or crevices within any of the following habitat types
		  • Non-irrigated pasture
		  • Annual or native grasslands and forbs
		  • Seasonal wetland
		  • Vernal pool complex
		  • Levee rock riprap
		  • Vegetated banks and levees
		  • Dune scrub
		  • Managed wetland
		  • Low-canopy riparian

Swainson's hawk	Nesting
	
	~~Nesting continued~~
		• Suitable nest trees: 20-ft minimum height in any of the following features
		  • Riparian including valley oak, Fremont cottonwood, willow, sycamore
		  • Isolated trees, small groves, or tree rows including oak, walnut, locust, conifers, or *Eucalyptus*

	Foraging Foraging continued	• Grassland: native, ruderal, or annual grasses, weeds, and forbs • Pasture or open rangeland • Barren fields • Fallowed fields • Irrigated field crops; including alfalfa and other hay, grains, sunflower, corn, safflower • Managed row crops; including tomatoes, beets, peppers, beans, lettuce, broccoli, asparagus, carrots, melons, squash, cucumbers, onions, garlic, berries • Shrub/sage • Managed or seasonal wetlands
Tricolored blackbird	Nesting and roosting	**Nesting:** Any of the following habitat features within 5 miles of an observed or historic breeding colony, within 3 miles of suitable foraging habitat, and within 0.3 miles of any open water source

Species	Habitat type	Habitat features included

		(canals, lakeshores, residual water in seasonal watercourses and farm ponds, etc.):
		• In any healthy freshwater emergent wetland (cattail/tule)
		• In any flooded riparian TRBL nesting habitat, including small willows thickets and cottonwoods, cattail/tule, giant reed, giant cane (*Arundo* spp.), desert olive, mulefat scrub, coyote bush, tamarisk, elderberry, buttonwillow, poison oak, or other riparian species
		• The Designated Biologist(s) and/or Biological Monitor(s) shall also conduct preconstruction surveys for breeding colonies (Condition of Approval 11.83) in the following alternative nesting substrates:
		  • Agricultural fields, such as dairy silage (triticale), fava beans, wheat, barley, rice, alfalfa, or safflower
		  • Large weedy fields at least 30 feet wide, such as wild mustard/mustard radish, foxtail, and mallow
		  • In any of the following armored plant habitat: thistle; blackberry or raspberry, particularly Himalayan blackberry; nettle; prickly lettuce; wild rose fence rows; wild grape; poison hemlock; or other thorny parts
		Roosting:
		• Managed wetland
		• Tidal freshwater and brackish emergent wetland
		• Nontidal freshwater emergent wetland
		• Riparian; including blackberry, elderberry, and willows

	Foraging ~~Foraging continued~~	• Grasslands – all types • Pasture • Weedy fields • Seasonal wetlands • Vernal pool complex • Dry and irrigated pasture • Sage/scrub • Hay crops including alfalfa and silage • Grain crops; including wheat, oats, and millet • Field crops; including sunflower, corn, and rice • Idle or fallowed croplands • Stored grain and livestock feed lots • Dairies • Farmsteads
Crotch bumble bee	All life stages	• Grasslands, meadows – all types • Chaparrals, gardens, urban parks • Alkaline seasonal wetlands

Species	Habitat type	Habitat features included
		• Vernal pool complex • Seasonal wetlands • Agricultural field margins • Habitat with floral sources not limited to the following: *Baccharis salicifolia, Salix, Ceanothus, Arctostaphylos, Salvia, Pentemon, Asclepias, Lupinus, Eriogonum, Grindelia, Solidago, Agastache, Monardella, Diplacus, Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, Eriogonum, Cordylanthus, Chaenactis* • Forage plant families: *Fabaceae, Rosaceae, Asteraceae, Rhamnaceae, Apocynaceae, Lamiaceae, Hydrophyllaceae, Plantaginaceae, Onograceae, Papaveraceae, Polygonaceae* • Overwintering: riparian, woody forest edges
Mason's lilaeopsis	All life stages	• Estuarine wetlands • Tidal perennial aquatic habitat • Banks of tidal sloughs, rivers, and creeks • Mudflats • Tule marshes; including California tule, whorled marsh pennywort; low bulrush, three-ribbed arrowgrass, hardstem bulrush, water iris, marshpepper, giant reed, nutsedge, iris-leaved rush, common buttonbush, red willow, smooth beggartick, water pygmyweed, Himalayan blackberry, common reed, sneezeweed, Pacific aster, Santa Barbara sedge, common rush, seep monkey flower, dallis grass, and hedge false bindweed
Covered Fish Species	Migration, Rearing, Foraging, and Spawning	• Temperature • Turbidity • Salinity • Food abundance/productivity • Predator abundance • Tidal wetland proximity
Western burrowing owl	Nesting, foraging, overwintering, and dispersal	Any of the following listed habitat features that contain or are within a 600m radius of, burrows, cracks, crevices, dens, culverts, pipes, rubble/rock piles or other habitat with a burrow entrance opening of at least seven centimeters, or presence of ground squirrels, gophers, or badgers. There must also be level or gently sloped areas with well-drained soils and extensive patches of bare ground and primarily low, sparse vegetation that BUOW may depend on for nesting, foraging, overwintering, and protection from predation and the elements in any of the following habitat types: • Grassland: native, ruderal, or annual grasses, weeds, and forbs • Alkaline grassland-scrub, upland herbaceous • Pasture or open rangeland

Species	Habitat type	Habitat features included
		• Agricultural fields and field edges, agricultural ditches • Barren fields • Fallowed fields • Alkaline seasonal wetlands, managed or other seasonal wetlands • Vernal pool complex • Shrub/scrub, sage, chaparrals, young perennials • Irrigated field crops; including alfalfa and other hay, grains, sunflower, corn, safflower, sorghum, sudan • Managed row crops; including tomatoes, onions, garlic, peppers, beets, beans, lettuce, broccoli, cabbage, asparagus, melons, squash, cucumbers, berries, cucumbers (miscellaneous truck crops) • Anthropogenically altered open spaces (e.g., cemeteries, airports, golf courses, urban parks, athletic fields, business complexes, vacant urban lots, roadsides, levee embankments, railroad embankments, fairgrounds)

20. Condition of Approval 10.8, *Habitat Evaluation*, shall be amended to read as follows:

10.8 Habitat Evaluation.
The Designated Biologist(s) shall conduct a field survey and identify suitable habitat for each Covered Species in areas within the planned Project construction site and within ~~1,300~~1,640 feet from the Project construction site consistent with the largest no-disturbance buffer for Covered Species (see Condition of Approval 11.~~85~~114), where accessible. Suitable habitat shall be defined by Condition of Approval 10.4. Any suitable habitat not included in the species' modeled habitat within the Project construction site that will be impacted by Covered Activities shall be subject to the same avoidance and minimization requirements for the Covered Species. Permittee shall conduct preconstruction field surveys consistent with approved protocol-level species and habitat survey methodology protocols (Condition of Approval 6.1) and include all initial preconstruction field survey results to CDFW in the appropriate Construction Phase Authorization Package (Condition of Approval 6.2) and identify the spatial extent of suitable habitat for each Covered Species as well as the total area surveyed by the Designated Biologist(s).

21. Condition of Approval 10.17, *Subsurface Vibratory Testing and Monitoring Study for Fossorial Covered Species*, shall be amended to include western burrowing owl as follows:

10.17 Subsurface Vibratory Testing and Monitoring Study for Fossorial Covered Species.
Permittee shall develop, in coordination with CDFW, a draft Subsurface Testing and Monitoring Study Plan to investigate thresholds and effects of subsurface vibrations on fossorial species (CTS, GGS, ~~and~~

CBB, and BUOW) behavior and overall health, prior to the initiation of Covered Activities. The draft Study Plan shall be submitted to CDFW for review and approval as part of the Pre-implementation Phase Authorization Package (Condition of Approval 6.1) and shall include actions to measure and monitor surface and subsurface vibrations in CTS, GGS, ~~and~~ CBB, and BUOW habitats. Permittee shall work collaboratively with CDFW to incorporate comments into the draft Study Plan and submit the final Study Plan to CDFW for review and approval a minimum of one year prior to initiating any ground-disturbing activities within fossorial Covered Species habitat. Permittee shall implement the CDFW-approved Study Plan prior to initiating Covered Activities within a Project site containing CTS, GGS, ~~or~~ CBB, or BUOW suitable habitat***s*** and shall submit the results of the Study with suggested vibratory monitoring protocols for fossorial Covered Species to CDFW as part of the appropriate Construction Phase Authorization Package.

22. Section VIII, subsection 11, *Take Minimization Measures*, paragraph one shall be amended to include western burrowing owl conditions of approval:

11. Take Minimization Measures

The following requirements are intended to ensure the minimization of incidental take of Covered Species and related impacts of the taking in the Project Area during Covered Activities. Conditions of Approval 11.1 through 11.~~108~~119 are intended to minimize impacts from Covered Activities associated with preconstruction, construction, and facilities maintenance, as described in this ITP for Covered Species. Permittee shall implement and adhere to the following conditions to minimize take of, and impacts of the taking to, Covered Species:

23. Condition of Approval 11.3, *Covered Species Capture, Handling, and Reporting*, shall be amended to include western burrowing owl as follows:

11.3 Covered Species Capture, Handling, and Reporting.

The Designated Biologist(s) shall be responsible for and direct efforts to capture and handle Covered Species. The Designated Biologist(s) shall ensure their hands are free of soaps, oils, creams, lotions, insect repellants, solvents or other potentially harmful chemicals and if not single use, nitrile or other hypo-allergenic gloves (non-latex) will be used for handling special-status fish or wildlife. The Designated Biologist(s) shall maintain monitoring records that include, but are not limited to: (1) the beginning and ending time the capture and relocation effort, (2) a statement identifying the Covered Species encountered, (3) the time of discovery, by whom, and the condition of the Covered Species, (4) the capture and release locations of each Covered Species individual, (5) photographs of each Covered Species individual, (6) measurements of each Covered Species individual if doing so will not cause undue stress or harm, (7) a description of all actions taken, and (8) any other pertinent information. See Condition of Approval 11.35 for handling protocols specific to special-status fish species. Methods for capture and handling focused on individual Covered Species are described

further below in Conditions of Approval 11.50, 11.67.1, 11.80, 11.92, ~~and~~ 11.108, and 11.115 for each Covered Species shall be used to capture and handle Covered Species.

24. Condition of Approval 11.5, *Prohibition of Rodenticide and Poison Use*, shall be amended to read as follows:

11.5 Prohibition of Rodenticide and Poison Use.
Permittee shall not use rodenticides, other poisons, or broadcast baiting used to control rodents in the Project ~~Area~~ site (including during construction, postconstruction maintenance, and operations). Permittee shall not conduct any additional forms of ground squirrel or rodent management by any means, including, but not limited to, live trapping within the Project site for the duration of Covered Activities in suitable CTS, GGS, and BUOW habitat.

25. Condition of Approval 11.11 (Speed Limits) shall be amended to read as follows:

11.11 Speed Limits.
Project vehicles shall observe a maximum speed limit of 10 miles per hour on unpaved non-public Project access roads and in construction and maintenance sites. Vehicles on paved, non-public Project access roads shall observe a maximum speed limit of 30 miles per hour. Speeds limits shall be enforced and posted in both directions. Wildlife crossing signs and signage requiring extra caution shall be posted in both directions on all Project access roads that overlap with CTS and GGS aquatic and upland habitat during Project construction, operations, and maintenance. Project vehicles shall observe a nighttime speed limit of 10 miles per hour in Project construction sites within the Bethany Complex between October 16 through July 14 (i.e., outside the "dry season" defined as July 15-Oct 15) to avoid potential vehicle strikes of CTS. Project vehicles shall observe a 10 mile per hour speed limit on paved, non-public access roads where they occur within 200 feet of GGS habitat during the active season (May 1 – October 1) except where exclusion fencing has been installed, in which case Project vehicles may observe a speed limit of up to 30 miles per hour. Project vehicles shall observe a 10 mile per hour speed limit on paved, non-public access roads where they occur in or within 1,640 feet (500 meters) of occupied BUOW habitat year-round unless BUOW survey results (see Condition of Approval 11.111) or monitoring (see Condition of Approval 11.116) indicate BUOW are not present near that access road and/or Project construction site, only after ~~approved~~approval in writing by CDFW.

26. Condition of Approval 11.20, *Hazards to Covered Species,* shall be amended as follows:

11.20 Hazards to Covered Species.
Permittee shall not permit pets, campfires, or firearms in Project construction sites and site access routes, except firearms carried by authorized security personnel or local, state, or federal law enforcement officials. Permittee shall prohibit any form of domestic birds from entering Project

construction site(s) to reduce the risk of transferring avian influenza, sticktight fleas, or other diseases or pests to SWHA, TRBL, and BUOW. To avoid attracting predators, Permittee shall ensure Project personnel dispose of all food-related trash items such as packaging, cans, bottles, and food scraps in enclosed containers. Permittee shall ensure trash is removed from the construction site and taken to an appropriate facility at least once a week from the construction ~~or Project~~ site (see Condition of Approval 9.6). All contracts with contractors shall include language reminding them of the obligations to abide by the laws related to litter within work areas and while traveling along public roads within Project construction sites and/or Project maintenance areas. Vehicles carrying trash shall have loads covered and secured to prevent trash and debris from falling onto roads and adjacent properties.

27. Condition of Approval 11.38, *Preconstruction Survey Protocols*, shall be amended to include western burrowing owl as follows:

11.38 Preconstruction Survey Protocols.
Permittee shall develop, in coordination with CDFW, species survey protocols specific to CTS, GGS, SWHA, TRBL, CBB, ~~and~~ MALI, and BUOW. Survey protocols specific to each forementioned Covered Species shall be provided to CDFW as part of the Pre-implementation Phase Authorization Package (Condition of Approval 6.1) for review and approval. Protocols shall be finalized and approved in writing by CDFW prior to initiation of any Covered Activity including but not limited to preconstruction field investigation activities or preconstruction species site surveys necessary for Construction Phase Authorization (Condition of Approval 6.2). Survey protocols shall include but not be limited to: the number of surveys that will be conducted for each Covered Activity and/or location; when the surveys are planned to take place (i.e., season and how much time between surveys); what type of habitat will be surveyed (i.e., foraging, nesting, and/or overwintering); associated habitat characteristics, survey methods and supporting rationale including references as appropriate; capture and identification protocol(s) if appropriate; and survey methodology developed specifically for determining presence or absence of a species, if appropriate.

28. Section VIII, *Conditions of Approval*, subsection 11, *Take Minimization Measures*, shall be amended to add *Western Burrowing Owl (BUOW) Measures* including the following:

Western Burrowing Owl (BUOW) Measures.

11.109 BUOW Avoidance.
To the greatest extent practicable, all known burrows (burrows that are known to be currently occupied by BUOW or are known to have been used in the past 3 years) or potential burrows (any subterranean hole three inches or larger with evidence of current or past use such as nearby BUOW presence, tracks, molted feathers, whitewash, cast pellets, prey remains, etc.) shall be completely avoided and undamaged by Project activities. Permittee shall conduct Covered Activities within

paved roads, farm roads, and similarly disturbed and compacted areas where possible. Where it is not feasible to conduct Covered Activities in previously disturbed areas, Permittee shall confine ground disturbance and habitat removal to the smallest area necessary as identified in the appropriate Construction Phase Authorization Package (Condition of Approval 6.2). Project personnel shall not cross occupied BUOW habitat and corresponding non-disturbance buffers (see Condition of Approval 11.114) outside of the Project construction site(s) during all phases of Covered Activities unless otherwise approved by CDFW. The Designated Biologist(s) shall train Project personnel on the required avoidance procedures, non-disturbance buffer zones, and protocols in the event that a BUOW is present in or comes into an active Project construction site (i.e., outside the non-disturbance buffer zone), as part of the education program described in Condition of Approval 9.4. Permittee shall ensure all workers inform the Designated Biologist(s) if they encounter BUOW on site or within 1,640 feet (500 meters) of the Project construction site.

11.110 Preconstruction Habitat Assessment.
Prior to the commencement of Covered Activities, the Designated Biologist(s) shall conduct a suitable habitat assessment consistent with CDFW-approved protocols (Condition of Approval 11.38) which shall incorporate methodology described in Appendix C of the 2012 Staff Report on Burrowing Owl Mitigation[51] or the most recently available CDFW-approved guidelines. The preconstruction habitat assessment shall determine if existing or potential nesting, foraging, and overwintering sites for BUOW are present within each Project construction site and include areas within 1,640 feet (500 meters) or more of a Project construction site, where feasible. Adjacent parcels under different landownership shall be surveyed lawfully where access is granted or where the parcels are visible from authorized areas. The Designated Biologist(s) shall submit the results in a report as described in Appendix C of the Staff Report on Burrowing Owl Mitigation in the appropriate Phase Authorization Packages (Condition of Approval 6.2) prior to the initiation of any vegetation clearing or ground disturbing Covered Activities. The report shall also include historical (preceding three years) and current BUOW species occurrences from reliable data sources such as California Natural Diversity Database (CNDDB). Permittee shall map all existing or potential nesting, foraging, and overwintering sites and provide these maps to CDFW as part of the BUOW Mortality Reduction Plan (Condition of Approval 11.115).

11.111 BUOW Surveys.
The Designated Biologist(s) with assistance (if needed) from the Biological Monitor(s) shall conduct BUOW surveys using CDFW-approved survey protocols (Condition of Approval 11.38) which shall incorporate methodology described in the 2012 Staff Report on BUOW Mitigation, Appendix D [52] or more recently available guidance approved by CDFW. Surveys shall identify the presence of suitable

[51] California Department of Fish and Game (2012). Staff Report on Burrowing Owl Mitigation Appendix C. March 2012. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline.
[52] California Department of Fish and Game (2012). Staff Report on Burrowing Owl Mitigation Appendix D. March 2012. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline.

habitat and/or nesting burrows within each preconstruction activity site, SCADA, transmission line and access road site, construction site, and maintenance area, prior to initiation of any Covered Activities. Surveys shall be used to detect and map known burrows including potential nesting, satellite, or roosting burrows, and evidence of burrows (e.g., BUOW tracks, molted feathers, whitewash, cast pellets, and prey remains). Permittee shall submit BUOW survey results, including Burrow Complex Maps (Condition of Approval 11.112), showing any new or atypical potential BUOW burrows or burrows/refugia that may be utilized by BUOW, to CDFW as part of the appropriate Construction Phase Authorization Package (Condition of Approval 6.2) prior to initiating Covered Activities. Subsequent surveys shall be conducted during the Project construction phase(s) or prior to maintenance activities each year Covered Activities are expected to occur in BUOW habitat and shall be reported to CDFW by the Permittee within the Monthly Compliance Report (Condition of Approval 10.12) and summarized within each Annual Status Report (Condition of Approval 10.13).

11.111.1 *BUOW Breeding and Overwintering Surveys*. Burrowing Owl breeding and overwintering surveys shall be conducted within all proposed Project construction sites and the adjoining 1,640 feet (500 meters) one year prior to the initiation of vegetation-disturbing or ground-clearing Covered Activities, including preconstruction activities, within a Phase. Surveys shall include a minimum of four visits using walking line transects spaced 23 feet to 66 feet (7 to 20 meters) apart, or as close to this method as the terrain allows. If Covered Activities are planned to occur during the breeding season (February 1 – August 31), a minimum of one survey shall be conducted between February 15 to April 15, and a minimum of three surveys shall be conducted at least three weeks apart between April 15 to July 15, with at least one of the surveys conducted after June 15, to determine potential or existing burrow locations. If Covered Activities are expected to occur during the nonbreeding season (September 1 – January 31), at least four surveys shall be conducted evenly throughout the nonbreeding season. Subsequent breeding and overwintering survey efforts conducted during the Project phase(s) shall occur each year Covered Activities are expected to occur in BUOW habitat to identify areas with new burrows or burrowing owls and results shall be reported to CDFW by the Permittee within the Monthly Compliance Report (Condition of Approval 10.12) and summarized within each Annual Status Report (Condition of Approval 10.13).

11.111.2 *BUOW Avoidance Surveys*. In addition to the surveys conducted for Condition of Approval 11.111.1, no more than 14 days prior to beginning any ground- or vegetation-disturbing Covered Activities (i.e., soil disposition areas, preconstruction activities, and SCADA, transmission line, or access road construction, maintenance, or improvement sites), the Designated Biologist(s) with assistance (if needed) from the Biological Monitor(s) shall conduct a minimum of two surveys, with the final survey conducted no more than 24 hours (at least one calendar day) prior to beginning Covered Activities using the methods approved by CDFW (Condition of Approval 11.38). The Designated Biologist(s) shall submit the survey results with an updated Burrow Complex Map to CDFW prior to beginning Covered Activities

and include the results in the appropriate Monthly Compliance Reports (Condition of Approval 10.12). If the Designated Biologist(s) identifies any potential, known, or currently active BUOW burrows within the Project construction site or 1,640 feet (500 meters) into adjoining areas, the burrow(s) shall be monitored (see Condition of Approval 11.116), and the Designated Biologist(s) shall establish appropriate non-disturbance buffers (see Condition of Approval 11.114) prior to the commencement of Covered Activities. If a lapse in Project-related work of 14 calendar days or longer occurs in any part of the Project construction site containing suitable BUOW habitat, the Designated Biologist(s) shall reconduct surveys and submit the updated results and maps to CDFW before work may be reinitiated in that part of the Project construction site.

11.112 BUOW Burrow Complex Map.
After BUOW surveys are conducted for each Project construction site, the Designated Biologist(s) shall provide a map (e.g., GIS shapefile) of the BUOW burrow complex(es) and atypical burrows surveyed (e.g., culverts, buckled concrete, etc.) to CDFW as part of the GIS shapefiles required in Condition of Approval 10.3 in the appropriate Construction Phase Authorization Package (Condition of Approval 6.2). Permittee shall provide updated map(s) to CDFW within the Monthly Compliance Report (Condition of Approval 10.12), and the Annual Status Report (Condition of Approval 10.13) where applicable. The maps shall be at a scale of 1:24,000 or finer to show detail and shall show locations of all BUOW sightings and signs of BUOW. The spatial data shall label any potential burrows, occupied burrows, satellite burrows, areas with BUOW signs (e.g., tracks, molted feathers, cast pellets, prey remains, eggshell fragments, or excrement), or areas of concentrated burrows, as appropriate. This data shall be updated annually with any additional surveys carried out by the Designated Biologist(s). The map shall include an outline of the Project Area and the current Project phase footprint. Locations documented by GPS coordinates must be collected in NAD83 datum. All nesting and overwintering sites, including currently occupied sites and sites known to have been occupied within the last three years, as well as the status of each site (e.g., potential, known, or actively nesting) shall be noted on the Burrow Complex Map and on Project plans for each applicable Phase.

11.113 BUOW Seasonal Work Restrictions.
To avoid the crushing of occupied burrows or reproductive failure, Permittee shall not conduct Covered Activities during the breeding season of February 1 – August 31 within 1,640 feet (500 meters) of any occupied burrow or burrow complex at a Project construction site until young are fledged and are no longer dependent on adults, and the adults are no longer nesting. If Covered Activities cannot be avoided while BUOW are present on site, Permittee shall implement non-disturbance buffers (Condition of Approval 11.114), and the Designated Biologist(s) shall conduct monitoring consistent with Condition of Approval 11.116 until BUOW individuals leave the Project construction site and the non-disturbance buffer on their own volition.

11.114 Non-disturbance Buffers.
If an active nesting, roosting, or satellite burrow is identified in or within 1,640 feet (500 meters) of the Project construction site and work cannot be relocated or conducted outside of the breeding season (Condition of Approval 11.113), the Designated Biologist(s) shall establish a non-disturbance buffer of 1,640 feet (500 meters) around the burrow or the entire burrow complex to minimize any Project disturbance to BUOW habitat. The non-disturbance buffer during the breeding season may be reduced to a minimum of 656 feet (200 meters) around the burrow or the entire burrow complex after submittal, consultation, and approval of a buffer reduction request to CDFW (see Condition of Approval 11.114.1). If nesting BUOW burrows (e.g., burrows with any evidence of nesting including the presence of eggs, chicks, dependent young, and/or brooding or egg incubation) are discovered on or within 1,640 feet (500 meters) of the Project construction site after Covered Activities have been initiated, the Designated Biologist(s) has the authority to immediately stop Covered Activities, establish a non-disturbance buffer of at least 1,640 feet around the nesting burrow or burrow complex, and shall notify CDFW by phone and email within one business day.

If active roosting and satellite burrows are present in or within 656 feet (200 meters) of the Project construction site during the nonbreeding season, or if a known BUOW burrow (a burrow that shows evidence of current or past use or is known to have been used in the past) or an "atypical" burrow (e.g., a pipe, culvert, buckled concrete, etc.) is discovered, the Designated Biologist(s) shall establish a non-disturbance buffer of 656 feet around the burrow or burrow complex. If BUOW are visibly stressed by Covered Activities or the presence of Project personnel after the above non-disturbance buffers are established, all work in the vicinity of the burrow(s) shall immediately cease and non-disturbance buffer sizes shall increase as determined by the Designated Biologist(s) in consultation with CDFW based on continued monitoring of the affected BUOW individuals.

To the extent feasible, as demonstrated in the Phase Authorization Package (Condition of Approval 6.2), any potential or active BUOW nesting or overwintering sites shall be avoided by relocating work areas with flexible locations (e.g., preconstruction field investigations) outside of the applicable non-disturbance buffer. The Designated Biologist(s) shall clearly delineate the non-disturbance buffers using high-visibility stakes, flags, and/or rope or cord, limiting the materials necessary to mark the buffer to that which is necessary for identification of the site. Permittee shall change the method of marking the non-disturbance buffer if corvids, raptors, or other predators are observed perching on marking materials. Permittee shall remove and properly dispose of all materials used for delineation immediately upon completion of the Project. The buffer zone design and locations shall be submitted to CDFW for approval as part of the BUOW Mortality Reduction Plan (Condition of Approval 10.115), included as part of the Monthly Compliance Report (Condition of Approval 10.12), and summarized within each Annual Status Report (Condition of Approval 10.13). If BUOW burrows cannot be avoided with non-disturbance buffers, Permittee shall submit a BUOW Exclusion Activities Plan (Condition of Approval 11.117) to CDFW.

11.114.1 Non-Disturbance Buffer Reduction Requests. Non-disturbance buffers shall not be reduced or otherwise modified without prior written approval from CDFW. If the Designated Biologist(s) determines that specific Covered Activities are not likely to affect BUOW individuals based on behavioral assessments from burrow monitoring, level of disturbance, and objects or topography potentially reducing noise or visual disturbance to BUOW, and that burrows can be preserved and available to BUOW after Covered Activities have been completed with a smaller buffer, Permittee may submit a non-disturbance buffer reduction request to CDFW via email for written approval. Such requests shall include visual burrow identification (e.g., flagging) and continuous monitoring until Covered Activities are completed (Condition of Approval 11.116). The buffer reduction request shall include, at a minimum, a monitoring report from the Designated Biologist(s) or Biological Monitor(s) that documents the burrows for a minimum of 120 minutes twice per day for four days when owls are most active and/or no less than 72 hours of monitoring with an infrared camera or other tracking medium to determine if the BUOW have not displayed any courtship behavior and are not in the process of egg-laying or incubation, or all juveniles from the occupied burrows have fledged, are no longer dependent on parents, and have moved out of the Project construction site. CDFW will review each buffer reduction request on a case-by-case basis and provide a determination in response to each request in writing. CDFW may request additional and/or continued biological monitoring prior to or after approval of a buffer reduction request. All buffer reduction requests, associated documents, and subsequent buffers shall be included with the appropriate Monthly Compliance Reports (Condition of Approval 10.12) and the Annual Status Report (Condition of Approval 10.13).

11.115 BUOW Mortality Reduction Plan.
Permittee shall submit a BUOW Mortality Reduction Plan (BUOW Plan) as part of the appropriate Construction Phase Authorization Package (Condition of Approval 6.2) prior to the initiation of ground clearing or vegetation disturbing Covered Activities. The BUOW Plan shall describe mortality reduction strategies Permittee will implement at a Project construction site specific to Covered Activity and time of year. The BUOW Plan shall include but not be limited to the following components:

(1) Preconstruction habitat assessment results (Condition of Approval 11.110);

(2) Preliminary burrow mapping results based on breeding and nonbreeding surveys (Condition of Approval 11.111.1);

(3) Proposed non-disturbance buffers based on Covered Activity, time of year, and disturbance levels (Condition of Approval 11.114). This shall include buffer zone designs and locations;

(4) Site-specific monitoring protocols during Covered Activities (Condition of Approval 11.116);

(5) Detailed burrow exclusion, blockage, and excavation design and protocols (Condition of Approval 11.117) This shall include criteria, materials, timing, and other relevant information specific to each BUOW Exclusion Activity;

(6) Artificial burrow design and installation protocols (i.e., depth and width of burrow, width of burrow entrance, orientation of burrow entrance, number and placement of entrances, etc.);

(7) Procedures for the capture and handling of injured BUOW and the collection and storage of BUOW carcasses; and

(8) Identification of a wildlife rehabilitation center or veterinary facility capable of and willing to treat injured BUOW or care for at-risk BUOW, BUOW eggs, and/or BUOW chicks.

If any of the designs and methodologies must be modified due to site conditions, Permittee shall submit proposed revisions to the CDFW-approved plan, and justification, via email for CDFW review and written approval prior to initiating any of the modifications. Only CDFW-approved Designated Biologist(s), or personnel under the supervision of the Designated Biologist(s), are authorized to handle and transport injured BUOW for treatment or impacted BUOW eggs for salvage. All other BUOW handling or capture is prohibited. Once the Burrowing Owl Mortality Reduction Plan is approved by CDFW, it shall be used for the duration of the appropriate Phase Authorization Package.

11.116 BUOW Monitoring.
The Designated Biologist(s) and/or Biological Monitor(s) shall be present at all times during Covered Activities to monitor the behavior of any burrowing owls present within the approved non-disturbance buffer of Covered Activities, and to monitor any blocked or excavated burrows (see Conditions of Approval 11.117.3 and 11.118.4). The Designated Biologist(s) and/or Biological Monitor(s) shall have the authority to issue a stop work order if BUOW exhibits distress and/or abnormal behavior (e.g., excessive vocalizations, defensive flights at intruders, flushing frequently, failure to deliver prey items, or otherwise displaying agitated behavior) from Covered Activities. Permittee shall not resume Covered Activities until the Designated Biologist(s) has consulted with CDFW and both the Designated Biologist(s) and CDFW confirm that the BUOW's behavior has normalized. CDFW, in consultation with the Designated Biologist(s), shall determine whether to increase the size of the non-disturbance buffer. Site-specific BUOW monitoring protocols shall be submitted for written approval as part of the Mortality Reduction Plan (Condition of Approval 11.115). Monitoring protocols for each Burrowing Owl Exclusion Activity shall be submitted as part of the BUOW Exclusion Activities Plan (Condition of Approval 11.117). All monitoring records shall be included within the appropriate Monthly Compliance Reports (Condition of Approval 10.12) and summarized in the Annual Status Report (Condition of Approval 10.13). Monitoring records shall include but not be limited to any previously available observational data; date and location of observations; the number of individuals observed; the approximate age of each individual observed; owl and/or fledgling behavior; whether or not nests were successful for that year in the appropriate

Annual Status Reports; type of Covered Activities occurring at the time of monitoring; whether burrow(s) were blocked or excavated; and the date(s) of when blocked burrows were unblocked (see Condition of Approval 11.117.3).

11.116.1 *BUOW Presence in Active Project Construction Site*. During Project activities, if changes in BUOW presence (e.g., BUOW have moved onsite or changed burrow use) are detected by the Designated Biologist(s), Biologist Monitor(s), or other Project personnel, the Designated Biologist(s) or Biological Monitor(s) shall have the authority to issue a stop-work order. All Covered Activities with potential to take BUOW in an active Project construction site, as determined by the Designated Biologist(s), shall cease until the owl(s) moves away from activities on its own. If the individual(s) do not move out of the Project construction site, the Designated Biologist(s) shall make reasonable effort to locate the active burrow(s) and establish appropriate BUOW non-disturbance buffers (see Condition of Approval 11.114) around the new presence or contact CDFW by phone or email within 24 hours (one calendar day) of the observation to consult on the appropriate measures to minimize impacts of Covered Activities to the BUOW individuals. If vegetation or fossorial mammal burrows become reestablished in an area previously disturbed by Covered Activities, then the Designated Biologist(s) shall resurvey these areas prior to reinitiating Covered Activities to ensure any Covered Species are not in harm's way.

11.117 BUOW Exclusion Activities.
Thirty (30) days prior to commencing Covered Species burrow blockage, eviction, burrow excavation, artificial burrow construction and installation, and other BUOW exclusion activities (collectively termed BUOW Exclusion Activities), Permittee shall submit a BUOW Exclusion Activities Plan to CDFW for written approval. The BUOW Exclusion Activities Plan shall include, but not be limited to, the following components:

(1) The appropriate Designated Biologist(s) for BUOW Exclusion Activities;

(2) Habitat assessment(s) and burrow complex maps specific to the occupied site anticipated for BUOW Exclusion Activities and proposed locations for artificial burrows/recipient sites (i.e., habitat description, soil and vegetation assessment, prey base, ground squirrel presence, potential predators and predator perches, susceptibility to flooding);

(3) Description of the proposed BUOW Exclusion Activities;

(4) Monitoring reports summarizing the behavior of BUOW on-site proposed for BUOW Exclusion Activities;

(5) Site-specific protocols for monitoring BUOW and blocked or excavated burrows pre- and post-BUOW Exclusion Activities; and

(6) Long-term monitoring and maintenance protocols of artificial burrows including protocols for vegetation maintenance and predator management.

BUOW Exclusion Activities shall not occur until CDFW has approved the BUOW Exclusion Activities Plan. Any Permittee-proposed changes to the BUOW Exclusion Activities Plan shall be submitted, in writing, to CDFW and approved by CDFW in writing prior to the implementation of any proposed modifications. Prior to conducting any BUOW Exclusion Activities, the Designated Biologist(s) shall conduct a habitat assessment of proposed recipient site(s) (see Condition of Approval 11.110) to ensure there is suitable habitat (adequately available burrows or artificial burrows) within 328 feet (100 meters) dispersal distance of the impacted burrow(s), or further with written approval from CDFW. Burrows (including burrows in natural substrate and in/under man-made structures) may be blocked or excavated by the Designated Biologist(s) following the approved BUOW Exclusion Activities Plan after the Designated Biologist(s) has monitored the selected burrows for a minimum of 120 minutes twice per day for four days when owls are most active and/or no less than 72 hours of monitoring with an infrared camera or other tracking medium, and has determined that BUOW are not currently present. Permittee shall not destroy, modify, or exclude BUOW from burrows that are beyond the direct Project construction site footprint of ground disturbance to preempt their use and burrow non-disturbance buffer establishment. Established BUOW non-disturbance buffers may be removed once the burrow is fully excavated and the Designated Biologist(s) has observed that BUOW are no longer attempting to use the burrow.

11.117.1 *BUOW Exclusion*. Permittee shall not exclude BUOW from burrows where there is evidence of nesting activity (sign is present, burrow contains eggs and/or flightless young, or two or more owls have been seen at the entrance or carrying prey) during the breeding season. If Covered Activities cannot be avoided while burrowing owls are present within a Project construction site during the nonbreeding season, Permittee shall implement exclusion protocols as approved by CDFW in the Phase-appropriate BUOW Exclusion Activities Plan (Condition of Approval 11.117). Notice of intent to evict owls from burrows shall be provided to CDFW via email at least 48 hours prior to proceeding with the installation of one-way doors. If a burrowing owl needs to be evicted from an occupied burrow and this cannot be avoided during the breeding season, the Designated Biologist(s) shall monitor the burrow(s) for a minimum of two hours per day for four consecutive days at sunrise and/or sunset or install a tracking medium or 24-hour infrared camera to monitor burrow activity. The Designated Biologist(s) shall remain at a distance that will allow for clear observation but not disturb the owls. Eviction may proceed only after the Designated Biologist(s) has determined that the burrow occupants consist of a single adult and the burrow does not contain an active nest. After monitoring, if it is determined that the burrow does not contain an active nest, the Designated Biologist(s) shall determine via close inspection and scoping whether the burrow is active. Once the burrow is determined to no longer be active, a one-way door shall be placed over the burrows for a maximum of 72 hours. Exclusion from burrows shall occur during morning hours or on cooler days and shall not occur when temperatures exceed 85 ˚F

(Condition of Approval 11.117.5). One-way doors shall be inspected at least twice daily to ensure they are functioning properly and for any signs owls may be trapped inside. The exclusion process shall be reinitiated as described above if an owl is found inside the burrow. After the doors have been in place for seven days and the burrow has been observed to be empty, the Designated Biologist(s) shall monitor to ensure no eggs or animals are present in the burrow using a tracking medium or 24-hour infrared camera. The burrow shall be blocked or hand excavated once it is determined that it is empty and owls are no longer attempting to reenter the burrow. Evicted BUOW shall be continuously monitored at the recipient site(s) for two weeks by the Designated Biologist(s). If the location of the evicted owl(s) cannot be determined, the Designated Biologist(s) with assistance (if needed) from the Biological Monitor(s) shall survey the habitat within 1,640 feet (500 meters) of the active Project construction site. The Designated Biologist(s) shall document the location of any known evicted BUOW, and a report shall be provided to CDFW within the subsequent Monthly Compliance Reports (Condition of Approval 10.12) summarizing the exclusion effort following the two weeks of continuous monitoring. Photographs of the eviction process, including the location of the initial burrow, one-way door installation and monitoring, excavation and closure process, removal of owl habitat, and the area the individual(s) relocated to (if possible) shall be included in the report. Excluded owls shall be periodically monitored by the Designated Biologist(s) and/or Biological Monitor(s) for the remaining duration of the Phase, focusing on the location of the owls and documenting potential breeding. All monitoring records shall be summarized within the appropriate Monthly Compliance Reports (Condition of Approval 10.12) and summarized in the Annual Status Report (Condition of Approval 10.13).

11.117.2 *Artificial Burrow Installation and Site Modification*. If destruction of occupied burrows (occupied within the last three years) cannot be avoided and the Designated Biologist(s) cannot determine that suitable unoccupied burrows exist outside of the Project area but are close enough to be useful to excluded burrows, Permittee shall install artificial burrow complexes within 328 feet (100 meters) of the original burrow(s)/burrow complex, or further if necessary with CDFW written approval. Permittee shall ensure that at least two suitable alternate burrows are available for each excavated occupied burrow or evicted BUOW. Artificial burrows shall be installed 21 days prior to initiating any BUOW Exclusion Activities. Artificial burrow installation shall be on-site or within 328 feet (100 meters) where suitable nesting, wintering, and foraging habitat will remain on-site and can be enhanced with artificial burrows to the extent feasible. These sites shall be protected and maintained throughout the duration of Covered Activities. Permittee shall submit artificial burrow design and installation protocols as part of the BUOW Mortality Reduction Plan (Condition of

Approval 11.115) consistent with Appendix E of the Staff Report on Burrowing Owl Mitigation[53] or the most recently available CDFW-approved guidelines.

11.117.3 *Burrow Blockage*. Burrows within areas of temporary impacts shall be blocked by installing an object (e.g., sandbags), then unblocked and made available for use immediately after Covered Activities within 1,640 feet (500 meters) feet of burrow habitat(s) or a reduced non-disturbance buffer (Condition of Approval 11.114.1) are completed and the Designated Biologist(s) has determined that potential resumed use of the burrow will not result in harm to BUOW. Nesting BUOW burrows shall not be blocked until survey and camera monitoring confirm adults and young have vacated the burrow and nestlings are fully fledged, independently foraging, and no longer dependent on the adults or burrow complex. Burrow blockage materials and protocols shall be provided to CDFW for written approval in the BUOW Mortality Reduction Plan (Condition of Approval 11.115). Burrow blockage shall be conducted in a manner that prevents burrowing animals from reentering the burrow. All blocked burrows shall be monitored by the Designated Biologist(s) and/or Biological Monitor(s) following the approved monitoring protocols in the BUOW Exclusion Activities Plan (Condition of Approval 11.117) at a minimum of twice a week for the duration of that Phase to ensure exclusion material is still intact. If any Covered Species regains access to the burrow, Permittee shall contact CDFW immediately and obtain written guidance on how best to proceed.

11.117.4 *Burrow Excavation and Monitoring*. Permittee shall avoid destroying any known or potential BUOW burrows unless they are in an area of direct ground disturbance (e.g., grading areas, excavation areas) or their location poses a risk of direct harm to BUOW individuals. Permittee shall not excavate active breeding BUOW burrows until the nestlings are fully fledged, are independently foraging, and are no longer dependent on the adults or burrow complex. The Designated Biologist(s), or Biological Monitor(s) under direct supervision of the Designated Biologist(s), shall hand excavate potential or known BUOW burrows (exhibiting signs of current or past BUOW use or have BUOW burrow characteristics) that cannot be avoided within the footprint of permanent ground-disturbing activities during the nonbreeding season (September 1 – January 31) only after the Designated Biologist(s) has installed one-way doors for up to 72 hours, monitored the burrows according to Condition of Approval 11.116, and scoped the burrow to determine that BUOW are not currently present and the burrow is inactive. One-way doors shall be removed if temperatures exceed 85 ˚F (see Condition of Approval 11.117.5). Potential BUOW burrows without any signs of BUOW use or characteristics suggesting it is a BUOW burrow or other burrowing Covered Species may be

[53] California Department of Fish and Game (2012). Staff Report on Burrowing Owl Mitigation Appendix E. March 2012. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline.

excavated under the direct supervision of the Designated Biologist(s) without prior camera monitoring. Burrow excavation shall be accomplished by careful hand excavation of the entire length of the burrow, until it is certain no individuals are inside. Burrows shall then be filled with soil and compacted to ensure that BUOW cannot reenter or use the burrow during Covered Activities. If the excavation process reveals BUOW eggs, young, or adults, then burrow excavation shall cease immediately, and monitoring shall be resumed. Permittee shall contact CDFW by phone or email within one business day of the observation to obtain written guidance prior to proceeding with burrow filling if an individual BUOW does not vacate the partially excavated burrow within the notification period. Work shall not resume until CDFW guidance has been obtained by the Permittee and the BUOW has successfully vacated the burrow.

11.117.5 *Offset Temperature Stress*. To the greatest extent practicable, BUOW exclusion activities shall take place during a three- to four-day period where temperatures are expected to remain below 85 ˚F. If temperatures of 85 ˚F or higher cannot be avoided, the burrows undergoing exclusion shall be continuously monitored by the Biological Monitor(s) while the exclusion activity proceeds. If an owl is observed standing outside of a closed-door burrow (i.e., trying to get back in or not leaving the area of the burrow) after air temperatures reach 85 ˚F, the one-way door(s) used for exclusion shall be opened to allow BUOW individuals to return to an open burrow. Doors shall remain open and passive relocation activities shall be paused for three days (72 hours) to minimize any potential stress to the owl(s). In addition, if temperatures are anticipated to reach or exceed 85 ˚F during exclusion activities, additional temporary shade sources shall be created. One artificial shade structure per occupied burrow undergoing exclusion shall be created in an area outside of Project activities within 1,640 feet (500 meters) of the primary/natal burrow. Artificial shades shall consist of a two- to three-foot long pipe approximately 12 inches in diameter, placed under two to three feet of dirt. One side of the pipe shall remain open to allow BUOW individuals access to the shade structure. The temporary shade structures shall remain onsite for up to one week after exclusion activities and be removed prior to any potential rain events.

11.118 Notification of BUOW Take or Injury.
Permittee shall immediately notify the Designated Biologist(s) if a BUOW is taken or injured by a Covered Activity, or if a BUOW is otherwise found dead or injured within the vicinity of a Project preconstruction activity, construction site, or maintenance area. The Designated Biologist(s) shall immediately take the BUOW to a CDFW-approved wildlife rehabilitation or veterinary facility identified in the BUOW Mortality Reduction Plan (Condition of Approval 11.115) and contact the CDFW Representative, via email and telephone, within one business day to discuss the next steps. If nestling(s) or egg(s) are abandoned, the Designated Biologist(s) shall recover the nestling(s) or egg(s) and immediately take it to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall bear any cost associated with care and recovery of any injured BUOW adults, nestling(s) or

egg(s) and hacking (controlled release of captive reared young). The Designated Biologist(s) shall immediately notify CDFW (within 24 hours) if nesting BUOW abandon the nest or exhibit distress and/or abnormal nesting behavior. Abnormal behavior includes, but is not limited to, head-bobbing, excessive vocalization (distress calls), agitation, failure to remain in nest, and failure to deliver prey items for an extended time period. The Designated Biologist(s) or Designated Representative shall provide initial notification to CDFW by contacting the CDFW Representative. The initial notification to CDFW shall include information regarding the location, species, date, and circumstances of the event (e.g., time when the individual was found, number of animals taken or injured, description of abnormal nesting behavior, etc.), the name of the facility where the animal was taken if applicable, and the ITP Number. Following initial notification, Permittee shall send a written incident report within two business days to the CDFW Representative. The incident report shall include the ITP number, date and time of the finding or incident, disposition of the BUOW, geo-referenced location of the animal or carcass (Project name, County, GPS location, and GPS datum), sex (if known), life stage/age class (if known), observer name and contact information, the name of the facility where the animal was taken, any photographs of the animal or the site it was found, explanation as to cause of take, injury, or nesting disturbance, and any other pertinent information. The written incident report shall also be included in the Monthly Compliance Report (Condition of Approval 10.12). The Designated Biologist or Designated Representative shall provide weekly updates on the status of the rehabilitation facility's treatment of the individual to CDFW.

11.119 Detering Predator Attraction.
Permittee shall avoid attracting BUOW predators to each Project construction site for all Project phases. Permittee shall modify Project-related tall structures (i.e., buildings and towers), fences, monitoring devices, or other materials that could be used as perches for ravens, great horned owls, hawks, and eagles to discourage perching within 1,640 feet (500 meters) of suitable BUOW habitat. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs (Condition of Approval 11.20). Plastic water bottles and plastic bags shall be removed daily. Permittee shall ensure all trash is removed from the Project construction site or firmly secured daily. Large equipment that is not in use for multiple days shall be covered or stored away from BUOW complexes to prevent avian predators from using large equipment as perches.

29. The following Conditions of Approval numerals shall be amended to accommodate the addition of BUOW Conditions of Approval as follows:

Condition of Approval	2081-2024-018-00	2081-2024-018-00-A1
Velocity Requirements at North Delta Intakes	11.109	11.120

Condition of Approval	2081-2024-018-00	2081-2024-018-00-A1
No Diversions Without North Delta Intake Screens	11.109.1	11.120.1
Phase 1 and Phase 2 Authorized Operations	11.110	11.121
Diversion Criteria	11.111	11.122
June Operations	11.111.1	11.122.1
Seasonal Operations of the North Delta Intakes	11.111.2	11.122.2
North Delta Diversion Monitoring Team	11.111.3	11.122.3
Chartering the North Delta Diversion Monitoring Team	11.111.4	11.122.4
Collaborative Approach to Real-time Decision Making	11.111.5	11.122.5
Salmon Presence Off-ramp	11.111.6	11.122.6
Reservoir Storage	11.112	11.123
Shifting During Balanced Conditions	11.113	11.124
Additional Diversions from North Delta Intakes	11.114	11.125
Delta Smelt and Longfin Smelt Biological Criteria	11.115	11.126
Smelt Biological Criterion 1	11.115.1	11.126.1
Smelt Biological Criterion 2	11.115.2	11.126.2
Winter- and Spring-run Chinook Salmon Biological Criteria	11.116	11.127
Salmonid Biological Criterion 1	11.116.1	11.127.1
Salmonid Biological Criterion 2	11.116.2	11.127.2
White Sturgeon Biological Criterion 1	11.117.1	11.128.1
White Sturgeon Biological Criterion 2	11.117.2	11.128.2
Compensatory Mitigation for Delta Smelt and Longfin Smelt	12.6	12.7
Mitigation for Impacts on DS and LFS Associated with Project Construction	12.6.1	12.7.1
Mitigation for Impacts on Delta Smelt Associated with Phase 1 and Phase 2 Project Operations	12.6.2	12.7.2
Delta Smelt Summer–Fall Habitat Action	12.6.3	12.7.3
Mitigation for Impacts on Longfin Smelt Associated with Phase 1 and Phase 2 Project Operations	12.6.4	12.7.4

Condition of Approval	2081-2024-018-00	2081-2024-018-00-A1
Spring Longfin Smelt Distribution	12.6.5	12.7.5
Longfin Smelt Refugial Population Establishment and Management	12.6.6	12.7.6
Compensatory mitigation for CHNWR and CHNSR	12.7	12.8
Mitigation for Impacts on CHNWR and CHNSR Associated with Project Construction	12.7.1	12.8.1
Mitigation for Impacts on CHNWR and CHNSR Associated with Phase 1 and Phase 2 Project Operations	12.7.2	12.8.2
Compensatory mitigation for White Sturgeon (WS)	12.8	12.9
Mitigation for Impacts on WS Associated with Project Construction	12.8.1	12.9.1
Mitigation for Impacts on WS Associated with Phase 1 and Phase 2 Project Operations	12.8.2	12.9.2
Cost Estimates	12.9	12.10
Land Acquisition	12.9.1	12.10.1
Start-up costs	12.9.2	12.10.2
Management Funding	12.9.3	12.10.3
Transaction Fees	12.9.4	12.10.4
On-Site Restoration Costs	12.9.5	12.10.5
Covered Species Credits	12.10	12.11
Habitat Management Lands Acquisition and Protection	12.11	12.12
Fee Title	12.11.1	12.12.1
Conservation Easement	12.11.2	12.12.2
HM Lands Approval	12.11.3	12.12.3
HM Lands Documentation	12.11.4	12.12.4
Land Manager	12.11.5	12.12.5
Start-up Activities	12.11.6	12.12.6
Interim Management (Initial and Capital)	12.11.7	12.12.7
In-Perpetuity Management Funding	12.12	12.13
Identify an Endowment Manager	12.12.1	12.13.1
Calculate the Endowment Funds Deposit	12.12.2	12.13.2
Capitalization Rate and Fees	12.12.2.1	12.13.2.1

Condition of Approval	2081-2024-018-00	2081-2024-018-00-A1
Endowment Buffers/Assumptions	12.12.2.2	12.13.2.2
10 Percent Contingency	12.12.2.2.1	12.13.2.2.1
Three Years Delayed Spending	12.12.2.2.2	12.13.2.2.2
Non-annualized Expenses	12.12.2.2.3	12.13.2.2.3
Management of the Endowment	12.12.3	12.13.3
Reimburse CDFW	12.13	12.14

In-text references to the aforementioned Conditions of Approval shall also be revised in the ITP.

30. Table 12-1 (Permanent and Temporary Project Construction Impacts and Associated Compensatory Mitigation Acres for Covered Species) in Condition of Approval 12, *Habitat Management Land Acquisition and Restoration*, shall be amended to include Western burrowing owl as follows:

Table 12-1. Permanent and Temporary Project Construction Impacts and Associated Compensatory Mitigation Acres for Covered Species.

Impact Type	**Acres** (unless noted otherwise)
California tiger salamander (*Ambystoma californiense)*	
Permanent aquatic habitat non-CDFW lands	0.20
Permanent aquatic habitat CDFW lands	0.00
Permanent upland habitat non-CDFW lands	68.37
Permanent upland habitat CDFW lands	4.04
Required compensatory mitigation for impacts non-CFDW lands	*0.60 aquatic* *205.11 upland*
Required compensatory mitigation for impacts CDFW-lands	*20.20 upland*
Total required compensatory mitigation	**0.60 aquatic** **225.31 upland**
Temporary upland habitat non-CDFW lands	18.21
Temporary upland habitat CDFW lands	0.87
Required on-site restoration for impacts non-CDFW lands	*18.21 upland*
Required on-site restoration for impacts CDFW lands	*1.74 upland*

Impact Type	**Acres** (unless noted otherwise)
Total required on-site restoration	**19.95 upland**
Giant garter snake (*Thamnophis gigas*)	
Permanent aquatic habitat non-CDFW lands	22.83
Permanent aquatic habitat CDFW lands	0.83
Permanent upland habitat non-CDFW lands	96.29
Permanent upland habitat CDFW lands	1.59
Required compensatory mitigation non-CDFW lands	*68.49 aquatic* *288.87 upland*
Required compensatory mitigation CDFW lands	*4.15 aquatic* *7.95 upland*
Total required compensatory mitigation	**72.64 aquatic** **296.82 upland**
Temporary aquatic habitat non-CDFW lands	13.70
Temporary aquatic habitat CDFW lands	0.18
Temporary upland habitat non-CDFW lands	37.36
Temporary upland habitat CDFW lands	0.34
Required on-site restoration non-CDFW lands	*13.70 aquatic* *37.36 upland*
Required on-site restoration CDFW lands	*0.36 aquatic* *0.68 upland*
Total required on-site restoration	**14.06 aquatic** **38.04 upland**
Swainson's hawk (*Buteo swainsoni*)	
Permanent foraging habitat non-CDFW lands	1,916.41
Permanent foraging habitat CDFW lands	4.17
Permanent nesting habitat non- CDFW lands	22.01
Permanent nesting habitat CDFW lands	2.38
Required compensatory mitigation non-CDFW lands	*1,916.41 foraging* *22.01 nesting*
Required compensatory mitigation CDFW lands	*12.51 foraging* *11.90 nesting*
Total required compensatory mitigation	**1,928.92 foraging** **33.91 nesting**
Temporary foraging habitat non-CDFW lands	161.81
Temporary foraging habitat CDFW lands	0.90
Temporary nesting habitat non-CDFW lands	8.09
Temporary nesting habitat CDFW lands	0.51

Impact Type	**Acres** (unless noted otherwise)
Required on-site restoration non-CDFW lands	*161.81 foraging* *8.09 nesting*
Required on-site restoration CDFW lands	*1.80 foraging* *1.02 nesting*
Total required on-site restoration	**163.61 foraging** **9.11 nesting**
Tricolored blackbird (*Agelaius tricolor*)	
Permanent nesting habitat non-CDFW lands *(previously occupied colonies and potentially suitable colonies)*	7.98
Permanent nesting habitat CDFW lands *(previously occupied colonies and potentially suitable colonies)*	0.62
Permanent breeding foraging habitat non-CDFW lands	1,725.32
Permanent breeding foraging habitat CDFW lands	7.27
Permanent nonbreeding foraging habitat non-CDFW lands	1,725.32
Permanent nonbreeding foraging habitat CDFW lands	7.27
Required compensatory mitigation non-CDFW lands	*23.9 ~~47.98~~ nesting* *1,725.32 breeding foraging* *1,725.32 nonbreeding foraging*
Required compensatory mitigation CDFW lands	*3.72 nesting* *29.08 breeding foraging* *14.54 nonbreeding foraging*
Total required compensatory mitigation	**~~11.70~~ 27.66 nesting** **1,754.40 breeding foraging** **1,739.86 nonbreeding foraging**
Temporary nesting habitat non-CDFW lands *(previously occupied colonies and potentially suitable colonies)*	1.88
Temporary nesting habitat CDFW lands *(previously occupied colonies and potentially suitable colonies)*	0.13

Impact Type	**Acres** (unless noted otherwise)
Temporary breeding foraging habitat non-CDFW lands	180.05
Temporary breeding foraging habitat CDFW lands	1.57
Temporary nonbreeding foraging habitat non-CDFW lands	180.05
Temporary nonbreeding foraging habitat CDFW lands	1.57
Required on-site restoration non-CDFW lands	*1.88 nesting* *180.05 breeding foraging* *180.05 nonbreeding foraging*
Required on-site restoration CDFW lands	*0.26 nesting* *3.14 breeding foraging* *3.14 nonbreeding foraging*
Total required on-site restoration	**2.14 nesting** **183.19 breeding foraging** **183.19 nonbreeding foraging**
Crotch bumble bee (*Bombus crotchii*)	
Permanent suitable habitat non-CDFW lands (*all life stages*)	129.64
Permanent suitable habitat CDFW lands (*all life stages*)	7.25
Required compensatory mitigation non-CDFW lands	**129.64**
Required compensatory mitigation CDFW lands	**29.00**
Total required compensatory mitigation	**158.64**
Temporary habitat (*all life stages*) non-CDFW lands	49.17
Temporary habitat (*all life stages*) CDFW lands	1.57
Required on-site restoration non-CDFW lands	*49.17*
Required on-site restoration CDFW lands	*3.14*
Total required on-site restoration	**52.31**
Mason's lilaeopsis (*Lilaeopsis masonii*)	
Permanent suitable habitat non-CDFW lands (*all life stages*)	2.12

Impact Type	**Acres** (unless noted otherwise)
Permanent suitable habitat CDFW lands (*all life stages*)	0.05
Required compensatory mitigation non-CDFW lands	*2.12*
Required compensatory mitigation CDFW lands	*0.15*
Total required compensatory mitigation	**2.27**
Temporary habitat *(all life stages)* non-CDFW lands	0.42
Temporary habitat (*all life stages*) CDFW lands	0.01
Required on-site restoration non-CDFW lands	*0.42*
Required on-site restoration CDFW lands	*0.02*
Total required on-site restoration	**0.44**
Delta smelt (*Hypomesus transpacificus*)	
Permanent tidal perennial habitat	5.57
Permanent shallow spawning habitat	500.6
Total required compensatory mitigation – permanent impacts	**16.71 tidal perennial 1,501.80 shallow spawning**
Temporary tidal perennial habitat	1.55
Total required compensatory mitigation – temporary impacts	**1.55 tidal perennial**
Longfin smelt (*Spirinchus thaleichthys*)	
Permanent tidal perennial habitat	5.57
Permanent shallow spawning habitat	500.6
Total required compensatory mitigation – permanent impacts	**16.71 tidal perennial 1,501.80 shallow spawning**
Temporary tidal perennial habitat	1.55
Total required compensatory mitigation – temporary impacts	**1.55 tidal perennial**
Winter-run Chinook salmon (*Oncorhynchus tshawytscha*)	
Permanent tidal perennial habitat	5.57
Permanent channel margin habitat	3,124 linear feet

Impact Type	**Acres** (unless noted otherwise)
Total required compensatory mitigation – permanent impacts	**16.71 tidal perennial** **9,372 linear feet channel margin**
Temporary tidal perennial habitat	1.55
Temporary channel margin habitat	494 linear feet
Total required compensatory mitigation – temporary impacts	**1.55 tidal perennial** **494 linear feet channel margin**
Spring-run Chinook salmon (*Oncorhynchus tshawytscha*)	
Permanent tidal perennial habitat	5.57
Permanent channel margin habitat	3,124 linear feet
Total required compensatory mitigation – permanent impacts	**16.71 tidal perennial** **9,372 linear feet channel margin**
Temporary tidal perennial habitat	1.55
Temporary channel margin habitat	494 linear feet
Total required compensatory mitigation – temporary impacts	**1.55 tidal perennial** **494 linear feet channel margin**
White Sturgeon (*Acipenser transmontanus*)	
Permanent tidal perennial habitat	5.57
Permanent channel margin habitat	3,124 linear feet
Total required compensatory mitigation – permanent impacts	**16.71 tidal perennial** **9,372 linear feet channel margin**
Temporary tidal perennial habitat	1.55
Temporary channel margin habitat	494 linear feet
Total required compensatory mitigation - temporary impacts	**1.55** **494 linear feet**
Western Burrowing Owl (*Athene cunicularia hypugaea*)	
Permanent nesting, foraging, wintering, and dispersal habitats on non-CDFW lands	2,068.11
Permanent nesting, foraging, wintering, and dispersal habitats on CDFW lands	7.39

Impact Type	**Acres** (unless noted otherwise)
Required compensatory mitigation non-CDFW lands	6,204.33
Required compensatory mitigation CDFW lands	44.34
Total required compensatory mitigation	**6,248.67**
Temporary nesting, foraging, wintering, and dispersal habitat on non-CDFW lands	208.05
Temporary nesting, foraging, wintering, and dispersal habitat on CDFW lands	1.60
Required on-site restoration non-CDFW lands	208.05
Required on-site restoration CDFW lands	3.20
Total required on-site restoration	**211.25**

For the purposes of this requirement, CDFW lands include those lands owned by CDFW and lands subject to a conservation easement to which CDFW is a grantee or third-party beneficiary. These include the Bethany Reservoir Conservation Easement, Woodbridge Ecological Reserve, Cosumnes River Ecological Reserve or any adjacent lands protected by CDFW.

31. Condition of Approval 12.4, *Install and Maintain Bird Strike Diverters on Transmission Lines in the Project Area*, shall be amended to read as follows:

12.4 Install and Maintain Bird Strike Diverters on Transmission Lines in the Project Area.
Permittee shall install bird strike diverters on newly constructed and existing transmission lines within the Project Area as a part of Covered Activities and shown in Attachment 1, Figures 5 and 6 consistent with Condition of Approval 11.17.1. Permittee shall submit a plan describing the location and type of bird strike diverters installed as compensatory mitigation for impacts to SWHA ~~and,~~ TRBL, and BUOW to CDFW for review and approval as part of the appropriate Construction Phase Authorization Package (Condition of Approval 6.2). Upon written approval of the Plan by CDFW, Permittee shall install and maintain all bird strike diverters.

32. Section VIII, *Conditions of Approval*, subsection 12, *Take Minimization Measures*, shall be amended to add *Western Burrowing Owl (BUOW) Measures* including the following.

12.6 Compensatory Mitigation for Western Burrowing Owl.
Currently available geospatial maps of the Project Area incorporate an array of potential suitable habitat assessed using vegetation classifications consistent with Condition of Approval 10.4 (Suitable Habitat Monitoring) and Attachment 5. Based on an analysis of available geospatial maps, Covered Activities are expected to result in the following impacts to BUOW nesting, foraging, wintering, and dispersal habitats: permanent loss of 2,068.11 acres on non-CDFW lands, permanent loss of 7.39 acres on CDFW lands, temporary loss of 208.05 acres on non-CDFW lands, and temporary loss of 1.60 acres on CDFW lands (see Table 12-1). As a result, the current total compensatory mitigation requirement is 6,248.67 acres and the total on-site restoration mitigation requirement is 211.25 acres based on available geospatial models, in the absence of site-specific surveys for BUOW suitable habitat (see Table 12-1). As described in Conditions of Approval 6.2 (Construction Phase Authorization Package) and 12 (Habitat Management Land Acquisition and Restoration), Permittee shall calculate the total impacts on BUOW and the corresponding amount of compensatory mitigation, on-site restoration, or other mitigation obligations required for each Phase of the Project prior to the beginning of each Phase, which calculation shall be included in the Phase Authorization Package submitted to CDFW for review and approval. Permittee may request an amendment if actual impacts as documented in the Phase Authorization packages are less than anticipated in the ITP based on updated information, including site surveys. Amendments shall also be required if impacts are greater than anticipated. Impacts to BUOW shall be assessed using site-specific surveys for suitable habitat consistent with Conditions of Approval 10.4 (Suitable Habitat Monitoring) and 10.8 (Habitat Evaluation) and using survey protocol approved by CDFW as described in Condition of Approval 11.38.

33. Section XIII, *Compliance with the California Environmental Quality Act*, has been amended as follows:

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 Delta Conveyance Project Final Environmental Impact Report, (SCH No.: 2020010227)] dated December 2023 that DWR certified for the Project on December 21, 2023, ~~and~~ the 2024 first addendum, and the 2025 second addendum thereto. 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.

Furthermore, CDFW finds that the addition of BUOW to the Covered Species in this Amended ITP does not result in the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code § 21166 or Cal. Code Regs., tit. 14 § 15162 and § 15163. While BUOW was not considered a candidate for listing under the California Endangered Species Act (CESA) at the time of the EIR's certification, the EIR analyzed the Project's impacts and includes measures to avoid, minimize, and mitigate impacts to the species.

34. Attachment 4, *HM Lands Criteria*, Attachment 5*, Baseline Species Maps*, and Attachment 6, *Phase Authorization Form*, were revised to include western burrowing owl.

35. The Attachments section has been amended as follows:

ATTACHMENT 1	Maps (February 14, 2026)
ATTACHMENT 2	MMRP (March 24, 2026)
ATTACHMENT 3	Biologist Resume Form (March 24, 2026)
ATTACHMENT 4	HM Lands Criteria (March 24, 2026)
ATTACHMENT 5	Baseline Species Maps (March 24, 2026)
ATTACHMENT 6	Phase Authorization Form (March 24, 2026)
ATTACHMENT 7	Amendments (March 24, 2026)