

State of California
Department of Fish and Wildlife



Memorandum

Date: March 24, 2021

To: Mr. Dan Riordan, Branch Chief
Department of Water Resources
3500 Industrial Boulevard
West Sacramento, CA 95691
Dan.Riordan@water.ca.gov

DocuSigned by:

Gregg Erickson

From: Mr. Gregg Erickson, Regional Manager
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: Incidental Take Permit for 2081-2020-031-03 Lookout Slough Tidal Habitat Restoration and Flood Improvement Project, Solano County

Enclosed you will find an electronic copy of the incidental take permit for the above referenced Project, which has been digitally signed by the California Department of Fish and Wildlife (CDFW). Please read the permit carefully, sign the acknowledgement, and return the original **no later than 30 days from CDFW signature**, and prior to initiation of ground-disturbing activities. You may return an electronic copy of the permit with digital signature to CESA@wildlife.ca.gov. Digital signatures shall comply with Government Code section 16.5. Alternatively, you may return a hard copy of the permit via mail to:

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

You are advised to keep the permit in a secure location and distribute copies to appropriate project staff responsible for ensuring compliance with the conditions of approval of the permit. Note that you are required to comply with certain conditions of approval prior to initiation of ground-disturbing activities. Additionally, a copy of the permit must be maintained at the project work site and made available for inspection by CDFW staff when requested.

The permit will not take effect until the signed acknowledgement is received by CDFW. If you wish to discuss these instructions or have questions regarding the permit, please contact Mr. Andy Rockriver, Senior Environmental Scientist (Specialist), at (209) 234-3433 or Andy.Rockriver@wildlife.ca.gov; or Ms. Gina Van Klompenburg, Senior Environmental Scientist (Supervisory), at (209) 234-3432 or Gina.VanKlompenburg@wildlife.ca.gov.

Enclosures

ec: Stephanie Freed, EIP Credit III Co, LLC – Stephanie@ecosystempartners.com
Bonnie Irving, Department of Water Resources – Bonnie.Irving@water.ca.gov



**California Department of Fish and Wildlife
Bay Delta Region
2825 CORDELIA ROAD, SUITE 100
FAIRFIELD, CA 94534**

California Endangered Species Act and
California Native Plant Protection Act

Incidental Take Permit No. 2081-2020-031-03

**LOOKOUT SLOUGH TIDAL HABITAT RESTORATION AND
FLOOD IMPROVEMENT PROJECT**

Authority: This California Endangered Species Act (CESA) and Native Plant Protection Act (NPPA) Incidental Take Permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code sections 1907 and 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, sections 786.9 and 783.0 et seq. CESA prohibits the take¹ of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species and the Native Plant Protection Act prohibits the take of any endangered or rare native plant.² CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code sections 1907 and 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, §§ 786.9 and 783.4).

Permittee:	Department of Water Resources
Principal Officer:	Dan Riordan, Branch Chief
Contact Person:	Stephanie Freed, EIP III Credit Co., LLC, (415) 990-6694
Mailing Address:	3500 Industrial Boulevard, West Sacramento, CA 95691

Effective Date and Expiration Date of this ITP:

This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **December 31, 2025**.

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

²"The definition of an endangered, threatened, and candidate species for purposes of CESA and NPPA are found in Fish and Game Code sections 2062, 2067, 2068, and 1901 respectively.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 7.7 of this ITP.

Project Location:

The Lookout Slough Tidal Habitat Restoration and Flood and Flood Improvement Project (Project) is located in unincorporated Solano County (See Figure 1). The Project is located approximately 10 miles north of the City of Rio Vista at a latitude of North 38.219949° and a longitude of West 121.038819°. The Project site is bounded by Shag Slough to the east, Cache Slough to the southwest, Hass and Duck Sloughs to the west, and Liberty Island Road to the north. The Project is located next to Liberty Island Ecological Reserve, which is on the eastside of Shag Slough.

Project Description:

The Project includes levee modifications, grading to achieve suitable elevation for tidal inundation, construction of a new setback levee along Duck Slough (Duck Slough Setback Levee), operations and maintenance of the new Duck Slough Setback Levee and the improved Cache/Hass Slough Levee (Cache/Hass Slough Training Levee), ecosystem restoration compliance and effectiveness monitoring, and long-term habitat management. The Project Area is approximately 3,600 acres in size and consists of three distinct properties and their adjoining levees and sloughs: Bowsbey Ranch, Liberty Farms, and Vogel Property. The Project will restore approximately 3,164 acres of tidal marsh and subtidal habitats, improving flood conditions in the region by providing increased flood conveyance and storage within the Yolo Bypass. Activities to improve flood abatement include lowering portions of the Shag Slough Levee and constructing the new Duck Slough Setback Levee.

The Project is intended to fulfill a portion of the 8,000-acre tidal habitat restoration obligations of the Department of Water Resources (DWR) contained within Reasonable and Prudent Alternative (RPA) of the U.S. Fish and Wildlife Service (USFWS) Delta Smelt Biological Opinion (BiOp) for long-term coordinated operations of the State Water Project (SWP) and the federal Central Valley Project (CVP). Because restoration of tidal habitat will provide access for salmonid rearing at Lookout Slough, the Project will also be consistent with RPA I.6.1 of the National Marine Fisheries Service (NMFS) Salmonid BiOp for SWP/CVP operations. The 8,000-acre tidal restoration requirement is also a condition (Condition of Approval 9.1.1) of Incidental Take Permit No. 2081-2018-066-00, for Long-Term Operation of the SWP in the Sacramento-San Joaquin Delta, issued by CDFW to DWR in 2020.

As described in detail below, Project activities include dewatering internal water features, vegetation clearing (trees and emergent vegetation), invasive species control, infrastructure and debris removal, habitat restoration activities (channel networks, ponds, and peninsula construction), patrol road construction, levee improvements (setback levee construction and existing levee modification, structure removal, pipe removal and plugging, boat ramp

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construction), temporary cofferdam construction and removal, levee breaching and degradation, riparian vegetation replanting, and limited post-Project repair and maintenance activities.

Site Preparation Activities:

Permittee will use the existing water control system to dewater many of the internal water features of the Project such as ponds, irrigation ditches, drainage ditches, toe drains, and water distribution channels. Dewatering will start from the northwest and will passively drain to the southeast corner of the Project Area using the existing water conveyance infrastructure. Permittee may use an excavator to remove any blockage and improve site drainage. Existing pumps will then discharge water into Shag Slough and will be operated to a seasonal schedule, with additional restrictions, to limit entrainment exposure to Giant Garter Snakes (*Thamnophis gigas*). Some water and wetland habitat will be maintained in the southwest corner to provide refugia to Giant Garter Snakes during construction work.

Permittee will clear most of the remaining vegetation, although the exact areas of clearing will depend on construction needs at the time. Permittee anticipates removing approximately 1,077 acres of freshwater marsh vegetation from the managed wetlands of the Liberty Farms and Vogel Property, and 23 acres of trees and shrubs and up to 486 acres of grasslands from Liberty Farms, Bowsbey Ranch, and Vogel Property. Permittee will use a combination of bulldozers, excavators, and wheel loaders to clear smaller trees, brush, and debris and a chainsaw to cut down larger trees within areas designated for clearing. Permittee will mechanically remove targeted invasive plant species using chainsaws, backhoes, excavators, mowers, or handheld powered equipment.

Permittee will remove and properly dispose of or reuse infrastructure associated with farming and duck hunting including livestock fencing, concrete-lined ditches, concrete pads, pumps and associated pipes and control structures, stock and agricultural fuel tanks, utility poles, trash and material piles, and drainage and inlet pipes along Duck Slough. Abandoned gas pipes will be cut and removed in areas where they will interfere with excavation activities or risk exposure during Project implementation. Any wells or pipelines disturbed will be decommissioned in accordance with state regulations.

Permittee will construct several temporary access roads and staging areas using a combination of motor graders, compactors, and other suitable grading equipment within the limits of disturbance in the Project site. Equipment and personnel may also access the work sites via existing levee roads and by boats and barges. Permittee will construct one staging area for the entirety of construction which will result in temporary impacts to approximately 10 acres of developed, non-native annual grassland, and seasonal wetland habitats. Additional temporary staging areas for cutoff wall and channel construction will be constructed as needed and each will temporarily impact two to three acres of irrigated pasture habitat or areas that will otherwise be disturbed through earthwork required to achieve Project design

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grades. Upon Project completion, Permittee will remove the temporary roads and restore the areas to conform to Project design.

Permittee will move the location of staging and fueling areas, temporary access roads, and staging areas throughout the Project site over time as the construction progresses across the site. Permittee will limit temporary roads and staging areas to previously disturbed areas where features such as burrows or subterranean features have been removed and outside of 200 feet from Giant Garter Snake habitat. Any parking areas without temporary fencing implemented for overnight equipment parking will occur at least 600 feet from Giant Garter Snake habitat. Use of access roads and staging areas for nighttime fueling and maintenance work will also be restricted by other Project conditions such as where buffers are established for nesting birds.

To allow for the shortest viable construction duration for the Project, Permittee will occasionally conduct nighttime fueling and maintenance of wheeled construction equipment at the staging areas approved for nighttime work by CDFW. Nighttime fueling and maintenance of slower moving construction equipment (i.e., tracked vehicles) will occur where the equipment is parked, outside of any sensitive resource areas. During summer, much of this work can be accomplished during daylight, but when the days are shorter, these activities will occur before sunrise or after sunset. These upkeep activities may occur for up to 6 hours outside of the construction day shift. Up to two large 2,000-gallon fuel and lubrication trucks will utilize temporary access roads to upkeep parked construction equipment including graders, scrapers, compactors, dozers, excavators, tractors, haul trucks, and water wagons.

Habitat Restoration Activities:

Permittee will excavate over 20 miles of channels and several open water tidal ponds with a combination of excavators, bulldozers, and scrapers. Excavated channels will have channel top widths between 60 and 400 feet, channel invert elevations between -1.0 to 1.0 feet NAVD88, and maximum side slopes of 3H:1V. This will require an approximate total of 1,780,000 cubic yards of soil excavation. Material excavated from the channels will be re-used on-site as appropriate based on soil types and beneficial re-use needs. Permittee will place some of the material from degradation of the Shag Slough Levee and the excavation of tidal channels within the proposed marsh plain to eliminate hauling the material over long distances. This material will be placed at a maximum elevation of +5.5 feet NAVD88 in a manner and location that will not interfere with the flow of water or tidal marsh development.

Permittee will construct a series of raised peninsulas (Pacific Gas and Electric Company (PG&E) Access Peninsulas) to facilitate access to the high voltage transmission towers that are owned by PG&E. PG&E currently holds an access easement on the property and will continue to have access to maintain these towers and the associated transmission lines. The elevation of the peninsulas will be at least 8.0 feet NAVD88, which is above mean higher high water (MHHW). These peninsulas will have 12-foot-wide roads surfaced with crushed gravel or recycled concrete to provide year-round access to the base of each PG&E tower.

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Permittee will place approximately 270,000 cubic yards of fill material to construct the raised peninsulas using a combination of excavators, bulldozers, and scrapers.

Permittee will maintain an approximately 53-acre Giant Garter Snake Temporary Relocation Area at the southern end of Liberty Farms to provide habitat for the snake, as well as internally displaced fish, during construction activities. Permittee will manage this area to provide both aquatic foraging and upland habitat types. This area will be enclosed along all sides bordering construction with a wildlife exclusion fence to prevent snakes from dispersing into areas with active construction. This area will be established beginning in the second year of construction as Project activities begin to move away from the new Duck Slough Setback Levee.

Levee Improvement Activities:

Permittee will construct a new setback levee (Duck Slough Setback Levee) along Duck Slough (running on average 110 feet from Duck Slough) and Liberty Island Road, breach and partially lower portions of the Shag Slough Levee, breach the Vogel Levee, and improve the Cache/Hass Slough Training Levee. A combination of excavators, bulldozers, and scrapers will be used to conduct these levee improvement activities.

The Duck Slough Setback Levee will become part of the Yolo Bypass West Levee System within the State-Federal levee system and protect properties to the north and west of the Project from inundation upon degradation and breaching of the Shag Slough Levee. The Duck Slough Setback Levee will include a soil-bentonite cutoff wall ranging in depth from 25 to 50 feet below the existing ground surface and an approximately 6-foot-deep inspection trench, with a bottom width of approximately 12 feet and 1H:1V side slopes, offset from the Duck Slough Setback Levee centerline, toward the waterside toe. Construction of the cutoff wall will require a temporary batch plant and materials staging area from two to three acres in size. The area will generate and supply trench stabilization fluid to the work site. Permittee will locate water storage tanks, bulk bag supplies of bentonite, a cyclone mixer, pumps, and generators adjacent to the slurry generation ponds. The exact locations of the temporary staging areas will be dependent on the contractor's means and methods; however, all staging areas for the cutoff wall construction will be interior to existing U.S. Army Corps of Engineers levees, in dry or dewatered habitat prior to creation of the staging area, and greater than 100 feet from Duck Slough. Construction activities involving bentonite will conform to best management practices to avoid hazardous materials contamination and spills, and Permittee will prepare a bentonite spill contingency plan.

Setback levee construction will use approximately 1,586,560 cubic yards of fill. Approximately 861,000 cubic yards of fill material will come from on-site borrow areas located adjacent to and on the waterside of the new setback levee. An additional approximate 712,000 cubic yards will come from tidal channel excavations throughout the restoration area and degraded portions of the Shag Slough Levee.

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Permittee will remove levee penetrations. Permittee will plug drainage and inlet pipes running through the Cache/Haas Slough Levee and remove associated structures. Existing wood structures including woodpiles will be removed with an excavator from the levee bank. Following removal of the structures, divers will cut the pipes at the existing slope, or if necessary, the area will be dewatered to expose the pipe and isolate work, and then pipe would be cut. Permittee will also cut the pipe at the existing slope on the inboard side of the levee and then plug and fill the pipe with concrete using a tremie. Permittee plans to conduct in-water work from June 1 to October 31. Each levee penetration removal will take between approximately 2 to 5 days to complete. A turbidity curtain, sheet piles, or super sack cofferdams will be used around structures to control sediment and turbidity which will temporarily impact approximately 0.27 acres of habitat in total.

Permittee will retain the levee along Cache and Hass Sloughs as a training levee (Cache/Hass Slough Training Levee) to prevent increased water surface elevations in Cache and Hass Sloughs during high water events in the Yolo Bypass. The Cache/Hass Slough Training Levee will be improved to reduce subsidence, increase slope stability, increase resilience to wind-wave forces, and improve maintenance access. Permittee will remove material from the levee to reduce the extent of future levee subsidence and standardize the crest height to either the 1957 water surface profile or 1% ACE water surface elevation, whichever is higher, plus one foot of freeboard. Removed levee material will be used to flatten the Project-side interior levee slope to a maximum of 4H:1V and construct an operations and maintenance roadway on the interior of the Project slope. Permittee will reshape the levee crown and upper portion of the slope to a more uniform width (minimum of 16 feet wide) and include a maintenance road with an improved road surface. Permittee will add erosion protection to the crown and upper slope of the Cache/Hass Slough Training Levee to provide protection from potential erosion due to overtopping caused by wind wave splash. Erosion protection could be in the form of rock or bio-geotechnical methods. In addition, riparian vegetation may be planted at appropriate elevations along portions of the Project-side slope.

Levee Degrade and Breaching Activities:

Permittee will breach the Vogel and Shag Slough Levees using similar methodologies. Prior to breaching, temporary sheet pile cofferdams will be installed outboard of breach locations between June 1 and October 31. A temporary working platform will be installed by dozing a level and stable platform large enough to accommodate a conventional driving rig. A mid-sized excavator or barge mounted crane with a vibratory hammer pile will be used to drive the sheet pile during installation. Sheet piles would be connected by a vertical interlocking ball and socket system to form a continuous, watertight wall of sheet piling. In the rare instance that vibratory hammering cannot complete the installation, Permittee will use an impact hammer to complete installation to design depths. An impact hammer would utilize a "soft start" which gradually increases the energy and frequency of impacts. Consideration of the soil layers and appropriate parameters will allow for the selection of the most suitable

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installation means and methods. However, relatively soft soil conditions are anticipated, based on available subsurface data, which suggests that a minimal number of strikes, likely less than 5 strikes, will be needed to achieve the required depth. Alternatively, Permittee may install an earthen cofferdam.

Permittee will conduct a fish rescue, per a CDFW-approved Fish Rescue and Relocation Plan, prior to dewatering the area between the cofferdam and levee. Approximately 1.54 acres of aquatic habitat will be dewatered as a result of levee breach activities. Sheet piles may be installed for 2 to 2.5 years and would be removed when construction within the Project Area is completed and the levee is ready to be breached. Permittee will remove sheet piles using an excavator on a barge or by an excavator from land. Excavation of the breach locations behind the sheet pile walls, using excavators and bulldozers, may occur in April and May outside of the in-water work window. This would allow breaching to occur within the work window and without delaying construction timelines.

Vogel Levee Breach: Permittee will breach the Vogel Levee at two locations using the previously described method of installing sheet pile cofferdams, excavating levee soil behind the sheet piles, and then removing the sheet piles. One breach along the Vogel Levee will be approximately 45 feet wide and the other one roughly 154 feet wide, necessitating between 1,100 and 2,600 cubic yards of excavation. In total, approximately 3,700 cubic yards of soil will be excavated and distributed within the interior of the property. This material will be placed at a maximum elevation of +5.5 feet NAVD88 across the proposed marsh plain in a manner and location that will not interfere with the flow of water or tidal marsh development. Portions of the Vogel property may have to be partially dewatered from incidental groundwater intrusion to facilitate channel excavation and grading improvements using terrestrial equipment. Permittee will implement a minimal dewatering system, as needed, to control incidental seepage/nuisance water intrusion during construction activities. Permittee may install water control devices, such as trash pumps, in low points and sump areas to effectively control potential seepage and high groundwater. All discharges and bypassed flows will replicate natural processes (e.g., overflow runoff) to the maximum extent possible and Permittee will maintain applicable receiving water limits and water quality objectives.

Permittee will install water control devices such that the intended diversion does not cause sedimentation, siltation, or erosion in the vicinity of the work area. Permittee will regularly inspect water control devices during construction to ensure that they are functioning properly, and to allow for maintenance or adjustments as needed. These devices may also need to be periodically relocated/repositioned relative to the sequencing of earthwork grading activities.

Shag Slough Levee Breach and Degrade: Permittee will breach the Shag Slough Levee at nine locations south of Liberty Island Road along the eastern boundary of the Project Area. Breaches along Shag Slough will have bottom widths of approximately 210 feet, 350 feet, 340 feet, 160 feet, 175 feet, 200 feet (two breaches), 185 feet, and 580 feet. Permittee will degrade the Shag Slough Levee in two 1,500-foot sections to provide flood benefits;

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however, most areas between breaches will not be degraded. The degraded section of the Shag Slough Levee located at the northern end of the Project Area will be lowered to approximately elevation 14.7 feet NAVD88. The degraded section of the Shag Slough Levee located at the southern end of the Project Area will be lowered to approximately elevation 11.8 feet NAVD88. These breach activities in addition to the levee degrade will collectively require approximately 261,250 cubic yards of excavation.

Permittee will place material excavated from the levee onto the interior tidal marsh plain. Soil placed within the tidal marsh area will be limited in height to remain below MHHW to ensure that spoil distribution does not inhibit development of emergent tidal marsh habitat.

Permittee may salvage and reuse rock from the Shag Slough Levee or obtain rock from an off-site source and transported to the site via barge or truck for use in levee erosion protection. There is approximately 10,000 tons of rock, up to 3 acres, that may be salvaged from the Shag Slough Levee. Permittee will only salvage rock from areas that would not impact existing riparian vegetation along Shag Slough. Permittee will install rock slope protection at the northern and southern portions of the degraded sections of the Shag Slough Levee. The rock slope protection will provide additional protection from erosion for the adjacent levees including the adjacent unmodified section of the Shag Slough Levee in the north and the adjacent section of the Cross Levee in the south.

The northern slope of the northernmost breach along the Shag Slough Levee will include an agency boat ramp to allow vehicles to back boats into the open water habitat at the breach location. This agency boat ramp will have an approximate 14% slope and will be surfaced with concrete.

Mason's Lilaeopsis Translocation:

Surveys conducted in summer of 2020 documented 8 colonies, totaling approximately 120 square feet, of Mason's lilaeopsis (*Lilaeopsis masonii*) in areas anticipated to be impacted by breach construction activities on the Shag Slough Levee. Permittee will translocate and monitor these plants according to a Mason's Lilaeopsis Transplantation Plan subject to CDFW review and approval.

Planting and Revegetation:

The tidal marsh areas within the Project are expected to revegetate through natural recruitment. The predominant plant species anticipated to colonize are tule (*Schoenoplectus acutus* var. *occidentalis*) and cattail (*Typha latifolia*). These plant species would establish across a range of elevations from 6.5 feet to 3.0 feet NAVD88. In some cases, these plant species might extend down to elevation 2.0 feet NAVD88. Both of these species reproduce prolifically from seed dispersal, and there is an abundance of these species in the local area to provide seed for natural recruitment. The restored tidal marsh wetland areas would not be

irrigated. Normal rainfall and daily tidal action would provide the necessary hydrology for tidal marsh plant establishment.

Permittee will plant approximately 41 acres of riparian trees and shrubs along selected areas of the remnant Shag Slough Levee, along the inboard side of Cache/Hass Slough Training Levee, the Cross Levee, along portions of Vogel Property border, and along portions of the PG&E Access Peninsulas. In general, native trees and shrubs will be planted within the normal rainy season, which is typically defined as October 15 through April 15. In instances where riparian planting occurs outside of this window, supplemental irrigation will be provided, as needed, to ensure survival. Plant material will consist of cuttings and containerized plants, including white alder (*Alnus rhombifolia*), valley oak (*Quercus lobata*), polished willow (*Salix laevigata*), Goodding's willow (*Salix gooddingii*), common buttonbush (*Cephalanthus occidentalis*), California blackberry (*Rubus ursinus*), arroyo willow (*Salix lasiolepis*), and blue elderberry (*Sambucus nigra* ssp). Blue elderberry shrubs will not be included in the planting palette along the Cache/Hass Slough Training Levee. Permittee will plant trees and shrubs within two feet in elevation of MHHW to facilitate establishment without irrigation by ensuring that their root systems have access to groundwater. Riparian plantings will be divided into subareas with set plant spacing to provide maximum habitat benefits for Giant Garter Snakes.

Post-Construction Levee Operation and Maintenance:

The Project will include operations and maintenance (O&M) activities. RD 2098 will be responsible for implementing long-term operations and management of the Duck Slough Setback Levee; RD 2098's O&M activities are not be covered by this ITP. DWR will be responsible for O&M of the Cache/Hass Slough Training Levee. Levee O&M activities will include annual inspections/evaluations, levee restoration and damage repair, levee crown roadway maintenance/damage repair, rodent abatement and damage repair, vegetation management, and levee debris/trash cleanup.

Inspections are intended to identify any levee deficiencies, and direct any operations, maintenance, repair, replacement, or rehabilitation work required to correct the noted deficiencies. Levee inspections will be required up to approximately four times per year. Permittee may repair damage to levee slopes to their design condition during the allowable in-water work window. The crown road will be maintained by dragging/grading, spraying, and re-gravelling. Permittee will implement an appropriate rodent abatement and damage repair program to minimize impacts to levee integrity. Removal of problematic rodent species through such means as baiting, trapping, or other necessary and appropriate methods could be needed. Where burrowing animal damage is identified, Permittee will fill burrows through various methods, including excavation and compaction, grouting with cement/bentonite grout, or other appropriate means. Rodent abatement and repair will extend no further than 15 feet from the toe of the levee.

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Consistent with the Vegetation Management Strategy of the Central Valley Flood Protection Plan, Duck Slough Setback Levee vegetation would be limited to native grass species on levee crowns, slopes, and within 15 feet of the landside toe. Vegetation will be managed by goat grazing, mechanized mowing, masticating, slope mower, large tractor with a boom, hand crews with weed-eaters, herbicide spraying, burning and hand cutting or removal. Grass mowing is typically completed between March and October and performed once per year; however, certain weeds may require management actions more than once per year. Grass and weed burning may be used to control grasses and would be conducted in summer or early fall. Woody debris and trash are expected to settle and accumulate on the levee crown, slopes, and toe/toe roads, especially after high water events. Permittee will either pile and burn (pending air quality requirements and approvals) woody debris or load and dispose it at an appropriate landfill/disposal facility. Trash and other debris will routinely require collection and removal/disposal at an appropriate landfill/disposal facility.

Post-Construction Habitat Maintenance:

Permittee will conduct upland vegetation maintenance on large woody vegetation within 200 feet of Giant Garter Snake foraging ponds to prevent the degradation of summer basking habitat for Giant Garter Snakes. On PG&E Access Peninsulas, PG&E will maintain and replace the gravel surface road base as needed under its own permits and authorizations. Permittee will conduct vegetation management on habitat outside the PG&E Access Peninsulas gravel roads according to the upland vegetation maintenance for Giant Garter Snakes if it is within areas identified for Giant Garter Snakes upland habitat management. Permittee will not conduct rodent control on the Access Peninsulas.

Maintenance for channels and tidal marsh plain will be based on the post-construction monitoring and adaptive management plan. Flood debris and woody vegetation within the restoration area will be monitored. Permittee will remove any debris, woody vegetation or emergent vegetation that interferes with the functionality of the restoration area from meeting the ecological or flood conveyance Project objectives. Removal of emergent vegetation from the tidal channels may be done mechanically or by spraying with an herbicide that is safe for aquatic applications. Herbicide application is described in more detail in the following paragraph.

Permittee will control or remove invasive plant species throughout the upland and aquatic habitats of the Project. Target species would be mechanically removed and/or sprayed. Targeted invasive species include but are not necessarily limited to: common reed, pampas grass, giant reed, Brazilian waterweed, water hyacinth, spongeplant, red sesbania, and water primrose. Application of herbicide (i.e., spraying) is proposed for use on invasive plants. Herbicide is typically applied in one of two methods: by hand (application to plants with a backpack sprayer or similar tool) or from a vehicle (a spray boom fitted with multiple spray nozzles with a tank to hold larger quantities of herbicide which are mounted to a vehicle).

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Herbicide will be mixed according to manufacturer safety standards and applied by a licensed applicator familiar with the legal and regulatory requirements for application.

Post-Construction Habitat Monitoring:

The monitoring associated with the Project incorporates elements of the Tidal Wetland Monitoring Framework for the Upper San Francisco Estuary and comprises three major components:

- Compliance monitoring – determining whether restoration actions have been completed as planned, including compliance with construction-related permitting requirements.
- Effectiveness monitoring – evaluating hypotheses related to the premise that tidal wetland restoration will benefit listed fish species in accordance with Project objectives.
- Potential special studies – Effectiveness monitoring that is too intensive in terms of time, expertise, and resources for regular implementation, but that would provide detailed information on the mechanisms responsible for wetland physical and ecological processes.

Take associated with any of the above monitoring activities is not authorized by this ITP. CDFW will be conducting the bulk of this monitoring; however, any other entities that become involved in monitoring the Project will seek their own CESA take authorization.

Project Schedule:

Permittee anticipates the Project will be completed over three construction seasons. The following Table 1 provides the estimated construction implementation schedule.

Table 1. Project Schedule

Year	Project Stage	Task Name	Estimated Start	Estimated Finish
Multiple Years or Year-Round		Pre-construction Surveys	2/1/2021	11/1/2023
	Site Preparation	Vegetation Clearing (Multiple Areas)	3/1/2021	11/30/2022
	Site Preparation	Control of Water	3/1/2021	11/30/2023
	Site Preparation	Control Vehicular Access via Liberty Island Road	3/1/2021	11/30/2023
1	Site Preparation	Mobilization, Construction Yard Setup and Exclusion Fence Installation	3/1/2021	3/15/2021

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	Site Preparation	Surface Debris/Trash Removal	2/1/2021	11/30/2021
	Site Preparation	Clearing/Grubbing	4/1/2021	11/30/2021
	Site Preparation	Gas Pipe Removal	5/1/2021	11/30/2021
	Site Preparation	Infrastructure and Debris Removal, Removal of Drainage/Inlet Pipes and Infrastructure	5/1/2021	11/30/2021
	Levee Improvements	Duck Slough Toe Drain and Setback Levee Preparatory Work	3/12/2021	11/30/2021
	Levee Improvements	Duck Slough Exclusion Fence Installation	5/31/2021	5/14/2021
	Levee Improvements	Slurry Cutoff Wall	4/1/2021	6/28/2021
	Levee Improvements	Place and Compact Embankment	6/28/2021	11/30/2021
	Habitat Restoration	Agricultural Berms and Ditch Grading	5/1/2021	11/30/2021
	Levee Improvements	Remaining Pipe Abandonment and Removal of Associated Infrastructure	6/1/2021	11/30/2021
	Levee Improvements	Install Sheet Pile at all Corresponding Breach Locations	6/11/2021	11/30/2021
	Levee Improvements	Vogel Levee Breach Channel Excavations (if able, may occur in 2021)	8/1/2021	10/15/2021
	Levee Improvements	Vogel Levee Sheet Pile Removal (if excavations occur in 2021)	10/16/2021	11/15/2021
	Site Preparation	Temporary BMP Installation and Winterization	11/15/2021	11/30/2021
2	Habitat Restoration	Giant Garter Snake Temporary Relocation Area Fence Installation	5/1/2022	5/23/2022
	Levee Improvements	Setback Levee General Embankment Construction	3/1/2022	9/15/2022
	Levee Improvements	Cache Hass Slough Training Levee Improvements	3/1/2022	11/30/2022
	Habitat Restoration	Elevated Peninsula Embankment Construction for PG&E Access Roads	3/1/2022	11/30/2022

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	Habitat Restoration	Tidal Channel System Excavation	3/15/2022	11/30/2022
	Habitat Restoration	Process Demolished Concrete and Aggregate Base Salvage for use on PG&E Access Roads	6/1/2022	8/15/2022
	Levee Improvements	Pipe Abandonment and Removal of Associated Infrastructure	6/1/2022	11/30/2022
	Habitat Restoration	Grade and Fill Lookout Slough	4/20/2022	9/20/2022
	Habitat Restoration	Giant Garter Snake Habitat Creation (Ponds)	6/1/2022	11/1/2022
	Site Preparation	Temporary BMP installation and Winterization	11/15/2022	11/30/2022
3	Habitat Restoration	Tidal Channel Excavation	3/1/2023	7/10/2023
	Habitat Restoration	Final Grading Excavated Soil within Tidal Marsh	3/1/2023	7/14/2023
	Levee Improvement	Final Roadway Construction on Peninsulas and Levees	3/15/2023	7/1/2023
	Levee Improvement	Shag Slough Levee Degrade, Salvage Rock	4/1/2023	7/15/2023
	Road Improvement	Improve Liberty Island Road Surface	5/30/2023	7/30/2023
	Habitat Restoration	Giant Garter Snake Temporary Area Fence Removal	5/15/2023	6/1/2023
	Levee Improvement	Shag Slough and Vogel Levee Breach Excavations and Agency Boat Ramp Construction (Behind Cofferdams)	6/1/2023	9/15/2023
	Levee Improvements	Pipe Abandonment and Removal of Associated Infrastructure	6/1/2023	9/15/2023
	Planting and Revegetation	Revegetation and Hydroseeding	6/1/2023	11/30/2023
	Levee Improvement	Shag Slough and Vogel Breach - Cofferdam Removal	9/15/2023	11/30/2023
	Demobilization	Cleanup/Demobilization	10/31/2023	11/30/2023

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Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Mason's lilaeopsis (<i>Lilaeopsis masonii</i>)	Rare ³
2. Longfin Smelt (<i>Spirinchus thaleichthys</i>)	Threatened ⁴
3. Delta Smelt (<i>Hypomesus transpacificus</i>)	Endangered ⁵
4. Giant Garter Snake (<i>Thamnophis couchi gigas</i>)	Threatened ⁶

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

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include equipment mobilization, mobilization, demobilization; site preparation; clearing and grubbing of vegetation; excavation and grading in wetland, transitional, and upland habitats; take in the course of loss of aquatic, wetland, riparian, and upland habitats; contact with vehicles and equipment; placement and dispersal of excavated material; hazardous material spills, decreased water quality from sedimentation during in-water construction activities; construction and deconstruction of coffer dams; levee construction, degrading and breaching; levee armoring; erosion at breaches; capture, handling, relocation, and transplanting of Covered Species; and post-Project repair and maintenance activities (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities such as vegetation control activities (spraying, clearing, grubbing, and grading of wetland and riparian habitats) that could crush or entomb Covered Species; destruction of small mammal burrows and other soil crevices that the Covered Species may inhabit; by being crushed by moving vehicles and equipment; increased bank erosion, and from disturbance by Project activities. Equipment noise, vibration, and increased human activity may interfere with normal behaviors. These behaviors include feeding, sheltering, movement between refugia and foraging grounds, fish rearing and migration, and other essential behaviors of the Covered Species. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursuit, catch,

³See Cal. Code Regs. tit. 14 § 670.2, subd. (c)(3)(A).

⁴See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(E).

⁵See *Id.*, subd. (a)(2)(O).

⁶See *Id.*, subd. (b)(4)(E).

capture, relocation, or attempt to do so, or transplanting of the Covered Species. The areas where authorized take of the Covered Species is expected to occur include the Project's levees, the wetlands, canals, ditches, ponds, uplands, and riparian habitats within the Project's boundaries, the tidal water habitat adjacent to the Project's exterior levees, haul routes, and all Project stockpiling and staging areas (collectively, the Project Area).

The Project will cause temporary and permanent impacts to Covered Species habitat. For Giant Garter Snake, construction activities will permanently impact 164 acres of suitable aquatic habitat, 331 acres of terrestrial summer basking habitat, and 109 acres of terrestrial winter refugia habitat. Project activities will temporarily impact 230 acres of terrestrial summer basking habitat and 23 acres of terrestrial winter refugia. Upon completion, the Project is expected to provide a net increase of 51 acres in aquatic foraging habitat, a net decrease of 331 acres in terrestrial summer basking habitat, and a net decrease of 109 acres in terrestrial winter refugia for Giant Garter Snake (Table 2). For Delta Smelt and Longfin Smelt, coffer dam construction and dewatering activities will temporarily impact approximately 1.7 acres of aquatic habitat along the levee and temporarily disturb approximately 0.27 acres of physical habitat. For Mason's lilaeopsis, levee breach activities will permanently impact approximately 120 square feet of Mason's lilaeopsis.

Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include stress resulting from noise and vibrations from construction activities, capture and relocation, translocation, and long-term effects due to habitat alterations, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

Table 2. Existing and Future Habitat Conditions

Habitat type	Existing (acres)	Future (4-18 years) (acres)	Net Habitat Change
Marsh and Wetland			
Intertidal emergent marsh and mud flats	5	2,762	+2,757
Shallow subtidal including tidal sloughs and tidal channels	195	615	+420
Coastal and Valley Freshwater Marsh	1,127	6	-1,121
Open water	142	12	-130
Food Production			
Primary and secondary food production for Delta Smelt	200	3,377	+3,177
Food production for ducks	1,120	2,740	+1,719

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Giant Garter Snake Habitat			
Aquatic/foraging	164	215	+51
Emergent refugia and foraging	0	2,147	+2,147
Terrestrial summer basking	561	230	-331
Terrestrial winter refugia	132	23	-109
Fish Habitat			
Spawning areas for Delta Smelt	0	0.25	+0.25
Open water for Delta Smelt and other target fish species	195	615	+420
Upland Habitat			
Great Valley mixed riparian forest	36	52	+16
Non-Native Grassland	487	193	-294
Developed	293	0	-293
Irrigated Pasture	1,364	0	-1,364

Incidental Take Authorization of Covered Species:

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

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular and heavy equipment ingress and egress, staging and parking and noise and vibration generating activities that may cause take. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH No.: 2019039136) certified by Department of Water Resources on

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November 2, 2020 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

3. **LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration (LSA) Agreement (Notification No. 1600-2020-0161-R3) for the Project executed by CDFW pursuant to Fish and Game Code, section 1600 et seq.
4. **ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the Formal Consultation on the Lookout Slough Tidal Habitat Restoration and Flood Improvement Project, Solano and Yolo Counties (08FBDT00-2020-F-0181) for the Project pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.
5. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.
6. **General Provisions:**
 - 6.1. Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.
 - 6.2. Designated Biologist and Biological Monitors. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information for the Designated Biologist and Biological Monitors at least 30 days before starting Covered Activities. As part of the qualification submittal, Permittee shall require that the Designated Biologist and each Biological Monitor submit a resume and complete the Biologist Resume Form (Attachment 2) for CDFW review and approval. The Designated Biologist shall be responsible for overseeing the Biological Monitors working on the project. Permittee shall ensure that the Designated Biologist and Biological Monitors are knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species which they are monitoring. The Designated Biologist and Biological Monitors shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the

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incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist and Biological Monitors in writing before starting Covered Activities and shall also obtain approval at least 14 days in advance, in writing, if there is a staffing change for the Designated Biologist or Biological Monitors.

- 6.3. Designated Biologist and Biological Monitors Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist and Biological Monitors shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.
- 6.4. Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, their status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.
- 6.5. Construction Monitoring Notebook. The Designated Biologist and Biological Monitors shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.
- 6.6. Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 6.7. Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated

Biologist and Biological Monitors. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.

- 6.8. Erosion Control Measures. Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a tidal slough. These exposed slopes shall be reseeded with native vegetation upon project completion.
- 6.9. Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting or jute netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 6.10. Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.
- 6.11. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle access traffic to established roads, staging, and parking areas. Construction equipment operations within the Project Area will not be limited by this Condition of Approval to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.
- 6.12. Project Speed Limits. Permittee shall ensure that vehicle speeds do not exceed 25 miles per hour, except within 200 feet of Giant Garter Snake habitat where speeds shall be limited to 15 miles per hour.
- 6.13. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, and equipment storage to previously disturbed areas or on barges as needed. Permittee shall return vehicles and heavy equipment on wheels to staging areas at the end of the day. Permittee may temporarily park tracked equipment overnight outside of staging areas if tracked equipment is located in previously disturbed areas and a minimum of 600 feet from water. To minimize travel, Permittee may create temporary staging areas on disturbed soils in or near the work area. Exclusion fencing shall be installed around staging areas per Condition of Approval 8.19 in this ITP. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the Project Area unless provided for in Condition of Approval 6.11.

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- 6.14. Artificial Lighting at Night. Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting, that casts light on Covered Species habitat beyond the Project Area for Covered Activities occurring between sunset and sunrise, except in emergencies. Nighttime construction lighting shall be shielded and oriented downward to minimize effects on any nearby Covered Species and to avoid Swainson's hawk (*Buteo swainsoni*) impacts.
- 6.15. Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.
- 6.16. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP and provide any necessary safety equipment should it be needed.
- 6.17. Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

7. Monitoring, Notification and Reporting Provisions:

- 7.1. Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.
- 7.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.
- 7.3. Compliance Monitoring. The Designated Biologist and/or Biological Monitor shall be on-site daily when Covered Activities occur. The Designated Biologist and Biological Monitors shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the

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Project Area. The Designated Representative or Designated Biologist and Biological Monitors shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.

- 7.4. Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Compliance Monitoring 7.3 into a Monthly Compliance Report and submit it to CDFW by the 5th of each month following the first day of Covered Activities. A copy of the MMRP table with notes showing the current implementation status of each mitigation measure shall be submitted as part of the report. Monthly Compliance Reports shall be submitted to the CDFW contact listed below via e-mail and hardcopy. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 7.5. Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.
- 7.6. CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 7.7. Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts

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on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

- 7.8. Reporting Consolidation. Permittee may consolidate reports that are required by this ITP and other permits (LSA Agreement, biological opinions) to the extent possible. Permittee shall consult with and receive written approval from CDFW prior to consolidating reports to ensure that all reporting requirements will be met and that any changes in due dates are acceptable to CDFW.
- 7.9. Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall collect and preserve the carcass of the Covered Species and provide initial notification to CDFW by calling the Regional Representative below. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

8. Minimization Measures:

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

- 8.1. Covered Species Daily Work Restriction. Permittee shall terminate all Covered Activities, except as described in the Project description and this Condition of Approval, at sunset and shall not resume Covered Activities until sunrise. Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area (<https://www.esrl.noaa.gov/gmd/grad/solcalc/sunrise.html>). Maintenance dewatering activities may be conducted after sunset. Vehicle fueling and maintenance activities may be conducted occasionally at night for up to 6 hours, between sunset and sunrise, within CDFW-approved designated staging areas or at the overnight parked locations of tracked heavy equipment.

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- 8.2. Precipitation Work Limit. Permittee shall restrict work activities on exterior levees to periods of low rainfall (less than 1/10th of an inch per 24-hour period) and periods of dry weather (with less than a 30% chance of rain). Permittee shall initiate all erosion control measures prior to all storm events. Permittee shall monitor the National Weather Service (<http://www.nws.noaa.gov>) 72-hr forecast for the Project site. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.
- 8.3. SWPPP Preparation. Prior to initiating Covered Activities, Permittee shall submit to CDFW a Stormwater Pollution Prevention Plan (SWPPP) to address Best Management Practices (BMPs) utilized to prevent erosion, sediment loss, and potential pollution within the Project site for CDFW review and approval.
- 8.4. Pesticide and Herbicide Use. Integrated pest management solutions that emphasize non-chemical pest management shall be used over chemical pesticides to the extent feasible. Rodenticides shall not be used under this ITP, and insecticides shall not be used in the stream zone without prior written permission from CDFW. Herbicides may be used at the Permittee's discretion with implementation of the following protective measures:
- 8.4.1. All herbicides shall be applied by a certified pesticide applicator or under the supervision of a certified pesticide applicator in accordance with regulations set by the California Department of Pesticide Regulation and according to labeled instructions.
- 8.4.2. Herbicides shall only be applied on calm days with wind speed below 5 miles per hour.
- 8.4.3. Permittee shall use caution to apply the least practicable amount of herbicides necessary to effectively control nuisance plants.
- 8.4.4. Permittee shall use the least concentrated formulation of herbicide possible and practicable to accomplish the task.
- 8.4.5. Permittee shall not apply certain herbicides within 60 feet from the edge of salmon-supporting waters (<http://www.cdpr.ca.gov/docs/endspec/salmonid.htm>).
- 8.4.6. Herbicide mixing sites shall be located on existing roadways or upland locations where they may not enter into streams or wetlands.
- 8.4.7. Permittee shall only apply herbicides after vegetation removal by another method, such as hand trimming, mowing, or livestock grazing, except during the spot treatment on non-native invasive vegetation.

- 8.4.8. Permittee shall only use herbicides registered with the California Department of Pesticide Regulation (CDPR). Permittee shall consult the Pesticide Regulation's Endangered Species Custom Realtime Internet Bulletin Engine (PRESCRIBE) to determine specific pesticide use limitations (<http://www.cdpr.ca.gov/docs/endspec/prescint.htm>).
- 8.4.9. Permittee shall only use pesticides for which a "no effect" determination has been issued by the U.S. EPA's Endangered Species Protection Program (<http://www.epa.gov/espp/>) for any species likely to occur within the Project site or downstream. Prior to applying pesticides, Permittee shall verify that selected pesticides are not on an endangered species bulletin issued by the U.S. EPA for the Project Area. Bulletins can be accessed using the interactive map, Bulletins Live! Two, at: <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>.
- 8.4.10. A list of the herbicides intended for use and their labeled instructions shall be made available to CDFW for review prior to an application event.
- 8.4.11. Permittee is responsible for maintaining its herbicide use records for ensuring herbicide use and timing is consistent with any federal, State, or local regulations.
- 8.4.12. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or their tributaries shall be contained in watertight containers or removed from the Project site.
- 8.4.13. Care shall be taken to avoid spraying native vegetation with herbicides. Spraying within 100 feet of existing mitigation sites shall be done by hand.
- 8.4.14. Should any fish or animal kills occur following application of herbicides, such kills shall be reported to CDFW Bay Delta Region within 24 hours.

Regardless of the contents of this ITP, Permittee is responsible for any environmental damage caused by the application or use of substances that prove harmful to fish and aquatic wildlife.

- 8.5. Stockpiles. Permittee shall not stockpile or store construction material where it could wash into the waterway or where it would cover Covered Species habitat.
- 8.6. Vehicle/Equipment Cleaning and Maintenance. Prior to the entry of any vehicle or equipment into the Project site including the staging area, Permittee shall ensure equipment and vehicles are clean of vegetation and not leaking fluids. Any equipment or vehicles driven and/or operated in proximity of sloughs and wetlands shall be maintained in good working order to prevent the release of contaminants

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that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. If a vehicle is found to be leaking fluids of any kind, Permittee shall take immediate measures to stop and/or contain the leak and then remove the vehicle to an off-site location until properly repaired.

- 8.7. Invasive Species. Permittee shall conduct Project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: <http://www.cal-ipc.org/ip/prevention/index.php> and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: <http://www.protectyourwaters.net/>.

8.7.1. Permittee shall not reintroduce any removed invasive aquatic plant species or part thereof into waters of the State. Permittee may bury or dispose of invasive aquatic plant material onto dry upland habitats as long as the disposal site does not drain towards any nearby pond, ditch, waterway, wetland or proposed wetland. Permittee shall not dispose of invasive aquatic plant species on any waterside levee. If no suitable upland disposal site is located in the Project Area, Permittee shall haul away the plant material and dispose of it at an appropriate off-site location.

8.7.2. Permittee shall properly dispose of invasive nonnative terrestrial plants and parts thereof that are physically removed during Covered Activities. Permittee may burn, bury, or haul away the invasive plant material and dispose of it at an appropriate offsite location to prevent their spread in and around the Project Area.

- 8.8. Covered Species Work Period Variance. If Permittee needs more time to complete the Project, work may be permitted outside the work period (see Conditions of Approval 8.13 and 8.27 for species specific work period restrictions) and extended on a week-to-week basis by CDFW. Permittee shall submit a written request for a work period variance to Andy Rockriver at Andy.Rockriver@wildlife.ca.gov, or if unavailable to CDFW at R3CESA@wildlife.ca.gov. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should evaluate the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of CDFW. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. CDFW will have ten (10) calendar

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days to review the proposed work period variance and respond to the request.

Additional Minimization Measures for Giant Garter Snake

- 8.9. Environmental Sensitive Areas. Permittee shall establish Environmentally Sensitive Areas (ESAs) in the Project Area to minimize the disturbance of Giant Garter Snake habitat from construction-related activities. Permittee shall erect temporary ESA signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary and as directed by the Designated Biologist or Biological Monitor, 200 feet from the edge of potential aquatic Giant Garter Snake habitat. In addition, all potential Giant Garter Snake habitat that can be reasonably avoided during construction activities shall be identified as ESAs and shall be marked by the Designated Biologist or Biological Monitor. Once all construction activities are completed in an area that has an ESA and there are no further threats to the ESA as determined by the Designated Biologist or Biological Monitor, Permittee may remove the temporary ESA signage and associated delineation material (stakes, flags, rope, fencing).
- 8.10. Rescue and Relocation Plan. Permittee shall submit for approval 30 days prior to construction a relocation plan that describes the circumstances under which a Giant Garter Snake would be relocated to the Giant Garter Snake Temporary Relocation Area, and the procedures for doing so. Giant Garter Snake may be relocated to other suitable habitat, including ESAs, with CDFW approval.
- 8.11. Capture and Handling. Only a Giant Garter Snake Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the surveying, monitoring, capturing, handling, and/or relocation of Giant Garter Snake) may capture and handle Giant Garter Snake. The Giant Garter Snake Qualified Biologist shall only relocate Giant Garter Snake if the animal is directly threatened by immediate Covered Activities and the animal is unable to move to a safe area on its own. The Giant Garter Snake Qualified Biologist shall only relocate Giant Garter Snake to areas identified in the CDFW-approved Rescue and Relocation Plan. The Giant Garter Snake Qualified Biologist shall minimize capture and handling to the extent feasible as most reptiles experience stress in response to capture and short-term confinement. Captured animals shall be released immediately.

The Designated Representative shall notify CDFW of the capture and handling incident immediately or no later than noon on the next business day if the incident occurs outside of normal business hours. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.

- 8.12. Giant Garter Snake Surveys. In any construction area that has Giant Garter Snake habitat, a Giant Garter Snake Qualified Biologist shall conduct a survey for Giant

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Garter Snake no more than 48 hours prior to initiating ground-disturbing or vegetation disturbing/removal activities in or within 200 feet of suitable aquatic and upland habitat. If a Giant Garter Snake is encountered during one of these surveys, Permittee shall not begin ground-disturbing or vegetation-disturbing/removal activities until the snake has left the active work area on its own volition or is captured (see Condition 8.11 for conditions under which a Giant Garter Snake may be captured) and relocated, by a Giant Garter Snake Qualified Biologist, to suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.

- 8.13. Giant Garter Snake Seasonal Work Restriction. Permittee shall limit construction activities within 200 feet of Giant Garter Snake aquatic habitat to the work window of May 1 to October 1. Permittee shall consult with CDFW and USFWS to determine if additional measures are necessary to minimize and avoid take for work between October 1 and May 1 (see Condition of Approval 8.8). Permittee may conduct work between October 2 and October 31, or April 1 and April 30 on days when the daily ambient air temperature is forecasted to exceed 75 degrees Fahrenheit (F) and maximum daily air temperatures are to have exceeded 75 degrees F for at least three consecutive days immediately preceding work. CDFW may consider requests to work outside of this temperature window during April and October on an activity-by-activity basis. The Permittee shall submit these requests in writing for review and approval by CDFW. Requests shall include a justification for the request and any additional information CDFW deems necessary.
- 8.14. Giant Garter Snake Observation. If a snake species of any kind is observed within or near the active work site, then all nearby Project activities shall stop and work shall not continue until the snake species is identified by the Designated Biologist or Biological Monitor. If the Designated Biologist or Biological Monitor cannot locate the snake, work may continue as long as the Designated Biologist or Biological Monitor is present and looking out for the snake. If a Giant Garter Snake is discovered at any time within the active work site and staging areas, then all nearby Project activities shall halt until the snake leaves the active work site on its own or is captured (see Condition 8.11 for conditions under which a Giant Garter Snake may be captured) and relocated, by a Giant Garter Snake Qualified Biologist, to suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.
- 8.15. Giant Garter Snake Daily Inspections. When working in or within 200 feet Giant Garter Snake habitat, both aquatic and upland, the Designated Biologist or Biological Monitor shall inspect the work site and areas adjacent to the work site for Giant Garter Snake prior to the start of construction activities each day. If the Designated Biologist or Biological Monitor determine the work site does not support Giant Garter Snake, construction may be initiated and continue under the observation of the Designated Biologist or Biological Monitor.

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- 8.16. Daily Equipment Inspections. Workers shall inspect under and in equipment and vehicles for snakes before equipment or vehicles are started or moved. If a snake is present, the worker shall immediately notify the Designated Biologist or Biological Monitor and work shall not commence until the snake leaves the area, as determined by the Designated Biologist or Biological Monitor, or is relocated by a Giant Garter Snake Qualified Biologist. If a Giant Garter Snake is found under or in a tracked equipment parked overnight outside a staging area, Permittee shall immediately consult with CDFW and shall subsequently implement any new measures related to overnight equipment storage that CDFW may require to protect Giant Garter Snake.
- 8.17. Construction Monitoring in Suitable Habitat. The Designated Biologist or a Biological Monitor shall monitor construction activities in or within 200 feet of suitable Giant Garter Snake aquatic or upland habitat. The Designated Biologist or Biological Monitors shall be present and visually monitor any active ground-disturbing, ground-clearing, or rip rap removal activities for the presence of snakes. The Designated Biologist shall submit Giant Garter Snake habitat mapping for the past month in the Monthly Compliance Report (Condition of Approval 7.4). The Monthly Compliance Report shall also include maps documenting the expected Giant Garter Snake habitat for the next month and expected construction activities in Giant Garter Snake habitat.
- 8.18. Unearthed Giant Garter Snake. If Permittee unearths or uncovers a Giant Garter Snake while conducting ground-disturbing activities, Permittee shall immediately stop work within all Giant Garter Snake habitat and notify CDFW. Permittee may continue work in the area only after consulting with CDFW and implementing any new measures that CDFW may require to protect Covered Species.
- 8.19. Exclusion Fencing. Permittee shall install exclusion fencing around all staging areas (both temporary and mobile) and temporary stockpiles, and any other area identified by CDFW. Permittee shall not install exclusion fencing between Giant Garter Snake upland and aquatic habitat until May 1 of each construction phase and no later than October 1. Fencing in between Giant Garter Snake upland and aquatic habitat shall be placed when Giant Garter Snakes are less likely to use upland habitats and be cut off from aquatic habitat. Fencing shall be checked daily for holes and damage. Permittee shall maintain and repair the barrier immediately to ensure that it is functional and without defects, that fencing material is taught, and that the bottom edge of the fencing material remains buried.
- 8.20. Dewatered Habitat. Permittee shall allow any dewatered wetland habitat in the Project Area to remain dry for at least fifteen days (between April 15 and October 1) prior to excavating or filling the dewatered habitat. If during this period a previously dewatered wetland becomes wet again, Permittee shall consult with CDFW prior to excavating or filling the wetland habitat if it has not remained dry for at least 15 days since last wetted.

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- 8.21. Entrapment in Pipes or other Structures. Permittee shall store all construction pipes, culvert, or similar structures in a fenced staging area until ready for use. Workers shall thoroughly inspect all construction pipe and similar structures with a diameter of 0.25 inches or greater that are stored for one or more overnight periods for Giant Garter Snake before the pipe is subsequently moved, buried, or capped. If a Giant Garter Snake is detected during inspection, workers shall notify the Designated Biologist or Biological Monitor and allow the animal to safely escape that section of pipe before moving and utilizing the pipe.
- 8.22. Open Trenches and Holes. Permittee shall fence or cover open trenches or holes within 200 feet of Giant Garter Snake aquatic habitat when workers are not in the immediate area. Covers shall be constructed such that snakes cannot get under the trench cover or hole cover. If a trench or hole cover is placed on uneven or bumpy ground, Permittee shall ensure that all gaps between the cover and ground are filled with soil such that a snake cannot slither under the cover. Permittee shall ensure all excavated trenches and holes, that are not enclosed by exclusion fencing, are provided with one or more escape ramps to prevent inadvertent entrapment of Giant Garter Snake. The ramps shall be constructed of earth fill or wooden planks.
- 8.23. Open Trenches and Holes Daily Inspections. The Designated Biologist or Biological Monitor shall check all excavated open holes, pumps, and trenches for Giant Garter Snake at the beginning, middle, and end of each day for trapped animals, and immediately prior to filling the hole or trench. If there is a Giant Garter Snake trapped in these features, a Giant Garter Snake Qualified Biologist shall remove and relocate the animal(s) to a safe location within suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.
- 8.24. Covered Species Injury. If a Giant Garter Snake is injured as a result of Project-related activities, a Giant Garter Snake Qualified Biologist shall immediately take it to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report. Notification shall include the name of the facility where the animal was taken. If a Giant Garter Snake is killed during Project-related activities, a Giant Garter Snake Qualified Biologist shall collect and preserve the carcass and immediately notify CDFW as described in Condition 7.9.
- 8.25. Water Pumps in Giant Garter Snake Habitat. Permittee shall consult with CDFW prior to operating any pumps for controlling internal water levels that operate during daylight hours, from April 1 through October 14, in or within 200 feet of or in Giant Garter Snake habitat. CDFW may require screens or other devices to prevent snake entrainment into pump intakes.

8.26. Cross Levee Road Use in the Giant Garter Snake Relocation Area. When the Giant Garter Snake Temporary Relocation Area is in active use, the Designated Biologist or Biological Monitor shall check for Giant Garter Snakes on the Cross Levee road immediately prior to vehicles driving on Cross Levee road within the Giant Garter Snake Temporary Relocation Area. Permittee shall install signage on both sides of the Giant Garter Snake Temporary Relocation Area to alert drivers of the additional sensitive habitat and requirement for the Designated Biologist or Biological Monitor clearance of the road.

Additional Measures for Delta Smelt and Longfin Smelt

8.27. Delta Smelt and Longfin Smelt Seasonal Work Restriction. Permittee shall limit in-water and waterside levee construction activities to the work window of June 1 through November 30. Permittee shall consult with CDFW if work after November 30 cannot be avoided to determine if additional measures are necessary to minimize and avoid take and related impacts of taking (see Condition of Approval 8.8).

8.28. Water Drafting. Permittee shall not draft water from the tidal sloughs (Shag, Cache, and Hass sloughs) adjacent to the Project site. If supplemental water from a tidal slough is required to maintain suitable aquatic habitat conditions in the Temporary Giant Garter Snake Relocation Area, Permittee shall consult with CDFW prior to drafting water from the tidal slough. If approved by CDFW, the water intake hose or pipe shall be screened per Condition of Approval 8.33 and the Permittee may draft water year-round, i.e., water drafting is not restricted to the Delta Smelt and Longfin Smelt Seasonal Work Restriction (Condition of Approval 8.27).

8.29. Minimize Turbidity and Siltation. Permittee shall not pump sediment-laden water from within the Project Area into Cache, Haas, or Shag sloughs. Permittee shall use a coffer dam, silt curtain or similar turbidity control methods while conducting in-water turbidity/siltation causing work to help minimize the release of suspended sediments into Cache, Haas, and Shag sloughs. In locations where such turbidity control methods are not practical, Permittee shall monitor turbidity levels every 4 hours upstream out of the influence of the Project and approximately 300 feet below the in-water work. During in-water work and Project dewatering activities, Permittee shall not cause turbidity levels to rise by more than 20 percent over baseline conditions. If Project dewatering activities or breaching occurs during an unseasonal storm runoff event, Permittee shall not cause turbidity to exceed 150 NTUs.

If Permittee monitors turbidity levels during breaching activities in lieu of turbidity control methods listed above, Permittee shall submit to CDFW a turbidity monitoring report within two weeks on initiation of breaching activities and every two weeks thereafter until two weeks after breaching activities cease. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase over natural turbidity conditions.

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8.30. Coffer Dam Material. Permittee shall construct coffer dams at breach locations using clean sheet piles or similar material that is free of oil, grease, and other hazardous material and free of invasive species if previously used outside of the Delta. At other levee work sites that require a coffer dam, Permittee may use clean sheet piles, clean river run gravel or sandbags which may be sealed with sheet plastic, to construct temporary coffer dams.

8.31. Pile Driving. If Permittee uses sheet piles to construct coffer dams, Permittee shall use a vibratory hammer to start installation of and removal of each sheet pile. Permittee may use an impact hammer if geotechnical conditions require its use to complete sheet pile construction. To minimize noise impacts to Delta Smelt and Longfin Smelt, Permittee shall:

8.31.1. Initiate a soft start to allow fish to leave the area prior to operating the vibratory or impact hammer at full capacity. The hammer operator shall initiate noise from the hammer for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure shall be repeated two additional times before commencing hammering at full capacity.

8.31.2. Limit pile driving between one hour after sunrise and one hour before sunset.

8.32. Barotrauma Monitoring During Pile-Driving. The Designated Biologist or Biological Monitor shall conduct visual monitoring of the water surface during pile driving activities to ensure that the sound level exposures levels do not adversely affect fish motor functions and cause fish die-off and predation. The Designated Biologist or Biological Monitor shall notify CDFW immediately if distressed fish are observed during the pile driving activities. If fish are observed to be in distress, then Permittee shall cease pile-driving activities for one (1) hour before commencing with a soft start as specified in Condition of Approval 8.31.1.

8.33. Fish Screens. Permittee shall screen the intake of any hose or pipe used to dewater coffer dams or to draft water from tidal sloughs adjacent to the Project site. The screens shall be designed so that the approach velocity is no more than 0.33 feet per second (fps). The screen material shall be wire mesh, perforated plate, or pipe with at least 27 percent open area. Round openings in the screen shall not exceed 3/32 inches (2.38 millimeters) diameter, and slotted openings shall not exceed 0.07 inches in width (approximately 1/16 inch or 1.75 millimeters) measured diagonally. Screens shall be kept clean and free of accumulated algae, leaves or other debris, which could block portions of the screen surface and increase approach velocities at any point on the screen.

8.34. Coffer Dam Checks for Stranded Covered Species. A Smelt Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the

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surveying, monitoring, capturing, handling, and/or relocation of Delta Smelt and Longfin Smelt) shall monitor for stranded aquatic life during the initial dewatering of all constructed coffer dams. Any aquatic life captured or left stranded by the initial dewatering shall be captured and relocated to suitable habitat as specified in the following Condition of Approval 8.35. Stranded Delta Smelt and Longfin Smelt shall be rescued first and relocated to nearby suitable tidal habitat.

8.35. Relocation of Stranded Fish and Wildlife. If found within any dewatering site associated with tidal waters of Shag, Cache or Hass Sloughs, a Smelt Qualified Biologist shall capture and relocate all fish and wildlife species immediately. Under the supervision of a Smelt Qualified Biologist, Biological Monitors may assist in the relocation of fish and wildlife. Biological Monitors may relocate fish and wildlife stranded by dewatering to non-tidal areas if those species are not listed as Covered Species or protected by State and federal endangered species laws, unless otherwise permitted. Measures shall be taken to avoid harm and mortality resulting from fish and amphibian relocation activities, as follows:

8.35.1. Relocation Records: Relocated reptiles, fish, and amphibians shall be moved to the nearest appropriate site outside of the work area. Giant Garter Snake shall be relocated according to the CDFW-approved Rescue and Relocation Plan (See Condition of Approval 8.11). A record shall be maintained of all relocated fish. The record shall include the date of capture and relocation, the method of capture, the location of the relocation site in relation to the Project site, the number of Covered Species and the general composition of other fish species (e.g., 50% silversides, 20% sunfish and bass, 10% carp, 10% shad, 10% other) captured and relocated. The record shall be provided to CDFW within two weeks of the completion of the work season or Project activities, whichever comes first.

8.35.2. Release Locations Criteria: Prior to capturing reptiles, fish and amphibians, the most appropriate release location(s) shall be determined, using the following criteria: water temperature shall be similar as the capture location; there shall be ample habitat for the captured fish; relocation areas must be in proximity to the capture site, contain suitable habitat, and not be affected by Project activities.

8.35.3. Capture Methods. Capture methods may include fish landing nets, seines, dip nets, buckets, and by hand.

8.35.4. Wet Hands and Nets: Handling of reptiles, fish and amphibians within the Project site shall be minimized. However, when handling is necessary, the Qualified Biologist and Biological Monitors shall always wet hands or nets prior to touching fish and amphibians.

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- 8.35.5. Mesh Size. Seine/net mesh shall be adequately sized to ensure fish are not gilled during capture. There shall be a minimum number of three passes with the seine or net to ensure a maximum capture probability of fish within the proposed area to be dewatered.
- 8.35.6. Proper Holding Technique. The Qualified Biologist and Biological Monitors may temporarily hold fish and amphibians in cool, shaded, aerated water or immediately release fish into the adjacent slough. Holding containers shall be sized such that the largest fish will fit without touching the sides. The Qualified Biologist and Biological Monitors shall protect fish and amphibians from jostling and noise and shall not remove fish from this container until time of release. A thermometer shall be placed in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. Overcrowding in containers shall be avoided by having at least two containers and segregating young-of-year fish and amphibians from larger age-classes to avoid predation. If fish are abundant, the capturing of fish and amphibians shall cease periodically and they shall be released at the predetermined locations. If Delta Smelt or Longfin Smelt are captured, they shall be processed first and returned to suitable tidal habitat immediately or as soon as practicable.
- 8.35.7. Mortality Rate of Reptiles, Fish and Amphibians. If mortality occurs during relocation activities, capturing efforts shall be stopped and Permittee shall immediately consult with CDFW and other the appropriate agencies.
- 8.35.8. Relocate Reptiles, Fish and Amphibians during Cool Temperatures. The Qualified Biologist and Biological Monitors shall conduct relocation activities in the morning when the temperatures are cooler. Relocation activities may continue into the afternoon with CDFW approval or per the CDFW-approved Rescue and Relocation Plan.
- 8.36. Interior Water Features Fish Rescue. If Permittee identifies Delta Smelt or Longfin Smelt while dewatering internal water features, Permittee shall immediately relocate these smelt to the nearest tidal slough and notify CDFW within 24 hours. Before dewatering any pond that has a large number of Wakasagi (*Hypomesus nipponensis*), which is a nonnative smelt that is known to hybridize with Delta Smelt, Permittee shall consult with CDFW regarding dewatering and rescue options that will minimize their release into Delta Smelt habitat.
- 8.37. Removal of Temporary Structures. Permittee shall remove any temporary construction-related structures upon completion of Project activities, e.g., sheet piles, coffer dams. Exposed areas on levee slopes shall be reseeded with native vegetation or noninvasive nonnative grasses appropriate to the expected habitat development. All trash and erosion control materials that are no longer needed shall be disposed of off-site.

- 8.38. Waterside Structure Removal. Permittee shall remove and properly dispose off-site all structures (water control structures) and material (pipes, culverts, pilings) cut free on the waterside of the levee. Any material cut off below the waterline or dropped into the water shall be retrieved and properly disposed off-site.
- 8.39. Plugging Existing Culvert with Concrete. Permittee shall prevent newly poured or pumped concrete, leachate/runoff, and other byproducts from contacting the wetted channel for at least 30 days. During this time, Permittee shall prevent concrete runoff from entering Cache, Haas, and Shag sloughs. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry per manufacturer's instructions.
- 8.40. No Additional Hardscaping. Permittee shall not increase the dimensions or add any additional hardscape within the riparian area or below top of the levee other than what is explicitly described in the ITP Application and supporting materials received by CDFW, unless otherwise explicitly described in this ITP. Permittee may replace existing hardscape features within the existing footprint. Replacement elements must be of the same volume and dimensions or lesser and shall be free of erodible soils, litter, and materials deleterious to aquatic life.
- 8.41. Riprap Reuse. Permittee may reuse existing angular rock (riprap) excavated from the Shag Slough levee and other suitable areas onsite to armor high erosion areas, pursuant to Condition of Approval 8.40. Any reused riprap shall be free of material deleterious to aquatic life. Permittee shall visually inspect all excavated rock for concrete, rebar, tires, trash, debris, and other hazardous material prior to reusing onsite. Such material shall be removed from the riprap and properly disposed of offsite according to local regulations.

Additional Minimization Measures for Mason's lilaeopsis

- 8.42. Pre-Construction Survey for Mason's Lilaeopsis. A Mason's lilaeopsis Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the surveying, monitoring, handling, and/or relocation of Mason's lilaeopsis) shall conduct pre-construction surveys for Mason's lilaeopsis prior to starting construction activities. If Mason's lilaeopsis are identified in the Project Area, they shall be flagged and avoided.
- 8.43. Translocation of Mason's Lilaeopsis. If impacts to Mason's lilaeopsis cannot be avoided, a Mason's lilaeopsis Qualified Biologist shall translocate the individuals to suitable habitats. Permittee shall consult with CDFW before attempting to transplant these individuals. Within 6 months of issuance of this ITP, Permittee shall submit to CDFW for approval a Mason's lilaeopsis translocation plan pursuant to Condition of

Approval 9.3.7.2.

- 8.44. Minimize Impacts to Waterside Levee Wetlands. Permittee shall minimize impacts to tidal wetland habitat along levees as this habitat may support Covered Species. Permittee shall operate construction equipment from the top of levees or from barges to the extent possible when working on the waterside of levees that are not enclosed by coffer dams.
- 8.45. Post-Construction Survey for Mason's lilaeopsis. A Mason's Lilaeopsis Qualified Biologist shall conduct a Post-Project Survey for Mason's lilaeopsis at each breach location. This survey shall be conducted within 45 days of completing breaching activities. If no suitable low tides occur within the first 45 days, the survey shall be completed during the first suitable low tide thereafter. The survey shall indicate the relative condition of any Mason's lilaeopsis within 100 feet of each breach and assess the plant's risk to unabated erosion of the breach. Permittee shall submit the survey results to CDFW no later than 30 days after completing the Post-Project Survey.

Levee Operation and Maintenance and Habitat Maintenance

The following requirements are intended to ensure the minimization of incidental take of and related impacts to the taking of Covered Species in the Project Area, excluding the new Duck Slough Setback Levee, during post-construction levee operation and maintenance and during habitat maintenance. Duck Slough Setback Levee post-construction operations and maintenance activities are the responsibility of RD 2098 and are not covered in this ITP. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species and related impacts of the taking:

- 8.46. Repair Plan Submittal. Permittee shall submit to CDFW a detailed levee and habitat repair plan and receive CDFW written approval prior to starting any post-project levee repair or habitat modification activities. Permittee shall document all temporary and permanent impacts to Covered Species habitat as part of this plan. Permittee shall submit this plan at least 45 days prior to the proposed work activities.
- 8.47. Repair Conditions of Approval. All post-project levee repair activities and habitat modification activities are subject to the previous Conditions of Approval listed in this ITP or as otherwise noted by CDFW in their review and approval of the levee and habitat repair plan (see Condition of Approval 8.46). Depending on the size and scope of the repair or maintenance activity, CDFW may, in consultation with Permittee, impose additional Conditions of Approval and mitigation.
- 8.48. Repair Design Limit. Permittee may only repair/restore a levee or peninsula to its as-built design using like material. If rock slope protection is required at a repair site that had no previous rock, Permittee shall consult with CDFW and receive written permission prior to repairing the site with rock. CDFW may require additional

mitigation measures to compensate the placement of new rock in the restoration site.

8.49. Repair and Maintenance Impacts to Covered Species Habitat. Permittee shall fully restore all temporary impacts to Covered Species habitat. If Permittee permanently impacts Covered Species habitat, CDFW may require additional mitigation to fully mitigate the impacts.

8.50. Vegetation Control. Permittee may control vegetation subject to the following:

8.50.1. Grazing. Permittee may control vegetation on the levee slopes by livestock grazing at any time.

8.50.2. Discing and Mowing. Within 200 feet of or in suitable Giant Garter Snake habitat, Permittee shall not disc or till upland vegetation. Permittee shall limit mowing to July 1 to September 30. Permittee shall raise mower blades to a minimum of six inches to avoid injuring Giant Garter Snake and to retain grassy cover. If levee or other upland vegetation management must be conducted in March, April, September, or October, work shall be conducted in the morning (prior to 9 AM) or when temperatures are below 70 degrees Fahrenheit.

8.50.3. Mowing > 6 inches. Outside of suitable Giant Garter Snake habitat and 200 feet of such habitat, Permittee may control vegetation and grasses on levees and peninsulas by mowing using mechanized equipment at any time, provided that mowing decks and/or blades are set at a mowing height of at least 6 inches above the ground surface.

8.50.4. Mowing ≤ 6 inches. Outside of suitable Giant Garter Snake habitat and 200 feet of such habitat, Permittee may control vegetation and grasses on levees and peninsulas by mowing lower than 6 inches above ground surface only during the following time period: August 15 of any one year to January 31 of the following year, and outside of this time period only with CDFW written approval.

8.50.5. Invasive Vegetation Management. Permittee may spot treat invasive plant species following all herbicide measures under Condition of Approval 8.4, Pesticide and Herbicide Use. Permittee shall coordinate with CDFW prior to implementing any mechanical vegetation management activities in tidal wetlands.

8.51. Post-Construction Breach Stabilization. If bank erosion at a constructed breach will result in the take or foreseeable take of Mason's lilaeopsis in the upcoming wet seasons, Permittee shall consult with CDFW to discuss potential bank stabilization measures or other measures to prevent Mason's lilaeopsis from eroding away. If bank stabilization measures are not practicable, CDFW may require Permittee to transplant and monitor the Mason's lilaeopsis and provide additional compensatory habitat.

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9. Habitat Management Land Acquisition and Restoration:

Delta Smelt and Longfin Smelt

CDFW has determined that the Project will directly benefit Delta Smelt and Longfin Smelt through the creation and permanent protection and management of approximately 3,164 acres of intertidal habitat (tidal marsh and mudflats), subtidal habitat, and a network of tidal channels. The permanent removal of 9 sections of the Shag Slough Levee and two sections of the Vogel Levee on Cache Slough and the subsequent flooding and conversion of agricultural and managed wetlands to permanent tidal wetland and subtidal habitat will fully mitigate temporary construction-related impacts to Delta Smelt and Longfin Smelt habitat.

To meet this requirement, Permittee shall complete the Project as described in the ITP Application and supporting documents, and pursuant to the Conditions of Approval in this ITP.

Giant Garter Snake

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

To meet this requirement, the Permittee shall provide for the restoration, permanent protection and management of aquatic and emergent foraging, and terrestrial winter refugia habitats within a single contiguous area, either onsite (preferred) or offsite (if necessary). If all habitat types can be protected on-site and directly adjacent to the Project site, then the Permittee shall provide for both the permanent protection and management of: (1) 492 acres of aquatic and emergent foraging habitat as created by the Project; (2) 37 acres of general wildlife upland habitat bordering Shag Slough as created by the Project; (3) 23 acres of terrestrial winter refugia as created by the Project; (4) 154 acres of terrestrial winter refugia adjacent to the Project site and no more than 700 feet from Duck Slough, but not including Duck Slough; and (5) preservation of Duck Slough adjacent to the Project site. If all habitat types cannot be protected onsite and directly adjacent to the Project site, then the Permittee shall provide for the permanent protection and management of 819 acres of aquatic and emergent foraging habitat and terrestrial winter refugia at an offsite location approved by CDFW pursuant to Condition of Approval 9.3.8 below. Collectively, these mitigation lands are Habitat Management (HM) lands, pursuant to Condition of Approval 9.3 below and the calculation and funding of the management funds pursuant to Condition of Approval 9.4 below. Permanent

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protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations.

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

- 9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$3,500/acre for 819 acres: **\$2,866,500**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirement.
- 9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at **\$5,733,000**.
- 9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **\$630,000**.
- 9.1.4. Long-term management funding as described in Condition of Approval 9.4 below of **\$126,000** annually in perpetuity for up to 819 acres. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.
- 9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW, estimated at **\$3,000**.

Mason's lilaeopsis

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

To meet this requirement, Permittee shall translocate, monitor, and manage Mason's lilaeopsis that will be impacted by Covered Activities and provide for the preservation, permanent protection and management of 1,200 square feet of occupied Mason's

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lilaeopsis habitat on the Project site. Collectively, these mitigation lands are HM lands pursuant to Condition of Approval 9.3 below and the calculation and funding of the management funds pursuant to Condition of Approval 9.4 below. The final size of the HM lands may be adjusted by CDFW depending on the results of the pre-construction and post-construction surveys for Mason's lilaeopsis (Conditions of Approval 8.42 and 8.45) and the extent of translocated Mason's lilaeopsis. Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations.

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

- 9.2.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$3,500/acre for 1 acre: **\$3,500**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirement.
- 9.2.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at **\$20,000**.
- 9.2.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **\$30,000**.
- 9.2.4. Translocated Mason's lilaeopsis vegetation monitoring and management funding for 7 years as described in Condition of Approval 9.3.7 below, estimated at **\$140,000**.
- 9.2.5. Long-term management funding as described in Condition of Approval 9.4 below of **\$6,000** annually in perpetuity for approximately 1,200 square feet of HM lands. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.
- 9.2.6. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW, estimated at **\$3,000**.

All Covered Species

9.3. Habitat Acquisition and Protection. To provide for the acquisition and perpetual protection and management of Covered Species HM lands, the Permittee shall:

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- 9.3.1. Fee Title/Conservation Easement. Transfer fee title to the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e).
- 9.3.2. HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 3A) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species.
- 9.3.3. HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 3B). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services.
- 9.3.4. Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change.
- 9.3.5. Start-up Activities. Provide for the implementation and funding of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include,

at a minimum: (1) preparing a final management plan for CDFW approval (see <https://www.wildlife.ca.gov/Conservation/Planning/Banking>). This plan can be incorporated into the larger Lookout Slough land management plan; (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) conducting litter removal; (5) constructing habitat enhancement features; and (6) installing signage.

9.3.6. Interim Management (Initial and Capital). Enhancement of the HM lands shall begin with the levee maintenance and site preparation related to enhancing the site for tidal restoration. The Permittee shall fund and ensure implementation of the interim management on the HM lands. The interim management period shall be a minimum of five years from the date that the Permittee begins the Covered Activities. Interim management period activities shall be those defined as necessary to manage the land and shall include levee road maintenance and minor levee repairs, trash removal, site monitoring, vegetation and invasive species management, mowing, and overall site maintenance.

9.3.7. Mason's Lilaeopsis HM Lands Monitoring and Management. To mitigate habitat impacts associated with Covered Activities, Permittee shall survey and monitor the status of translocated plants and representative reference occurrences of Mason's lilaeopsis on Project levees. Permittee shall develop a monitoring and management plan to benefit Mason's lilaeopsis using management funds as described in Condition of Approval 9.4 and subject to Condition of Approval 9.4.2.

9.3.7.1. Within 6 months of issuance of this ITP, Permittee shall prepare and submit to CDFW for approval a Mason's lilaeopsis Monitoring and Management Plan (MLMMP), including a baseline assessment, to facilitate management and monitoring of Mason's lilaeopsis on the Project site. The MLMMP shall include detail adequate to allow efficient implementation by vegetation management contractors under the direction of a Mason's lilaeopsis Qualified Biologist. Management activities may include, but are not limited to, invasive species control, trash removal, and biotechnical bank stabilization measures to abate Project-related erosion of Mason's lilaeopsis habitat.

9.3.7.2. As part of the MLMMP, Permittee shall include a translocation plan for Mason's lilaeopsis occurrences at Breach numbers 5, 7 and 8, and at any other Project locations where Mason's lilaeopsis could be permanently impacted by Covered Activities. This plan shall describe: (1) the location and patch size of the existing occurrences to be transplanted; (2) identify the HM lands where the Mason's lilaeopsis will be transplanted. Subject

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to CDFW approval, this identified area shall become part of the HM lands; (3) the existing habitat conditions of the proposed HM lands; (4) transplanting methods and techniques; (5) a monitoring and maintenance plan for the HM lands; and (6) success criteria for the transplanted Covered Species. The monitoring and maintenance plan reporting shall be incorporated into the Annual Lookout Slough Mason's Lilaeopsis Monitoring Report (Annual Report) as described below in Condition of Approval 9.3.7.4.

- 9.3.7.3. Permittee shall monitor all translocated Mason's lilaeopsis individuals and populations in the vicinity of breaches for potential erosion impacts for a minimum of seven years. HM lands shall be managed and monitored in perpetuity.
- 9.3.7.4. Permittee shall provide CDFW an Annual Report on the status of Mason's lilaeopsis no later than January 31 of every year beginning with issuance of this ITP. Each annual report shall include, at a minimum: (1) names and titles of each survey crew member; (2) survey methods and dates; (3) the size and location of Mason's lilaeopsis occurrences in the HM lands; (4) the relative habitat condition of each occurrence; (5) the specific habitat conditions in the HM lands, including percent cover of all other plant species in the HM lands; and (6) a brief analysis of the status of translocated Mason's lilaeopsis. Each Annual Report shall also include a summary of any management activities that occurred during the year.
- 9.3.7.5. After initiating management activities, Permittee or CDFW may determine that an alternative management approach would be more successful in protecting or enhancing Mason's lilaeopsis habitat or is necessary to ensure successful implementation of this mitigation. The MLMMP may be revised accordingly. Permittee shall acquire CDFW's approval of all revisions to the MLMMP at least one month prior to conducting new or modified activities.
- 9.3.7.6. Following completion of the seven-year monitoring period for translocated Mason's lilaeopsis, Permittee shall prepare a summary report describing the success of the translocated plants as specified in the MLMMP. The report shall detail Mason's lilaeopsis monitoring and management approaches used in the Project Area, any management adaptations attempted, the percent invasive species cover in each management area at the end of each management year, a description of the response of Mason's lilaeopsis to management activities over the management period, and any other information that would inform future

monitoring and management activities in the Project Area. The report shall be submitted to CDFW staff for review.

- 9.3.8. Giant Garter Snake Mitigation, Monitoring, and Reporting Plan. Within 6 months of the issuance of this ITP, Permittee shall submit a Giant Garter Snake Mitigation, Monitoring, and Reporting Plan to CDFW for approval. The Giant Garter Snake Mitigation, Monitoring, and Reporting Plan shall describe how the Permittee will achieve the HM Lands requirement for Giant Garter Snake including any designs for habitat development; the species and habitat monitoring to be conducted to measure success of the HM Lands; and proposed contents and frequency of reports on HM Lands.
- 9.4. In-Perpetuity Management Funding. The Permittee shall ensure that the Giant Garter Snake and Mason's lilaeopsis HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. Permittee shall provide long-term management funding for the perpetual management of the HM lands by using revenues derived from the State Water Project (SWP) as defined in the October 18, 2010, *Agreement between the Department of Water Resources and the Department of Fish and Game (now Department of Fish and Wildlife) Regarding Implementation of a Fish Restoration Program in Satisfaction of Federal Biological Opinions for State Water Project Delta Operations; Section "H. Property Transfer and Management Costs."*

The Permittee shall enter into a Project-specific agreement with CDFW which will include assurances for sufficient funding through DWR's SWP operations and maintenance budget for perpetual O&M of the restoration project in perpetuity and adjusted for inflation. If sufficient funding is no longer available from SWP charges to the SWP Contractors, Permittee shall annually fund in-perpetuity management activities through another funding source, until Permittee has established and fully funded an Endowment. If another funding source is required, it shall be established within six months of identifying that the previous funding source will no longer be available. Additionally, if funding from SWP charges to the SWP Contractors is no longer available, Permittee shall fund an Endowment amount sufficient to fund these activities in perpetuity as established through the Property Analysis Record (PAR) prepared for this Project pursuant to Condition 9.4.2 of this ITP. Permittee shall fund the Endowment by contributing a minimum of ten percent of the amount required by the PAR (adjusted for present value) annually, commencing the fiscal year that SWP charges to the SWP Contractors funding is no longer available, to a mutually agreed upon account, until the Endowment is fully funded, after which time the activities under the management plan will be funded from interest generated from the Endowment principal.

Permittee may choose to fully fund an Endowment for all or part of the HM Lands at any time using any funding source. Permittee shall submit a proposal to CDFW describing what HM Lands will be covered under the fully funded Endowment and what lands will continue to be funded by the SWP charges to the SWP Contractors, for CDFW approval. All Conditions of Approval within this ITP related to Endowment establishment, funding, governance, and management shall apply. Permittee's proposal shall identify performance security (Security) for any land-acquisition, interim, start-up, or land management activity costs, and related transaction fees, as applicable, until the Endowment is fully funded and is available to fund the applicable HM Lands management. Such Security shall be in the form of SWP charges to the SWP Contractors unless or until an alternate form of Security is provided to CDFW. Alternate Security shall be in the form of an irrevocable letter of credit (see Attachment 4) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel. Alternate Security shall: 1) be in an amount approved in advance in writing by CDFW; 2) be provided to CDFW before Covered Activities begin or within 30 days of CDFW approval of Permittee's proposal, whichever comes first; 3) be held by CDFW or in a manner approved in advance in writing by CDFW; 4) if held by CDFW, be transmitted to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 5) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other; and 5) allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.

The Endowment as used in this ITP is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plans required by Condition of Approval 9.3.5. The Endowment shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded as described above.

- 9.4.1. Identify an Endowment Manager. If Endowment establishment is triggered, per Condition of Approval 9.4 above, the Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment

Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).

- 9.4.2. Calculate the Endowment Funds Deposit. If Endowment establishment is triggered, per Condition of Approval 9.4, and after obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) [or PAR-equivalent analysis (hereinafter "PAR")] to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). If the HM lands have been managed pursuant to a final long-term management plan approved by CDFW for at least five years, the PAR and Endowment shall be based on the actual costs of managing the HM lands. Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.
- 9.4.2.1. Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.
- 9.4.2.2. Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:
- 9.4.2.2.1. 10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.
- 9.4.2.2.2. Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

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

9.4.3. Transfer Long-term Endowment Funds. If Endowment establishment is triggered, per Condition of Approval 9.4, the Permittee shall fund the Endowment Deposit Amount over a 10-year period, in annual amount of 10% of the total Endowment Deposit Amount, adjusted for inflation, as approved by CDFW in writing. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965- 65968, as amended, and Probate Code sections 18501-18510, as amended.

9.5. Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, and expenses incurred from other state agency reviews.

10. Performance Security:

The Permittee may proceed with Covered Activities based on the Security as described below. Permittee is a party to a long-term water supply contract with each of its 29 water supply customers, who are generally referred to as "SWP Contractors." SWP Contractors contract with Permittee to pay for the operation, maintenance, planning and capital costs of the SWP. Under Water Code section 11651, "any agency which contracts to purchase from the department any water, use of water, water storage, electric power, or other service shall provide for the punctual payment to the department of all amounts which become due under the contract." In accordance with a statutory requirement, each water supply contract between Permittee and an SWP Contractor requires that if that SWP Contractor fails or is unable to raise sufficient funds by other means, the SWP Contractor must levy upon all taxable property in the SWP Contractor's service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the water supply contract. If the SWP Contractor defaults in payment, Permittee may, and under certain conditions is required to, upon six months' notice, suspend water deliveries during the period of default.

Permittee will treat the costs of ITP implementation as components of the SWP and address such costs to fulfill those requirements as part of overall SWP costs. Costs, such as routine operation, maintenance, and power (e.g., monitoring of mitigation sites) are not financed, but are instead paid in monthly installments in the calendar year,

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incurred based upon estimates developed by Permittee and delivered to the SWP Contractors in July of the preceding year.

Permittee shall provide Security as follows:

- 10.1. Security Amount. Security is assured by Permittee's long-term water supply contracts and applicable state law. Estimated costs to implement acquisition, protection, restoration, and perpetual management of Covered Species HM lands is **\$9,429,000**. This amount is based on the cost estimates identified in Conditions of Approval 9.1 and 9.2 of this ITP.
- 10.2. Mitigation Implementation. Payment of the costs of mitigation projects, is assured by Permittee's long-term water supply contracts and applicable state law. All costs of the Project, including the costs of mitigation and monitoring activities required by this ITP shall be paid by Permittee and charged to SWP Contractors.

Permittee shall prepare and submit to CDFW within one year of the effective date of this ITP an initial CESA mitigation funding strategy for review and approval. The strategy shall include detailed cost estimates regarding: (1) purchase of off-site mitigation for Giant Garter Snake, as necessary; (2) HM lands acquisition and start-up costs and interim management period costs; and (3) long-term management costs for HM lands.

Permittee shall submit annual updates to the strategy to CDFW for review and approval. These updates shall include extension of the detailed funding strategy for five years post submission date and shall include a description of expenditures to date for compliance with Conditions of Approval 9.1, 9.2, and 9.3. To the degree that annual charges to SWP Contractors are relied upon, the funding strategy shall demonstrate that those funds have been or will be charged to SWP Contractors and received by Permittee consistent with SWP Contractor billing practices.

- 10.3. Demonstration of Performance. Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied, as evidenced by:
- Within one year of the effective date of this ITP, submission of an initial CESA mitigation funding strategy for concurrence by CDFW;
 - Receipt by CDFW of documentation, acceptable to CDFW, demonstrating that Permittee will treat the mitigation obligations of this ITP as components of SWP and will fulfill these mitigation obligations as part of the overall SWP costs;
 - Within 18 months of the effective date of this ITP, receipt by CDFW of documentation of the required acquisition and protection of Covered Species HM lands and copies of all recorded and executed conservation easements for

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HM lands; and

- Within 18 months of the effective date of this ITP, receipt by CDFW of the final CDFW-approved management plans for HM lands.

Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied on an ongoing basis, as evidenced by:

- Timely submission of CESA mitigation funding strategy annual updates for HM lands;
- Timely submission of all required reports; and
- If Endowment establishment is triggered, Condition of Approval 9.4, written confirmation from approved Endowment Manager of its receipt of the full Endowment.

CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

Amendment:

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:

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

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Compliance with Other Laws:

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

Notices:

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

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

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

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by email or registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2020-031-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Gregg Erickson, Regional Manager
California Department of Fish and Wildlife – Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
R3CESA@wildlife.ca.gov

and a copy to:

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

Incidental Take Permit
No. 2081-2020-031-03
Department of Water Resources

LOOKOUT SLOUGH TIDAL HABITAT RESTORATION AND FLOOD IMPROVEMENT PROJECT

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

Andy Rockriver, Senior Environmental Scientist (Specialist)
 California Department of Fish and Wildlife - Bay Delta Region
 2109 Arch Airport Road, Suite 100
 Stockton, CA 95206
 (209) 234-3433
Andy.Rockriver@wildlife.ca.gov

Compliance with CEQA:

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, Department of Water Resources. (See generally Pub. Resources Code, §§ 21067, 21069). The lead agency's prior environmental review of the Project is set forth in the Environmental Impact Report (EIR) for the Lookout Slough Tidal Habitat Restoration and Flood Improvement Project (SCH No.: 2019039136), dated October 2020 that the Department of Water Resources certified for Lookout Slough Tidal Habitat Restoration and Flood Improvement Project on November 2, 2020. At the time the lead agency certified the EIR and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

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

Findings Pursuant to CESA:

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

CDFW finds based on substantial evidence in the ITP application, Lookout Slough Tidal Habitat Restoration and Flood Improvement Project EIR, the results of site visits and

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LOOKOUT SLOUGH TIDAL HABITAT RESTORATION AND FLOOD IMPROVEMENT PROJECT

consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of the Project Area, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and
- (8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

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Department of Water Resources

LOOKOUT SLOUGH TIDAL HABITAT RESTORATION AND FLOOD IMPROVEMENT PROJECT

Attachments:

FIGURE 1	Map of Project
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Biologist Resume Form
ATTACHMENT 3A,3B	Proposed Lands for Acquisition, Habitat Management Lands Checklist
ATTACHMENT 4	Letter of Credit Form
ATTACHMENT 5	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 3/24/2021.

DocuSigned by:

Gregg Erickson

BE74D4C93C604EA

Gregg Erickson, Regional Manager
Bay Delta Region

ACKNOWLEDGMENT

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

DocuSigned by:

Dan Riordan

By: _____

ED309E357D9C409...

Date: 3/24/2021

Printed Name: Dan Riordan

Title: EPM 1

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LOOKOUT SLOUGH TIDAL HABITAT RESTORATION AND FLOOD IMPROVEMENT PROJECT

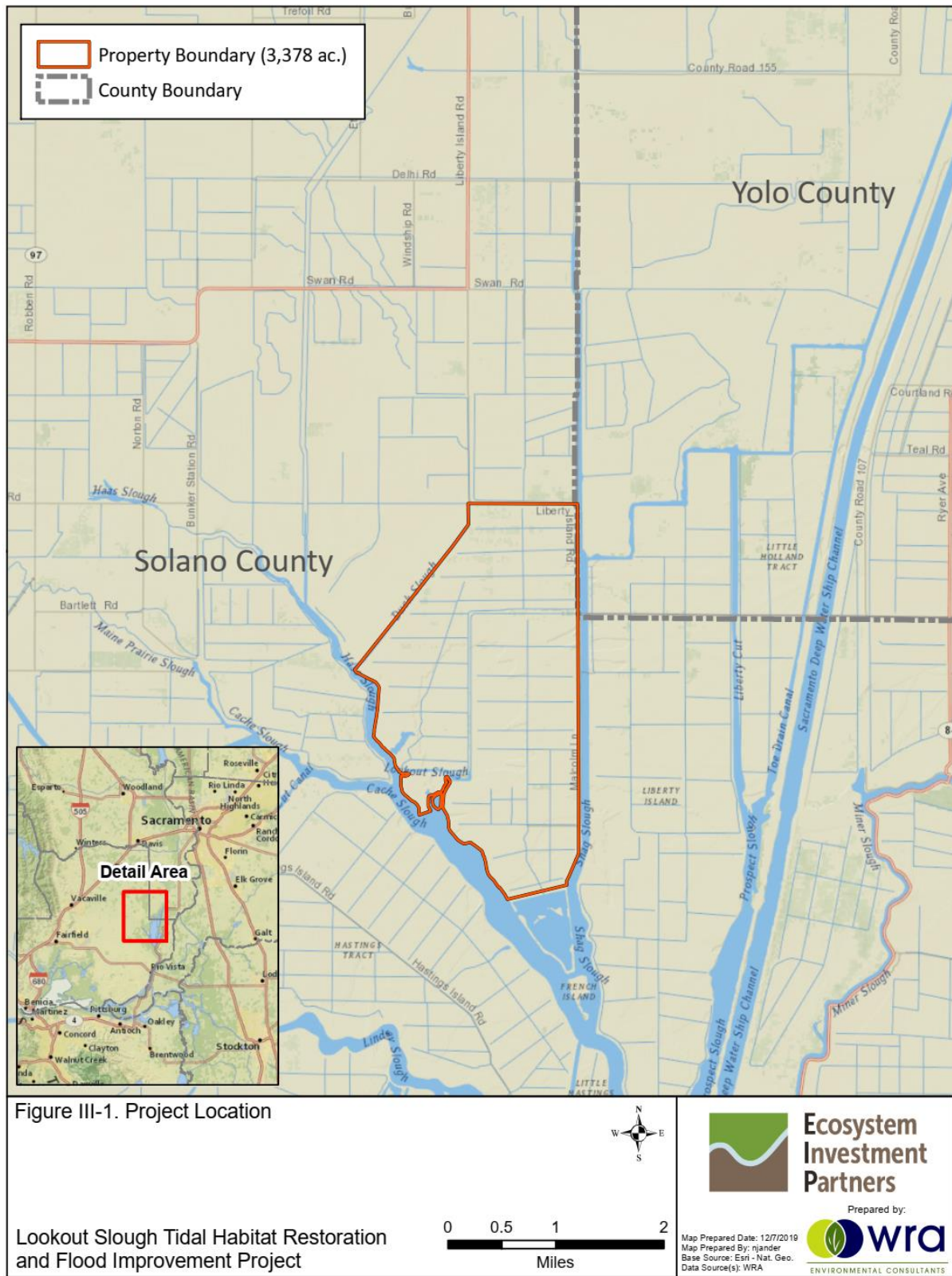


Figure 1. Location of Lookout Slough Tidal Habitat Restoration and Flood and Flood Improvement Project, Solano County.

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
CALIFORNIA ENDANGERED SPECIES ACT AND
CALIFORNIA NATIVE PLANT PROTECTION ACT
INCIDENTAL TAKE PERMIT NO. 2081-2020-014-03**

PERMITTEE: Department of Water Resources

PROJECT: Lookout Slough Tidal Habitat Restoration and Flood Improvement Project

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the California Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with sections 1907 and 2081, subdivisions (b) and (c) of the Fish and Game Code and sections 786.9 and 783.0 et seq. of California Code of Regulations, Title 14. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

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

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

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

TABLE OF MITIGATION MEASURES

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

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Designated Representative. Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.	ITP Condition # 6.1	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
2	Designated Biologist and Biological Monitors. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information for the Designated Biologist and Biological Monitors at least 30 days before starting Covered Activities. As part of the qualification submittal, Permittee shall require that the Designated Biologist and each Biological Monitor submit a resume and complete the Biologist Resume Form (Attachment 2) for CDFW review and approval. The Designated Biologist shall be responsible for overseeing the Biological Monitors working on the project. Permittee shall ensure that the Designated Biologist and Biological Monitors are knowledgeable and experienced in the biology, natural history, and collecting and handling of the Covered Species which they are monitoring. The Designated Biologist and Biological Monitors shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist and Biological Monitors in writing before starting Covered Activities and shall also obtain approval at least 14 days in advance, in writing, if there is a staffing change for the Designated Biologist or Biological Monitors.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	Designated Biologist and Biological Monitors Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist and Biological Monitors shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.	ITP Condition # 6.3	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
4	Education Program. Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, their status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.	ITP Condition # 6.4	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
5	Trash Abatement. Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	ITP Condition # 6.6	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
6	Erosion Control Measures. Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a tidal slough. These exposed slopes shall be reseeded with native vegetation upon project completion.	ITP Condition # 6.8	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
7	Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting or jute netting (erosion control matting) or similar material, in potential Covered Species' habitat.	ITP Condition # 6.9	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
8	Delineation of Habitat. Permittee shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the	ITP Condition # 6.10	Before commencing ground- or vegetation-	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	disturbance of Covered Species' habitat.		disturbing activities/ Entire Project		
9	CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP and provide any necessary safety equipment should it be needed.	ITP Condition # 6.16	Before commencing ground- or vegetation- disturbing activities, during construction, and post-project/ Entire Project	Permittee	
10	Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.	ITP Condition # 7.1	At least 14 days before impacting Covered Species habitat	Permittee	
11	SWPPP Preparation. Prior to initiating Covered Activities, Permittee shall submit to CDFW a Stormwater Pollution Prevention Plan (SWPPP) to address Best Management Practices (BMPs) utilized to prevent erosion, sediment loss, and potential pollution within the Project site for CDFW review and approval.	ITP Condition # 8.3	Before commencing ground- or vegetation- disturbing activities	Permittee	
12	Environmental Sensitive Areas. Permittee shall establish Environmentally Sensitive Areas (ESAs) in the Project Area to minimize the disturbance of Giant Garter Snake habitat from construction-related activities. Permittee shall erect temporary ESA signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary and as directed by the Designated Biologist or Biological Monitor, 200 feet from the edge of potential aquatic Giant Garter Snake habitat. In addition, all potential Giant Garter Snake habitat that can be reasonably avoided during construction activities shall be identified as ESAs and shall be marked by the Designated Biologist or Biological Monitor. Once all construction activities are completed in an area that has an ESA and there are no further threats to the ESA as determined by the Designated Biologist or Biological Monitor, Permittee may remove the temporary ESA signage and associated delineation material (stakes, flags, rope, fencing).	ITP Condition # 8.9	Before commencing ground- or vegetation- disturbing activities and during construction/ Entire Project	Permittee	
13	Rescue and Relocation Plan. Permittee shall submit for approval 30 days prior to construction a relocation plan that describes the circumstances under which a Giant Garter Snake would be relocated to the Giant Garter Snake Temporary Relocation Area, and the procedures for doing so. Giant	ITP Condition # 8.10	At least 30 days before impacting Covered Species habitat	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	Garter Snake may be relocated to other suitable habitat, including ESAs, with CDFW approval.				
14	Giant Garter Snake Surveys. In any construction area that has Giant Garter Snake habitat, a Giant Garter Snake Qualified Biologist shall conduct a survey for Giant Garter Snake no more than 48 hours prior to initiating ground-disturbing or vegetation disturbing/removal activities in or within 200 feet of suitable aquatic and upland habitat. If a Giant Garter Snake is encountered during one of these surveys, Permittee shall not begin ground-disturbing or vegetation-disturbing/removal activities until the snake has left the active work area on its own volition or is captured (see Condition 8.11 for conditions under which a Giant Garter Snake may be captured) and relocated, by a Giant Garter Snake Qualified Biologist, to suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.	ITP Condition # 8.12	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
15	Exclusion Fencing. Permittee shall install exclusion fencing around all staging areas (both temporary and mobile) and temporary stockpiles, and any other area identified by CDFW. Permittee shall not install exclusion fencing between Giant Garter Snake upland and aquatic habitat until May 1 of each construction phase and no later than October 1. Fencing in between Giant Garter Snake upland and aquatic habitat shall be placed when Giant Garter Snakes are less likely to use upland habitats and be cut off from aquatic habitat. Fencing shall be checked daily for holes and damage. Permittee shall maintain and repair the barrier immediately to ensure that it is functional and without defects, that fencing material is taught, and that the bottom edge of the fencing material remains buried.	ITP Condition # 8.19	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
16	Pre-Construction Survey for Mason's Lilaeopsis. A Mason's lilaeopsis Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the surveying, monitoring, handling, and/or relocation of Mason's lilaeopsis) shall conduct pre-construction surveys for Mason's lilaeopsis prior to starting construction activities. If Mason's lilaeopsis are identified in the Project Area, they shall be flagged and avoided.	ITP Condition # 8.42	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
17	Translocation of Mason's Lilaeopsis. If impacts to Mason's lilaeopsis cannot be avoided, a Mason's lilaeopsis Qualified Biologist shall translocate the individuals to suitable habitats. Permittee shall consult with CDFW before	ITP Condition # 8.43	Within 6 months of issuance of this ITP	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	attempting to transplant these individuals. Within 6 months of issuance of this ITP, Permittee shall submit to CDFW for approval a Mason's lilaeopsis translocation plan pursuant to Condition of Approval 9.3.7.2.		and prior to translocation		
18	<p>Habitat Management Land Acquisition and Restoration: Delta Smelt and Longfin Smelt</p> <p>CDFW has determined that the Project will directly benefit Delta Smelt and Longfin Smelt through the creation and permanent protection and management of approximately 3,164 acres of intertidal habitat (tidal marsh and mudflats), subtidal habitat, and a network of tidal channels. The permanent removal of 9 sections of the Shag Slough Levee and two sections of the Vogel Levee on Cache Slough and the subsequent flooding and conversion of agricultural and managed wetlands to permanent tidal wetland and subtidal habitat will fully mitigate temporary construction-related impacts to Delta Smelt and Longfin Smelt habitat.</p> <p>To meet this requirement, Permittee shall complete the Project as described in the ITP Application and supporting documents, and pursuant to the Conditions of Approval in this ITP.</p>	ITP Condition # 9.0 (Delta Smelt and Longfin Smelt)	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
19	<p>Habitat Management Land Acquisition and Restoration. Giant Garter Snake</p> <p>CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.</p> <p>To meet this requirement, the Permittee shall provide for the restoration, permanent protection and management of aquatic and emergent foraging, and terrestrial winter refugia habitats within a single contiguous area, either onsite (preferred) or offsite (if necessary). If all habitat types can be protected on-site and directly adjacent to the Project site, then the Permittee shall provide for both the permanent protection and management of: (1) 492 acres of aquatic and emergent foraging habitat as created by the Project; (2) 37 acres of general wildlife upland habitat bordering Shag</p>	ITP Condition # 9.0 (Giant Garter Snake)	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	Slough as created by the Project; (3) 23 acres of terrestrial winter refugia as created by the Project; (4) 154 acres of terrestrial winter refugia adjacent to the Project site and no more than 700 feet from Duck Slough, but not including Duck Slough; and (5) preservation of Duck Slough adjacent to the Project site. If all habitat types cannot be protected onsite and directly adjacent to the Project site, then the Permittee shall provide for the permanent protection and management of 819 acres of aquatic and emergent foraging habitat and terrestrial winter refugia at an offsite location approved by CDFW pursuant to Condition of Approval 9.3.8 below. Collectively, these mitigation lands are Habitat Management (HM) lands, pursuant to Condition of Approval 9.3 below and the calculation and funding of the management funds pursuant to Condition of Approval 9.4 below. Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations.				
20	<p>Habitat Management Land Acquisition and Restoration. Mason's lilaeopsis CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to NPPA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.</p> <p>To meet this requirement, Permittee shall translocate, monitor, and manage Mason's lilaeopsis that will be impacted by Covered Activities and provide for the preservation, permanent protection and management of 1,200 square feet of occupied Mason's lilaeopsis habitat on the Project site. Collectively, these mitigation lands are HM lands pursuant to Condition of Approval 9.3 below and the calculation and funding of the management funds pursuant to Condition of Approval 9.4 below. The final size of the HM lands may be adjusted by CDFW depending on the results of the pre-construction and post-construction surveys for Mason's lilaeopsis (Conditions of Approval 8.42 and 8.45) and the extent of translocated Mason's lilaeopsis. Permanent protection and funding for perpetual</p>	ITP Condition # 9.0 (Mason's lilaeopsis)	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	management of compensatory habitat must be complete before starting Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 10 below for all uncompleted obligations.				
21	<p>Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:</p> <p>Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$3,500/acre for 819 acres: \$2,866,500. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirement.</p> <p>Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at \$5,733,000.</p> <p>Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at \$630,000.</p> <p>Long-term management funding as described in Condition of Approval 9.4 below of \$126,000 annually in perpetuity for up to 819 acres. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.</p> <p>Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW, estimated at \$3,000.</p>	ITP Condition # 9.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
22	<p>Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the Mason's lilaeopsis HM lands and restoration of temporarily disturbed habitat as follows:</p> <p>Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$3,500/acre for 1 acre: \$3,500. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirement.</p>	ITP Condition # 9.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at \$20,000.</p> <p>Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at \$30,000.</p> <p>Translocated Mason's lilaeopsis vegetation monitoring and management funding for 7 years as described in Condition of Approval 9.3.7 below, estimated at \$140,000.</p> <p>Long-term management funding as described in Condition of Approval 9.4 below of \$6,000 annually in perpetuity for approximately 1,200 square feet of HM lands. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.</p> <p>Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW, estimated at \$3,000.</p>				
23	<p>Fee Title/Conservation Easement. Transfer fee title to the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended. If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW does not hold the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Government Code sections 65965-65968, as</p>	ITP Condition # 9.3.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e).				
24	HM Lands Approval. Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, a formal Proposed Lands for Acquisition Form (see Attachment 3A) identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species.	ITP Condition # 9.3.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
25	HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents (see Attachment 3B). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services.	ITP Condition # 9.3.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
26	Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change.	ITP Condition # 9.3.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)		
27	Start-up Activities. Provide for the implementation and funding of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see https://www.wildlife.ca.gov/Conservation/Planning/Banking). This plan can be incorporated into the larger Lookout Slough land management plan; (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) conducting litter removal; (5) constructing habitat enhancement features; and (6) installing signage.	ITP Condition # 9.3.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
28	Interim Management (Initial and Capital). Enhancement of the HM lands shall begin with the levee maintenance and site preparation related to enhancing the site for tidal restoration. The Permittee shall fund and ensure implementation of the interim management on the HM lands. The interim management period shall be a minimum of five years from the date that the Permittee begins the Covered Activities. Interim management period activities shall be those defined as necessary to manage the land and shall include levee road maintenance and minor levee repairs, trash removal, site monitoring, vegetation and invasive species management, mowing, and overall site maintenance.	ITP Condition # 9.3.6	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
29	Mason's Lilaepsis HM Lands Monitoring and Management. To mitigate habitat impacts associated with Covered Activities, Permittee shall survey and monitor the status of translocated plants and representative reference occurrences of Mason's lilaepsis on Project levees. Permittee shall develop a monitoring and management plan to benefit Mason's lilaepsis using management funds as described in Condition of Approval 9.4 and subject to Condition of Approval 9.4.2.	ITP Condition # 9.3.7	Before commencing ground- or vegetation-disturbing activities	Permittee	
30	Within 6 months of issuance of this ITP, Permittee shall prepare and submit to CDFW for approval a Mason's lilaepsis Monitoring and Management Plan (MLMMP), including a baseline assessment, to facilitate management and monitoring of Mason's lilaepsis on the Project site. The MLMMP shall include detail adequate to allow efficient implementation by vegetation management contractors under the direction of a Mason's lilaepsis Qualified Biologist. Management activities may include, but are not limited to, invasive species control, trash removal, and biotechnical bank stabilization measures to abate Project-related erosion of Mason's lilaepsis habitat.	ITP Condition # 9.3.7.1	Within 6 months of issuance of this ITP	Permittee	
31	As part of the MLMMP, Permittee shall include a translocation plan for Mason's lilaepsis occurrences at Breach numbers 5, 7 and 8, and at any other Project locations where Mason's lilaepsis could be permanently impacted by Covered Activities. This plan shall describe: (1) the location and patch size of the existing occurrences to be transplanted; (2) identify the HM lands where the Mason's lilaepsis will be transplanted. Subject to CDFW approval, this identified area shall become part of the HM lands; (3) the existing habitat conditions of the proposed HM lands; (4) transplanting methods and techniques; (5) a monitoring and maintenance plan for the HM	ITP Condition # 9.3.7.2	Within 6 months of issuance of this ITP	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	lands; and (6) success criteria for the transplanted Covered Species. The monitoring and maintenance plan reporting shall be incorporated into the Annual Lookout Slough Mason's Lilaepsis Monitoring Report (Annual Report) as described below in Condition of Approval 9.3.7.4.				
32	Giant Garter Snake Mitigation, Monitoring, and Reporting Plan. Within 6 months of the issuance of this ITP, Permittee shall submit a Giant Garter Snake Mitigation, Monitoring, and Reporting Plan to CDFW for approval. The Giant Garter Snake Mitigation, Monitoring, and Reporting Plan shall describe how the Permittee will achieve the HM Lands requirement for Giant Garter Snake including any designs for habitat development; the species and habitat monitoring to be conducted to measure success of the HM Lands; and proposed contents and frequency of reports on HM Lands.	ITP Condition # 9.3.8	Within 6 months of issuance of this ITP	Permittee	
33	<p>In-Perpetuity Management Funding. The Permittee shall ensure that the Giant Garter Snake and Mason's lilaepsis HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. Permittee shall provide long-term management funding for the perpetual management of the HM lands by using revenues derived from the State Water Project (SWP) as defined in the October 18, 2010, Agreement between the Department of Water Resources and the Department of Fish and Game (now Department of Fish and Wildlife) Regarding Implementation of a Fish Restoration Program in Satisfaction of Federal Biological Opinions for State Water Project Delta Operations; Section "H. Property Transfer and Management Costs."</p> <p>The Permittee shall enter into a Project-specific agreement with CDFW which will include assurances for sufficient funding through DWR's SWP operations and maintenance budget for perpetual O&M of the restoration project in perpetuity and adjusted for inflation. If sufficient funding is no longer available from SWP charges to the SWP Contractors, Permittee shall annually fund in-perpetuity management activities through another funding source, until Permittee has established and fully funded an Endowment. If another funding source is required, it shall be established within six months of identifying that the previous funding source will no longer be available. Additionally, if funding from SWP charges to the SWP Contractors is no longer available, Permittee shall fund an Endowment amount sufficient to fund these activities in perpetuity as established</p>	ITP Condition # 9.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>through the Property Analysis Record (PAR) prepared for this Project pursuant to Condition 9.4.2 of this ITP. Permittee shall fund the Endowment by contributing a minimum of ten percent of the amount required by the PAR (adjusted for present value) annually, commencing the fiscal year that SWP charges to the SWP Contractors funding is no longer available, to a mutually agreed upon account, until the Endowment is fully funded, after which time the activities under the management plan will be funded from interest generated from the Endowment principal.</p> <p>Permittee may choose to fully fund an Endowment for all or part of the HM Lands at any time using any funding source. Permittee shall submit a proposal to CDFW describing what HM Lands will be covered under the fully funded Endowment and what lands will continue to be funded by the SWP charges to the SWP Contractors, for CDFW approval. All Conditions of Approval within this ITP related to Endowment establishment, funding, governance, and management shall apply. Permittee's proposal shall identify performance security (Security) for any land-acquisition, interim, start-up, or land management activity costs, and related transaction fees, as applicable, until the Endowment is fully funded and is available to fund the applicable HM Lands management. Such Security shall be in the form of SWP charges to the SWP Contractors unless or until an alternate form of Security is provided to CDFW. Alternate Security shall be in the form of an irrevocable letter of credit (see Attachment 4) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel. Alternate Security shall: 1) be in an amount approved in advance in writing by CDFW; 2) be provided to CDFW before Covered Activities begin or within 30 days of CDFW approval of Permittee's proposal, whichever comes first; 3) be held by CDFW or in a manner approved in advance in writing by CDFW; 4) if held by CDFW, be transmitted to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 5) or by way of an approved instrument such as escrow, irrevocable letter of credit, or other; and 5) allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.</p> <p>The Endowment as used in this ITP is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plans required by Condition of Approval 9.3.5. The</p>				

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	Endowment shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended. After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded as described above.				
34	Identify an Endowment Manager. If Endowment establishment is triggered, per Condition of Approval 9.4 above, the Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended. Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(4) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(4).	ITP Condition # 9.4.1	If endowment is triggered	Permittee	
35	Calculate the Endowment Funds Deposit. If Endowment establishment is triggered, per Condition of Approval 9.4, and after obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a Property Analysis Record (PAR) [or	ITP Condition # 9.4.2	If endowment is triggered	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>PAR-equivalent analysis (hereinafter "PAR")) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). If the HM lands have been managed pursuant to a final long-term management plan approved by CDFW for at least five years, the PAR and Endowment shall be based on the actual costs of managing the HM lands. Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.</p> <p>Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.</p> <p>Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:</p> <p>10 Percent Contingency. A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.</p> <p>Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.</p> <p>Non-annualized Expenses. For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.</p>				
36	<p>Transfer Long-term Endowment Funds. If Endowment establishment is triggered, per Condition of Approval 9.4, the Permittee shall fund the Endowment Deposit Amount over a 10-year period, in annual amount of 10% of the total Endowment Deposit Amount, adjusted for inflation, as approved by CDFW in writing. The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage</p>	ITP Condition # 9.4.3	If endowment is triggered	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	the Endowment in compliance with this ITP, Government Code sections 65965- 65968, as amended, and Probate Code sections 18501-18510, as amended.				
37	Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable expenses incurred by CDFW such as transaction fees, account set-up fees, administrative fees, and expenses incurred from other state agency reviews.	ITP Condition # 9.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)/ During construction/ Post-construction		
38	<p>Performance Security: The Permittee may proceed with Covered Activities based on the Security as described below. Permittee is a party to a long-term water supply contract with each of its 29 water supply customers, who are generally referred to as "SWP Contractors." SWP Contractors contract with Permittee to pay for the operation, maintenance, planning and capital costs of the SWP. Under Water Code section 11651, "any agency which contracts to purchase from the department any water, use of water, water storage, electric power, or other service shall provide for the punctual payment to the department of all amounts which become due under the contract." In accordance with a statutory requirement, each water supply contract between Permittee and an SWP Contractor requires that if that SWP Contractor fails or is unable to raise sufficient funds by other means, the SWP Contractor must levy upon all taxable property in the SWP Contractor's service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the water supply contract. If the SWP Contractor defaults in payment, Permittee may, and under certain conditions is required to, upon six months' notice, suspend water deliveries during the period of default.</p> <p>Permittee will treat the costs of ITP implementation as components of the SWP and address such costs to fulfill those requirements as part of overall SWP costs. Costs, such as routine operation, maintenance, and power (e.g., monitoring of mitigation sites) are not financed, but are instead paid in monthly installments in the calendar year, incurred based upon estimates developed by Permittee and delivered to the SWP Contractors in July of the preceding year.</p>	ITP Condition # 10	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>Permittee shall provide Security as follows:</p> <p>Security Amount. Security is assured by Permittee's long-term water supply contracts and applicable state law. Estimated costs to implement acquisition, protection, restoration, and perpetual management of Covered Species HM lands is \$9,429,000. This amount is based on the cost estimates identified in Conditions of Approval 9.1 and 9.2 of this ITP.</p> <p>Mitigation Implementation. Payment of the costs of mitigation projects, is assured by Permittee's long-term water supply contracts and applicable state law. All costs of the Project, including the costs of mitigation and monitoring activities required by this ITP shall be paid by Permittee and charged to SWP Contractors.</p> <p>Permittee shall prepare and submit to CDFW within one year of the effective date of this ITP an initial CESA mitigation funding strategy for review and approval. The strategy shall include detailed cost estimates regarding: (1) purchase of off-site mitigation for Giant Garter Snake, as necessary; (2) HM lands acquisition and start-up costs and interim management period costs; and (3) long-term management costs for HM lands.</p> <p>Permittee shall submit annual updates to the strategy to CDFW for review and approval. These updates shall include extension of the detailed funding strategy for five years post submission date and shall include a description of expenditures to date for compliance with Conditions of Approval 9.1, 9.2, and 9.3. To the degree that annual charges to SWP Contractors are relied upon, the funding strategy shall demonstrate that those funds have been or will be charged to SWP Contractors and received by Permittee consistent with SWP Contractor billing practices.</p> <p>Demonstration of Performance. Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied, as evidenced by:</p> <p>Within one year of the effective date of this ITP, submission of an initial CESA mitigation funding strategy for concurrence by CDFW;</p> <p>Receipt by CDFW of documentation, acceptable to CDFW, demonstrating that Permittee will treat the mitigation obligations of this ITP as components of SWP and will fulfill these mitigation obligations as part of the overall SWP costs;</p>				

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>Within 18 months of the effective date of this ITP, receipt by CDFW of documentation of the required acquisition and protection of Covered Species HM lands and copies of all recorded and executed conservation easements for HM lands; and</p> <p>Within 18 months of the effective date of this ITP, receipt by CDFW of the final CDFW-approved management plans for HM lands.</p> <p>Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied on an ongoing basis, as evidenced by:</p> <p>Timely submission of CESA mitigation funding strategy annual updates for HM lands;</p> <p>Timely submission of all required reports; and</p> <p>If Endowment establishment is triggered, Condition of Approval 9.4, written confirmation from approved Endowment Manager of its receipt of the full Endowment.</p> <p>CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.</p>				
DURING CONSTRUCTION					
39	Construction Monitoring Notebook. The Designated Biologist and Biological Monitors shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.	ITP Condition # 6.5	During Construction/ Entire Project	Permittee	
40	Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist and Biological Monitors. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.	ITP Condition # 6.7	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
41	Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description, and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle access traffic to established roads, staging, and parking areas. Construction equipment operations within the Project Area will not be limited by this Condition of Approval to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.	ITP Condition # 6.11	During Construction/ Entire Project	Permittee	
42	Project Speed Limits. Permittee shall ensure that vehicle speeds do not exceed 25 miles per hour, except within 200 feet of Giant Garter Snake habitat where speeds shall be limited to 15 miles per hour.	ITP Condition # 6.12	During Construction/ Entire Project	Permittee	
43	Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, and equipment storage to previously disturbed areas or on barges as needed. Permittee shall return vehicles and heavy equipment on wheels to staging areas at the end of the day. Permittee may temporarily park tracked equipment overnight outside of staging areas if tracked equipment is located in previously disturbed areas and a minimum of 600 feet from water. To minimize travel, Permittee may create temporary staging areas on disturbed soils in or near the work area. Exclusion fencing shall be installed around staging areas per Condition of Approval 8.19 in this ITP. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the Project Area unless provided for in Condition of Approval 6.11.	ITP Condition # 6.13	During Construction/ Entire Project	Permittee	
44	Artificial Lighting at Night. Permittee shall not use permanent or temporary, fixed, exterior lighting, including motion-triggered security lighting, that casts light on Covered Species habitat beyond the Project Area for Covered Activities occurring between sunset and sunrise, except in emergencies. Nighttime construction lighting shall be shielded and oriented downward to minimize effects on any nearby Covered Species and to avoid Swainson's hawk (<i>Buteo swainsoni</i>) impacts.	ITP Condition # 6.14	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
45	Hazardous Waste. Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.	ITP Condition # 6.15	During Construction/ Entire Project	Permittee	
46	Refuse Removal. Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.	ITP Condition # 6.17	During Construction and Post-Construction/ Entire Project	Permittee	
47	Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 24 hours.	ITP Condition # 7.2	During Construction/ Entire Project	Permittee	
48	Compliance Monitoring. The Designated Biologist and/or Biological Monitor shall be on-site daily when Covered Activities occur. The Designated Biologist and Biological Monitors shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist and Biological Monitors shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.	ITP Condition # 7.3	During Construction/ Entire Project	Permittee	
49	Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Compliance Monitoring 7.3 into a Monthly Compliance Report and submit it to CDFW by the 5th of each month following the first day of Covered	ITP Condition # 7.4	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	Activities. A copy of the MMRP table with notes showing the current implementation status of each mitigation measure shall be submitted as part of the report. Monthly Compliance Reports shall be submitted to the CDFW contact listed below via e-mail and hardcopy. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.				
50	Annual Status Report. Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 7.4; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; and (6) information about other Project impacts on the Covered Species.	ITP Condition # 7.5	During Construction and Post-Construction/ Entire Project	Permittee	
51	CNDDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 7.6	During Construction/ Entire Project	Permittee	
52	Reporting Consolidation. Permittee may consolidate reports that are required by this ITP and other permits (LSA Agreement, biological opinions) to the extent possible. Permittee shall consult with and receive written approval from CDFW prior to consolidating reports to ensure that all reporting requirements will be met and that any changes in due dates are acceptable to CDFW.	ITP Condition # 7.8	During Construction and Post-Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
53	Notification of Take or Injury. Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall collect and preserve the carcass of the Covered Species and provide initial notification to CDFW by calling the Regional Representative below. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	ITP Condition # 7.9	During Construction and Post-Construction/ Entire Project	Permittee	
54	Covered Species Daily Work Restriction. Permittee shall terminate all Covered Activities, except as described in the Project description and this Condition of Approval, at sunset and shall not resume Covered Activities until sunrise. Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area (https://www.esrl.noaa.gov/gmd/grad/solcalc/sunrise.html). Maintenance dewatering activities may be conducted after sunset. Vehicle fueling and maintenance activities may be conducted occasionally at night for up to 6 hours, between sunset and sunrise, within CDFW-approved designated staging areas or at the overnight parked locations of tracked heavy equipment.	ITP Condition # 8.1	During Construction/ Entire Project	Permittee	
55	Precipitation Work Limit. Permittee shall restrict work activities on exterior levees to periods of low rainfall (less than 1/10th of an inch per 24-hour period) and periods of dry weather (with less than a 30% chance of rain). Permittee shall initiate all erosion control measures prior to all storm events. Permittee shall monitor the National Weather Service (http://www.nws.noaa.gov) 72-hr forecast for the Project site. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.	ITP Condition # 8.2	During Construction/ Entire Project	Permittee	
56	Pesticide and Herbicide Use. Integrated pest management solutions that emphasize non-chemical pest management shall be used over chemical pesticides to the extent feasible. Rodenticides shall not be used under this ITP, and insecticides shall not be used in the stream zone without prior	ITP Condition # 8.4	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>written permission from CDFW. Herbicides may be used at the Permittee's discretion with implementation of the following protective measures:</p> <p>All herbicides shall be applied by a certified pesticide applicator or under the supervision of a certified pesticide applicator in accordance with regulations set by the California Department of Pesticide Regulation and according to labeled instructions.</p> <p>Herbicides shall only be applied on calm days with wind speed below 5 miles per hour.</p> <p>Permittee shall use caution to apply the least practicable amount of herbicides necessary to effectively control nuisance plants.</p> <p>Permittee shall use the least concentrated formulation of herbicide possible and practicable to accomplish the task.</p> <p>Permittee shall not apply certain herbicides within 60 feet from the edge of salmon-supporting waters (http://www.cdpr.ca.gov/docs/endspec/salmonid.htm).</p> <p>Herbicide mixing sites shall be located on existing roadways or upland locations where they may not enter into streams or wetlands.</p> <p>Permittee shall only apply herbicides after vegetation removal by another method, such as hand trimming, mowing, or livestock grazing, except during the spot treatment on non-native invasive vegetation.</p> <p>Permittee shall only use herbicides registered with the California Department of Pesticide Regulation (CDPR). Permittee shall consult the Pesticide Regulation's Endangered Species Custom Realtime Internet Bulletin Engine (PRESCRIBE) to determine specific pesticide use limitations (http://www.cdpr.ca.gov/docs/endspec/prescint.htm).</p> <p>Permittee shall only use pesticides for which a "no effect" determination has been issued by the U.S. EPA's Endangered Species Protection Program (http://www.epa.gov/espp/) for any species likely to occur within the Project site or downstream. Prior to applying pesticides, Permittee shall verify that selected pesticides are not on an endangered species bulletin issued by the U.S. EPA for the Project Area. Bulletins can be accessed using the interactive map, Bulletins Live! Two, at: https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins.</p>				

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>A list of the herbicides intended for use and their labeled instructions shall be made available to CDFW for review prior to an application event.</p> <p>Permittee is responsible for maintaining its herbicide use records for ensuring herbicide use and timing is consistent with any federal, State, or local regulations.</p> <p>Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or their tributaries shall be contained in watertight containers or removed from the Project site.</p> <p>Care shall be taken to avoid spraying native vegetation with herbicides. Spraying within 100 feet of existing mitigation sites shall be done by hand.</p> <p>Should any fish or animal kills occur following application of herbicides, such kills shall be reported to CDFW Bay Delta Region within 24 hours.</p> <p>Regardless of the contents of this ITP, Permittee is responsible for any environmental damage caused by the application or use of substances that prove harmful to fish and aquatic wildlife.</p>				
57	Stockpiles. Permittee shall not stockpile or store construction material where it could wash into the waterway or where it would cover Covered Species habitat.	ITP Condition # 8.5	During Construction/ Entire Project	Permittee	
58	Vehicle/Equipment Cleaning and Maintenance. Prior to the entry of any vehicle or equipment into the Project site including the staging area, Permittee shall ensure equipment and vehicles are clean of vegetation and not leaking fluids. Any equipment or vehicles driven and/or operated in proximity of sloughs and wetlands shall be maintained in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. If a vehicle is found to be leaking fluids of any kind, Permittee shall take immediate measures to stop and/or contain the leak and then remove the vehicle to an off-site location until properly repaired.	ITP Condition # 8.6	During Construction/ Entire Project	Permittee	
59	Invasive Species. Permittee shall conduct Project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the	ITP Condition # 8.7	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>California Invasive Plant Council's website at: http://www.cal-ipc.org/ip/prevention/index.php and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: http://www.protectyourwaters.net/.</p> <p>Permittee shall not reintroduce any removed invasive aquatic plant species or part thereof into waters of the State. Permittee may bury or dispose of invasive aquatic plant material onto dry upland habitats as long as the disposal site does not drain towards any nearby pond, ditch, waterway, wetland or proposed wetland. Permittee shall not dispose of invasive aquatic plant species on any waterside levee. If no suitable upland disposal site is located in the Project Area, Permittee shall haul away the plant material and dispose of it at an appropriate off-site location.</p> <p>Permittee shall properly dispose of invasive nonnative terrestrial plants and parts thereof that are physically removed during Covered Activities. Permittee may burn, bury, or haul away the invasive plant material and dispose of it at an appropriate offsite location to prevent their spread in and around the Project Area.</p>				
60	<p>Covered Species Work Period Variance. If Permittee needs more time to complete the Project, work may be permitted outside the work period (see Conditions of Approval 8.13 and 8.27 for species specific work period restrictions) and extended on a week-to-week basis by CDFW. Permittee shall submit a written request for a work period variance to Andy Rockriver at Andy.Rockriver@wildlife.ca.gov, or if unavailable to CDFW at R3CESA@wildlife.ca.gov. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should evaluate the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of CDFW. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. CDFW will have ten (10) calendar days to review the proposed work period variance and respond to the request.</p>	ITP Condition # 8.8	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
61	<p>Capture and Handling. Only a Giant Garter Snake Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the surveying, monitoring, capturing, handling, and/or relocation of Giant Garter Snake) may capture and handle Giant Garter Snake. The Giant Garter Snake Qualified Biologist shall only relocate Giant Garter Snake if the animal is directly threatened by immediate Covered Activities and the animal is unable to move to a safe area on its own. The Giant Garter Snake Qualified Biologist shall only relocate Giant Garter Snake to areas identified in the CDFW-approved Rescue and Relocation Plan. The Giant Garter Snake Qualified Biologist shall minimize capture and handling to the extent feasible as most reptiles experience stress in response to capture and short-term confinement. Captured animals shall be released immediately.</p> <p>The Designated Representative shall notify CDFW of the capture and handling incident immediately or no later than noon on the next business day if the incident occurs outside of normal business hours. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, time, location, and circumstances of the incident.</p>	ITP Condition # 8.11	During Construction/ Entire Project	Permittee	
62	<p>Giant Garter Snake Seasonal Work Restriction. Permittee shall limit construction activities within 200 feet of Giant Garter Snake aquatic habitat to the work window of May 1 to October 1. Permittee shall consult with CDFW and USFWS to determine if additional measures are necessary to minimize and avoid take for work between October 1 and May 1 (see Condition of Approval 8.8). Permittee may conduct work between October 2 and October 31, or April 1 and April 30 on days when the daily ambient air temperature is forecasted to exceed 75 degrees Fahrenheit (F) and maximum daily air temperatures are to have exceeded 75 degrees F for at least three consecutive days immediately preceding work. CDFW may consider requests to work outside of this temperature window during April and October on an activity-by-activity basis. The Permittee shall submit these requests in writing for review and approval by CDFW. Requests shall include a justification for the request and any additional information CDFW deems necessary.</p>	ITP Condition # 8.13	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
63	Giant Garter Snake Observation. If a snake species of any kind is observed within or near the active work site, then all nearby Project activities shall stop and work shall not continue until the snake species is identified by the Designated Biologist or Biological Monitor. If the Designated Biologist or Biological Monitor cannot locate the snake, work may continue as long as the Designated Biologist or Biological Monitor is present and looking out for the snake. If a Giant Garter Snake is discovered at any time within the active work site and staging areas, then all nearby Project activities shall halt until the snake leaves the active work site on its own or is captured (see Condition 8.11 for conditions under which a Giant Garter Snake may be captured) and relocated, by a Giant Garter Snake Qualified Biologist, to suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.	ITP Condition # 8.14	During Construction/ Entire Project	Permittee	
64	Giant Garter Snake Daily Inspections. When working in or within 200 feet Giant Garter Snake habitat, both aquatic and upland, the Designated Biologist or Biological Monitor shall inspect the work site and areas adjacent to the work site for Giant Garter Snake prior to the start of construction activities each day. If the Designated Biologist or Biological Monitor determine the work site does not support Giant Garter Snake, construction may be initiated and continue under the observation of the Designated Biologist or Biological Monitor.	ITP Condition # 8.15	During Construction/ Entire Project	Permittee	
65	Daily Equipment Inspections. Workers shall inspect under and in equipment and vehicles for snakes before equipment or vehicles are started or moved. If a snake is present, the worker shall immediately notify the Designated Biologist or Biological Monitor and work shall not commence until the snake leaves the area, as determined by the Designated Biologist or Biological Monitor, or is relocated by a Giant Garter Snake Qualified Biologist. If a Giant Garter Snake is found under or in a tracked equipment parked overnight outside a staging area, Permittee shall immediately consult with CDFW and shall subsequently implement any new measures related to overnight equipment storage that CDFW may require to protect Giant Garter Snake.	ITP Condition # 8.16	During Construction/ Entire Project	Permittee	
66	Construction Monitoring in Suitable Habitat. The Designated Biologist or a Biological Monitor shall monitor construction activities in or within 200 feet of suitable Giant Garter Snake aquatic or upland habitat. The Designated Biologist or Biological Monitors shall be present and visually monitor any	ITP Condition # 8.17	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	active ground-disturbing, ground-clearing, or rip rap removal activities for the presence of snakes. The Designated Biologist shall submit Giant Garter Snake habitat mapping for the past month in the Monthly Compliance Report (Condition of Approval 7.4). The Monthly Compliance Report shall also include maps documenting the expected Giant Garter Snake habitat for the next month and expected construction activities in Giant Garter Snake habitat.				
67	Unearthed Giant Garter Snake. If Permittee unearths or uncovers a Giant Garter Snake while conducting ground-disturbing activities, Permittee shall immediately stop work within all Giant Garter Snake habitat and notify CDFW. Permittee may continue work in the area only after consulting with CDFW and implementing any new measures that CDFW may require to protect Covered Species.	ITP Condition # 8.18	During Construction/ Entire Project	Permittee	
68	Dewatered Habitat. Permittee shall allow any dewatered wetland habitat in the Project Area to remain dry for at least fifteen days (between April 15 and October 1) prior to excavating or filling the dewatered habitat. If during this period a previously dewatered wetland becomes wet again, Permittee shall consult with CDFW prior to excavating or filling the wetland habitat if it has not remained dry for at least 15 days since last wetted.	ITP Condition # 8.20	During Construction/ Entire Project	Permittee	
69	Entrapment in Pipes or other Structures. Permittee shall store all construction pipes, culvert, or similar structures in a fenced staging area until ready for use. Workers shall thoroughly inspect all construction pipe and similar structures with a diameter of 0.25 inches or greater that are stored for one or more overnight periods for Giant Garter Snake before the pipe is subsequently moved, buried, or capped. If a Giant Garter Snake is detected during inspection, workers shall notify the Designated Biologist or Biological Monitor and allow the animal to safely escape that section of pipe before moving and utilizing the pipe.	ITP Condition # 8.21	During Construction/ Entire Project	Permittee	
70	Open Trenches and Holes. Permittee shall fence or cover open trenches or holes within 200 feet of Giant Garter Snake aquatic habitat when workers are not in the immediate area. Covers shall be constructed such that snakes cannot get under the trench cover or hole cover. If a trench or hole cover is placed on uneven or bumpy ground, Permittee shall ensure that all gaps between the cover and ground are filled with soil such that a snake cannot slither under the cover. Permittee shall ensure all excavated	ITP Condition # 8.22	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	trenches and holes, that are not enclosed by exclusion fencing, are provided with one or more escape ramps to prevent inadvertent entrapment of Giant Garter Snake. The ramps shall be constructed of earth fill or wooden planks.				
71	Open Trenches and Holes Daily Inspections. The Designated Biologist or Biological Monitor shall check all excavated open holes, pumps, and trenches for Giant Garter Snake at the beginning, middle, and end of each day for trapped animals, and immediately prior to filling the hole or trench. If there is a Giant Garter Snake trapped in these features, a Giant Garter Snake Qualified Biologist shall remove and relocate the animal(s) to a safe location within suitable habitat identified in the CDFW-approved Rescue and Relocation Plan.	ITP Condition # 8.23	During Construction/ Entire Project	Permittee	
72	Covered Species Injury. If a Giant Garter Snake is injured as a result of Project-related activities, a Giant Garter Snake Qualified Biologist shall immediately take it to a CDFW-approved wildlife rehabilitation or veterinary facility. Permittee shall identify the facility before starting Covered Activities. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The Permittee shall notify CDFW of the injury to the Covered Species immediately by telephone and e-mail followed by a written incident report. Notification shall include the name of the facility where the animal was taken. If a Giant Garter Snake is killed during Project-related activities, a Giant Garter Snake Qualified Biologist shall collect and preserve the carcass and immediately notify CDFW as described in Condition 7.9.	ITP Condition # 8.24	During Construction/ Entire Project	Permittee	
73	Water Pumps in Giant Garter Snake Habitat. Permittee shall consult with CDFW prior to operating any pumps for controlling internal water levels that operate during daylight hours, from April 1 through October 14, in or within 200 feet of or in Giant Garter Snake habitat. CDFW may require screens or other devices to prevent snake entrainment into pump intakes.	ITP Condition # 8.25	During Construction/ Entire Project	Permittee	
74	Cross Levee Road Use in the Giant Garter Snake Relocation Area. When the Giant Garter Snake Temporary Relocation Area is in active use, the Designated Biologist or Biological Monitor shall check for Giant Garter Snakes on the Cross Levee road immediately prior to vehicles driving on Cross Levee road within the Giant Garter Snake Temporary Relocation Area. Permittee shall install signage on both sides of the Giant Garter	ITP Condition # 8.26	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	Snake Temporary Relocation Area to alert drivers of the additional sensitive habitat and requirement for the Designated Biologist or Biological Monitor clearance of the road.				
75	Delta Smelt and Longfin Smelt Seasonal Work Restriction. Permittee shall limit in-water and waterside levee construction activities to the work window of June 1 through November 30. Permittee shall consult with CDFW if work after November 30 cannot be avoided to determine if additional measures are necessary to minimize and avoid take and related impacts of taking (see Condition of Approval 8.8).	ITP Condition # 8.27	During Construction/ Entire Project	Permittee	
76	Water Drafting. Permittee shall not draft water from the tidal sloughs (Shag, Cache, and Haas sloughs) adjacent to the Project site. If supplemental water from a tidal slough is required to maintain suitable aquatic habitat conditions in the Temporary Giant Garter Snake Relocation Area, Permittee shall consult with CDFW prior to drafting water from the tidal slough. If approved by CDFW, the water intake hose or pipe shall be screened per Condition of Approval 8.33 and the Permittee may draft water year-round, i.e., water drafting is not restricted to the Delta Smelt and Longfin Smelt Seasonal Work Restriction (Condition of Approval 8.27).	ITP Condition # 8.28	During Construction/ Entire Project	Permittee	
77	Minimize Turbidity and Siltation. Permittee shall not pump sediment-laden water from within the Project Area into Cache, Haas, or Shag sloughs. Permittee shall use a coffer dam, silt curtain or similar turbidity control methods while conducting in-water turbidity/siltation causing work to help minimize the release of suspended sediments into Cache, Haas, and Shag sloughs. In locations where such turbidity control methods are not practical, Permittee shall monitor turbidity levels every 4 hours upstream out of the influence of the Project and approximately 300 feet below the in-water work. During in-water work and Project dewatering activities, Permittee shall not cause turbidity levels to rise by more than 20 percent over baseline conditions. If Project dewatering activities or breaching occurs during an unseasonal storm runoff event, Permittee shall not cause turbidity to exceed 150 NTUs. If Permittee monitors turbidity levels during breaching activities in lieu of turbidity control methods listed above, Permittee shall submit to CDFW a turbidity monitoring report within two weeks on initiation of breaching activities and every two weeks thereafter until two weeks after breaching	ITP Condition # 8.29	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	activities cease. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase over natural turbidity conditions.				
78	Coffer Dam Material. Permittee shall construct coffer dams at breach locations using clean sheet piles or similar material that is free of oil, grease, and other hazardous material and free of invasive species if previously used outside of the Delta. At other levee work sites that require a coffer dam, Permittee may use clean sheet piles, clean river run gravel or sandbags which may be sealed with sheet plastic, to construct temporary coffer dams.	ITP Condition # 8.30	During Construction/ Entire Project	Permittee	
79	Pile Driving. If Permittee uses sheet piles to construct coffer dams, Permittee shall use a vibratory hammer to start installation of and removal of each sheet pile. Permittee may use an impact hammer if geotechnical conditions require its use to complete sheet pile construction. To minimize noise impacts to Delta Smelt and Longfin Smelt, Permittee shall: Initiate a soft start to allow fish to leave the area prior to operating the vibratory or impact hammer at full capacity. The hammer operator shall initiate noise from the hammer for 15 seconds at reduced energy followed by a one-minute waiting period. This procedure shall be repeated two additional times before commencing hammering at full capacity. Limit pile driving between one hour after sunrise and one hour before sunset.	ITP Condition # 8.31	During Construction/ Entire Project	Permittee	
80	Barotrauma Monitoring During Pile-Driving. The Designated Biologist or Biological Monitor shall conduct visual monitoring of the water surface during pile driving activities to ensure that the sound level exposures levels do not adversely affect fish motor functions and cause fish die-off and predation. The Designated Biologist or Biological Monitor shall notify CDFW immediately if distressed fish are observed during the pile driving activities. If fish are observed to be in distress, then Permittee shall cease pile-driving activities for one (1) hour before commencing with a soft start as specified in Condition of Approval 8.31.1.	ITP Condition # 8.32	During Construction/ Entire Project	Permittee	
81	Fish Screens. Permittee shall screen the intake of any hose or pipe used to dewater coffer dams or to draft water from tidal sloughs adjacent to the Project site. The screens shall be designed so that the approach velocity is	ITP Condition # 8.33	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	no more than 0.33 feet per second (fps). The screen material shall be wire mesh, perforated plate, or pipe with at least 27 percent open area. Round openings in the screen shall not exceed 3/32 inches (2.38 millimeters) diameter, and slotted openings shall not exceed 0.07 inches in width (approximately 1/16 inch or 1.75 millimeters) measured diagonally. Screens shall be kept clean and free of accumulated algae, leaves or other debris, which could block portions of the screen surface and increase approach velocities at any point on the screen.				
82	Coffer Dam Checks for Stranded Covered Species. A Smelt Qualified Biologist (a pre-approved Designated Biologist or Biological Monitor with a combination of academic training and professional experience, as determined by CDFW, in the surveying, monitoring, capturing, handling, and/or relocation of Delta Smelt and Longfin Smelt) shall monitor for stranded aquatic life during the initial dewatering of all constructed coffer dams. Any aquatic life captured or left stranded by the initial dewatering shall be captured and relocated to suitable habitat as specified in the following Condition of Approval 8.35. Stranded Delta Smelt and Longfin Smelt shall be rescued first and relocated to nearby suitable tidal habitat.	ITP Condition # 8.34	During Construction/ Entire Project	Permittee	
83	Relocation of Stranded Fish and Wildlife. If found within any dewatering site associated with tidal waters of Shag, Cache or Hass Sloughs, a Smelt Qualified Biologist shall capture and relocate all fish and wildlife species immediately. Under the supervision of a Smelt Qualified Biologist, Biological Monitors may assist in the relocation of fish and wildlife. Biological Monitors may relocate fish and wildlife stranded by dewatering to non-tidal areas if those species are not listed as Covered Species or protected by State and federal endangered species laws, unless otherwise permitted. Measures shall be taken to avoid harm and mortality resulting from fish and amphibian relocation activities, as follows: Relocation Records: Relocated reptiles, fish, and amphibians shall be moved to the nearest appropriate site outside of the work area. Giant Garter Snake shall be relocated according to the CDFW-approved Rescue and Relocation Plan (See Condition of Approval 8.11). A record shall be maintained of all relocated fish. The record shall include the date of capture and relocation, the method of capture, the location of the relocation site in relation to the Project site, the number of Covered Species and the general composition of other fish species (e.g., 50% silversides, 20% sunfish and	ITP Condition # 8.35	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>bass, 10% carp, 10% shad, 10% other) captured and relocated. The record shall be provided to CDFW within two weeks of the completion of the work season or Project activities, whichever comes first.</p> <p>Release Locations Criteria: Prior to capturing reptiles, fish and amphibians, the most appropriate release location(s) shall be determined, using the following criteria: water temperature shall be similar as the capture location; there shall be ample habitat for the captured fish; relocation areas must be in proximity to the capture site, contain suitable habitat, and not be affected by Project activities.</p> <p>Capture Methods. Capture methods may include fish landing nets, seines, dip nets, buckets, and by hand.</p> <p>Wet Hands and Nets: Handling of reptiles, fish and amphibians within the Project site shall be minimized. However, when handling is necessary, the Qualified Biologist and Biological Monitors shall always wet hands or nets prior to touching fish and amphibians.</p> <p>Mesh Size. Seine/net mesh shall be adequately sized to ensure fish are not gilled during capture. There shall be a minimum number of three passes with the seine or net to ensure a maximum capture probability of fish within the proposed area to be dewatered.</p> <p>Proper Holding Technique. The Qualified Biologist and Biological Monitors may temporarily hold fish and amphibians in cool, shaded, aerated water or immediately release fish into the adjacent slough. Holding containers shall be sized such that the largest fish will fit without touching the sides. The Qualified Biologist and Biological Monitors shall protect fish and amphibians from jostling and noise and shall not remove fish from this container until time of release. A thermometer shall be placed in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. Overcrowding in containers shall be avoided by having at least two containers and segregating young-of-year fish and amphibians from larger age-classes to avoid predation. If fish are abundant, the capturing of fish and amphibians shall cease periodically and they shall be released at the predetermined locations. If Delta Smelt or Longfin Smelt are captured, they shall be processed first and returned to suitable tidal habitat immediately or as soon as practicable.</p>				

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>Mortality Rate of Reptiles, Fish and Amphibians. If mortality occurs during relocation activities, capturing efforts shall be stopped and Permittee shall immediately consult with CDFW and other the appropriate agencies.</p> <p>Relocate Reptiles, Fish and Amphibians during Cool Temperatures. The Qualified Biologist and Biological Monitors shall conduct relocation activities in the morning when the temperatures are cooler. Relocation activities may continue into the afternoon with CDFW approval or per the CDFW-approved Rescue and Relocation Plan.</p>				
84	Interior Water Features Fish Rescue. If Permittee identifies Delta Smelt or Longfin Smelt while dewatering internal water features, Permittee shall immediately relocate these smelt to the nearest tidal slough and notify CDFW within 24 hours. Before dewatering any pond that has a large number of Wakasagi (<i>Hypomesus nipponensis</i>), which is a nonnative smelt that is known to hybridize with Delta Smelt, Permittee shall consult with CDFW regarding dewatering and rescue options that will minimize their release into Delta Smelt habitat.	ITP Condition # 8.36	During Construction/ Entire Project	Permittee	
85	Removal of Temporary Structures. Permittee shall remove any temporary construction-related structures upon completion of Project activities, e.g., sheet piles, coffer dams. Exposed areas on levee slopes shall be reseeded with native vegetation or noninvasive nonnative grasses appropriate to the expected habitat development. All trash and erosion control materials that are no longer needed shall be disposed of off-site.	ITP Condition # 8.37	During Construction and Post-Construction/ Entire Project	Permittee	
86	Waterside Structure Removal. Permittee shall remove and properly dispose off-site all structures (water control structures) and material (pipes, culverts, pilings) cut free on the waterside of the levee. Any material cut off below the waterline or dropped into the water shall be retrieved and properly disposed off-site.	ITP Condition # 8.38	During Construction/ Entire Project	Permittee	
88	Plugging Existing Culvert with Concrete. Permittee shall prevent newly poured or pumped concrete, leachate/runoff, and other byproducts from contacting the wetted channel for at least 30 days. During this time, Permittee shall prevent concrete runoff from entering Cache, Haas, and Shag sloughs. Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur.	ITP Condition # 8.39	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	If sealant is used, water shall be excluded from the site until the sealant is dry per manufacturer's instructions.				
88	No Additional Hardscaping. Permittee shall not increase the dimensions or add any additional hardscape within the riparian area or below top of the levee other than what is explicitly described in the ITP Application and supporting materials received by CDFW, unless otherwise explicitly described in this ITP. Permittee may replace existing hardscape features within the existing footprint. Replacement elements must be of the same volume and dimensions or lesser and shall be free of erodible soils, litter, and materials deleterious to aquatic life.	ITP Condition # 8.40	During Construction/ Entire Project	Permittee	
89	Riprap Reuse. Permittee may reuse existing angular rock (riprap) excavated from the Shag Slough levee and other suitable areas onsite to armor high erosion areas, pursuant to Condition of Approval 8.40. Any reused riprap shall be free of material deleterious to aquatic life. Permittee shall visually inspect all excavated rock for concrete, rebar, tires, trash, debris, and other hazardous material prior to reusing onsite. Such material shall be removed from the riprap and properly disposed of offsite according to local regulations.	ITP Condition # 8.41	During Construction/ Entire Project	Permittee	
90	Minimize Impacts to Waterside Levee Wetlands. Permittee shall minimize impacts to tidal wetland habitat along levees as this habitat may support Covered Species. Permittee shall operate construction equipment from the top of levees or from barges to the extent possible when working on the waterside of levees that are not enclosed by coffer dams.	ITP Condition # 8.44	During Construction/ Entire Project	Permittee	
91	Permittee shall provide CDFW an Annual Report on the status of Mason's lilaeopsis no later than January 31 of every year beginning with issuance of this ITP. Each annual report shall include, at a minimum: (1) names and titles of each survey crew member; (2) survey methods and dates; (3) the size and location of Mason's lilaeopsis occurrences in the HM lands; (4) the relative habitat condition of each occurrence; (5) the specific habitat conditions in the HM lands, including percent cover of all other plant species in the HM lands; and (6) a brief analysis of the status of translocated Mason's lilaeopsis. Each Annual Report shall also include a summary of any management activities that occurred during the year.	ITP Condition # 9.3.7.4	During Construction and Post-Construction	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
POST CONSTRUCTION					
92	Final Mitigation Report. No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports and all ASRs; (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.	ITP Condition # 7.7	Post-construction and after completion of mitigation	Permittee	
93	Post-Construction Survey for Mason's lilaepsis. A Mason's Lilaepsis Qualified Biologist shall conduct a Post-Project Survey for Mason's lilaepsis at each breach location. This survey shall be conducted within 45 days of completing breaching activities. If no suitable low tides occur within the first 45 days, the survey shall be completed during the first suitable low tide thereafter. The survey shall indicate the relative condition of any Mason's lilaepsis within 100 feet of each breach and assess the plant's risk to unabated erosion of the breach. Permittee shall submit the survey results to CDFW no later than 30 days after completing the Post-Project Survey.	ITP Condition # 8.45	Within 45 Days of Completing Levee Breaching Activities	Permittee	
94	Permittee shall monitor all translocated Mason's lilaepsis individuals and populations in the vicinity of breaches for potential erosion impacts for a minimum of seven years. HM lands shall be managed and monitored in perpetuity.	ITP Condition # 9.3.7.3	Post-construction	Permittee	
95	After initiating management activities, Permittee or CDFW may determine that an alternative management approach would be more successful in protecting or enhancing Mason's lilaepsis habitat or is necessary to ensure successful implementation of this mitigation. The MLMMP may be revised accordingly. Permittee shall acquire CDFW's approval of all	ITP Condition # 9.3.7.5	Post-Construction	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	revisions to the MLMMP at least one month prior to conducting new or modified activities.				
96	Following completion of the seven-year monitoring period for translocated Mason's lilaeopsis, Permittee shall prepare a summary report describing the success of the translocated plants as specified in the MLMMP. The report shall detail Mason's lilaeopsis monitoring and management approaches used in the Project Area, any management adaptations attempted, the percent invasive species cover in each management area at the end of each management year, a description of the response of Mason's lilaeopsis to management activities over the management period, and any other information that would inform future monitoring and management activities in the Project Area. The report shall be submitted to CDFW staff for review.	ITP Condition # 9.3.7.6	Post-Construction	Permittee	
97	CDFW accepts the Final Mitigation Report as complete.		Post-construction and after completion of all mitigation	CDFW	
POST PROJECT LEVEE OPERATION AND MAINTENANCE AND HABITAT MAINTENANCE (AS NECESSARY)					
98	Repair Plan Submittal. Permittee shall submit to CDFW a detailed levee and habitat repair plan and receive CDFW written approval prior to starting any post-project levee repair or habitat modification activities. Permittee shall document all temporary and permanent impacts to Covered Species habitat as part of this plan. Permittee shall submit this plan at least 45 days prior to the proposed work activities.	ITP Condition # 8.46	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
99	Repair Conditions of Approval. All post-project levee repair activities and habitat modification activities are subject to the previous Conditions of Approval listed in this ITP or as otherwise noted by CDFW in their review and approval of the levee and habitat repair plan (see Condition of Approval 8.46). Depending on the size and scope of the repair or maintenance activity, CDFW may, in consultation with Permittee, impose additional Conditions of Approval and mitigation.	ITP Condition # 8.47	During Construction/ Entire Project	Permittee	
100	Repair Design Limit. Permittee may only repair/restore a levee or peninsula to its as-built design using like material. If rock slope protection is required at a repair site that had no previous rock, Permittee shall consult with	ITP Condition # 8.48	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	CDFW and receive written permission prior to repairing the site with rock. CDFW may require additional mitigation measures to compensate the placement of new rock in the restoration site.				
101	Repair and Maintenance Impacts to Covered Species Habitat. Permittee shall fully restore all temporary impacts to Covered Species habitat. If Permittee permanently impacts Covered Species habitat, CDFW may require additional mitigation to fully mitigate the impacts.	ITP Condition # 8.49	During Construction/ Entire Project	Permittee	
102	<p>Vegetation Control. Permittee may control vegetation subject to the following:</p> <p>Grazing. Permittee may control vegetation on the levee slopes by livestock grazing at any time.</p> <p>Discing and Mowing. Within 200 feet of or in suitable Giant Garter Snake habitat, Permittee shall not disc or till upland vegetation. Permittee shall limit mowing to July 1 to September 30. Permittee shall raise mower blades to a minimum of six inches to avoid injuring Giant Garter Snake and to retain grassy cover. If levee or other upland vegetation management must be conducted in March, April, September, or October, work shall be conducted in the morning (prior to 9 AM) or when temperatures are below 70 degrees Fahrenheit.</p> <p>Mowing > 6 inches. Outside of suitable Giant Garter Snake habitat and 200 feet of such habitat, Permittee may control vegetation and grasses on levees and peninsulas by mowing using mechanized equipment at any time, provided that mowing decks and/or blades are set at a mowing height of at least 6 inches above the ground surface.</p> <p>Mowing ≤ 6 inches. Outside of suitable Giant Garter Snake habitat and 200 feet of such habitat, Permittee may control vegetation and grasses on levees and peninsulas by mowing lower than 6 inches above ground surface only during the following time period: August 15 of any one year to January 31 of the following year, and outside of this time period only with CDFW written approval.</p> <p>Invasive Vegetation Management. Permittee may spot treat invasive plant species following all herbicide measures under Condition of Approval 8.4, Pesticide and Herbicide Use. Permittee shall coordinate with CDFW prior to</p>	ITP Condition # 8.50	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	implementing any mechanical vegetation management activities in tidal wetlands.				
103	Post-Construction Breach Stabilization. If bank erosion at a constructed breach will result in the take or foreseeable take of Mason's lilaeopsis in the upcoming wet seasons, Permittee shall consult with CDFW to discuss potential bank stabilization measures or other measures to prevent Mason's lilaeopsis from eroding away. If bank stabilization measures are not practicable, CDFW may require Permittee to transplant and monitor the Mason's lilaeopsis and provide additional compensatory habitat.	ITP Condition # 8.51	Post-Construction/ Entire Project	Permittee	



Department of Fish and Wildlife

BIOLOGIST RESUME FORM

Date XX.XX.2020

SECTION 1. NAME AND CONTACT INFORMATION

Name:		Title:	
Company Name & Address:		Phone:	
		Email:	

SECTION 2. EDUCATION

College/University & Degree Type Related to Natural Resource Science:	
Other Relevant Workshops & Training:	

SECTION 3. PROJECT INFORMATION

CDFW LSA Agreement/ITP Number(s):	
Project Name:	
Relevant Measure(s) and Biologist Type ¹:	

SECTION 4. SPECIES AND RESOURCE EXPERIENCE - SUMMARY

LSA Agreement/ITP Special Status Species & Other Sensitive Resources				
<i>This section summarizes experience for species and other resources. Use one line for: 1) each species or other resource where surveys or special protections are required in the LSA Agreement/ITP for which the biologist is requesting approval ². If additional space is needed, add rows to this table. Provide details in Section 5.</i>				
Species or Resource	Number of Field Seasons & Hours, Life Stages Observed (Provide project details in Section 5)	Life History Knowledge (Describe formal workshops & training with dates, or informal training details)	CDFW SCP, MOU, & USFWS 10a1a Authorization Number & Authorized Activities (This form does not fulfill above authorization reporting requirements)	
Insert Species or Resource 1	Field seasons: Hours: Life Stages:			Issued to:
Insert Species or Resource 2	Field seasons: Hours: Life Stages:			Issued to:
Insert Species or Resource 3	Field seasons: Hours: Life Stages:			Issued to:
Insert Species or Resource 4	Field seasons: Hours: Life Stages:			Issued to:

¹ The Biologist Type is generally a "Qualified Biologist" with the necessary experience to survey for special status species or a "Biological Monitor" that would primarily monitor construction activities.

² Often LSA Agreements / ITPs include surveys and other protections for multiple species and other resources. Include only those for which the biologist has experience and is requesting approval.

SECTION 5. SPECIES AND RESOURCE EXPERIENCE - DETAILS

This section provides detailed experience from the three most recent relevant projects for each species and resource identified in Section 4. If more space is needed, attach additional pages in the same table format.

Insert Species or Resource 1			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role ³:	
Survey Type(s) ⁴:		Construction Monitoring ⁵:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Additional Information:			
Insert Species or Resource 2			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:

³ Insert the role as described in the associated LSA Agreement or ITP. For example, LSA Agreements often require a "Qualified Biologist" and ITPs often require a "Designated Biologist." If these permits were not issued, describe the role based on the duties, e.g., "lead biologist with handling authorization" or "biological monitor."

⁴ For example, pre-construction survey or describe the protocol or guideline followed.

⁵ Include the number of days and describe the types of activities monitored (e.g., heavy equipment operation).

Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Additional Information:			
Insert Species or Resource 3			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Additional Information:			
Insert Species or Resource 4			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	

Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement or ITP Number:		Role:	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Observed: Handled:	Professional Reference Name, Phone, Email:	
Additional Information:			

PROPOSED LANDS FOR ACQUISITION FORM ("PLFAF")

Date: _____

TO: Regional Representative

Facsimile:

FROM: _____

Applicant proposes that the following parcel of land be considered for approval by the CDFW as suitable for purposes of habitat management lands to replace the adverse environmental impacts of the Project:

<u>Section</u>	<u>Township</u>	<u>Range</u>	<u>Number of Acres</u>
----------------	-----------------	--------------	------------------------

_____	_____	_____	_____
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Current Legal Owner(s), of the surface and mineral estates, include Assessor's Parcel Number(s):

General Description of Location of Parcel(s):

Land value: \$ _____

For Region Use only

APPROVED ____

REJECTED ____

By: _____

Regional Manager's signature

DATE: _____

Explanation: _____

ATTACHMENT 3B
 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (CDFW)
 HABITAT MANAGEMENT LAND ACQUISITION PACKAGE CHECKLIST FOR THIRD PARTY
 BENEFICIARY (TPB) PROJECT APPLICANTS

The following checklist is provided to inform you of documents necessary to expedite the CDFW processing of your Habitat Management Land acquisition proposal. Any land acquisition processing requests which are incomplete when received, will be returned. The Region contact will review and approve the document package and forward it to the Habitat Conservation Planning Branch Senior Land Agent with a request to review the real estate documents.

To: _____
 Regional Manager, Region Name

From: _____
 Project Applicant

Phone: _____

Tracking #: _____
 CDFW assigned permit or agreement #

Project Name: _____

Enclosed is the complete package for the ☐ Conservation Easement

Documents in this package include:

- ☐ Draft Conservation Easement Deed with legal description stamped by a licensed surveyor, if applicable.
- ☐ Proposed Lands for Acquisition Form (PLFAF)
- ☐ Phase I Environmental Site Assessment Report Date on report: _____
 (An existing report may be used, but it should be less than two years old.)
- ☐ Mineral Assessment Report, if applicable.
- ☐ Preliminary Title Report(s) for subject property is enclosed and has been reviewed for Encumbrances, including severed mineral estates, and other easements. The title report must be less than one year old when final processing is conducted.
 Included are additional documents:
 - ☐ document(s) to support title exceptions
 - ☐ document(s) to explain title encumbrances
 - ☐ a plot or map of easements/encumbrances on the property
- ☐ County Assessor Parcel Map(s) for subject property
- ☐ Vicinity or Site Location Map (Site location with property boundaries outline on a USGS 1:24,000 scale topo)
- ☐ Final Permit or Agreement (or other appropriate instrument)
 Type of agreement: ☐ Bank Agreement ☐ Mitigation Agreement
☐ Permit _____ Other: _____
 (write in type of permit)
- ☐ Final Management Plan (if required prior to finalizing permit or agreement)
- ☐ Biological Resources Report, if applicable.
- ☐ Draft Summary of Transactions ☐ Electronic Copy ☐ Hard Copy

[Financial institution letterhead]

IRREVOCABLE STANDBY LETTER OF CREDIT
NO. **[number issued by financial institution]**

Issue Date: **[date]**

Beneficiary:

California Department of Fish and Wildlife
Habitat Conservation Planning Branch
Post Office Box 944209
Sacramento, CA 94244-2090
Attn: HCPB Contract Coordinator

Amount: U.S. \$**[dollar number]** **[(dollar amount)]**

Expiry: **[Date]** at our counters

Dear Sirs:

1. At the request and on the instruction of our customer, **[name of applicant]** ("Applicant"), we, **[name of financial institution]** ("Issuer"), hereby establish in favor of the beneficiary, the California Department of Fish and Wildlife ("CDFW"), this irrevocable standby letter of credit ("Credit") in the principal sum of U.S. \$**[dollar number]** **[(dollar amount)]** ("Principal Sum").
2. We are informed this Credit is and has been established for the benefit of CDFW pursuant to the terms of the incidental take permit for the **[name of project]** issued by CDFW to the Applicant on **[date]** (No. **[number]**) ("Permit").
3. We are further informed that pursuant to the Permit, the Applicant has agreed to complete certain mitigation requirements, as set forth in Conditions **[numbers]** in the Permit ("Mitigation Requirements").
4. We are finally informed that this Credit is intended by CDFW and the Applicant to serve as a security device for the performance by the Applicant of the Mitigation Requirements.
5. CDFW shall be entitled to draw upon this Credit only by presentation of a duly executed Certificate for Drawing ("Certificate") in the same form as Attachment A, which is attached hereto, at our office located at **[name and address of financial institution]**.

6. The Certificate shall be completed and signed by an “Authorized Representative” of CDFW as defined in paragraph 12 below. Presentation by CDFW of a completed Certificate may be made in person or by registered mail, return receipt requested, or by overnight courier.
7. Upon presentation of a duly executed Certificate as above provided, payment shall be made to CDFW, or to the account of CDFW, in immediately available funds, as CDFW shall specify.
8. If a demand for payment does not conform to the terms and conditions of this Credit, we shall give CDFW prompt notice that the demand for payment was not effected in accordance with the terms and conditions of this Credit, state the reasons therefore, and await further instruction.
9. Upon being notified that the demand for payment was not effected in conformity with the Credit, CDFW may correct any such non-conforming demand for payment under the terms and conditions stated herein.
10. All drawings under this Credit shall be paid with our funds. Each drawing honored by us hereunder shall reduce, *pro tanto*, the Principal Sum. By paying to CDFW an amount demanded in accordance herewith, we make no representations as to the correctness of the amount demanded.
11. This Credit will be cancelled upon receipt by us of Certificate of Cancellation, which: (i) shall be in the form of Attachment B, which is attached hereto, and (ii) shall be completed and signed by an Authorized Representative of CDFW, as defined in paragraph 12 below.
12. An “Authorized Representative” shall mean the Director of CDFW; the General Counsel of CDFW; a Regional Manager of CDFW; or the Branch Chief of CDFW’s Habitat Conservation Planning Branch.
13. This Credit shall be automatically extended without amendment for additional periods of one year from the present or any future expiration date hereof, unless at least sixty (60) days prior to any such date, we notify CDFW in writing by registered mail, return receipt requested, or by overnight courier that we elect not to consider this Credit extended for any such period.
14. Communications with respect to this Credit shall be in writing and addressed to us at [***name and address of financial institution***], specifically referring upon such writing to this credit by number. The address for notices with respect to this Credit shall be: (i) for CDFW: Department of Fish and Wildlife, Habitat Conservation Planning Branch, Post Office Box 944209, Sacramento, CA 94244-2090, Attn: HCPB Contract Coordinator; and (ii) for the Applicant: [***name and address of applicant***].

15. This Credit may not be transferred.

16. This Credit is subject to the International Standby Practices 1998 ("ISP 98"). As to matters not covered by the ISP 98 and to the extent not inconsistent with the ISP 98, this credit shall be governed by and construed in accordance with the Uniform Commercial Code, Article 5 of the State of California.

17. This Credit shall, if not canceled, expire on [***expiration date***], or any extended expiration date.

18. We hereby agree with CDFW that documents presented in compliance with the terms of this Credit will be duly honored upon presentation, as specified herein.

19. This Credit sets forth in full the terms of our undertaking. Such undertaking shall not in any way be modified, amended or amplified by reference to any document or instrument referred to herein or in which this Credit is referred to or to which this Credit relates and any such reference shall not be deemed to incorporate herein by reference any document or instrument.

[*Name of financial institution*]

By: _____

Name: _____

Title: _____

Telephone: _____

ATTACHMENT A

IRREVOCABLE STANDBY LETTER OF CREDIT NO. [***number issued by financial institution***]
CERTIFICATE FOR DRAWING

To:

[***Name and address of financial institution***]

Re: [***Insert:*** "Lake" ***or*** "Streambed"] Alteration Agreement (No. [***permit number***])

The undersigned, a duly Authorized Representative of the California Department of Fish and Wildlife ("CDFW"), as defined in paragraph 12 in the above-referenced Irrevocable Standby Letter of Credit ("Credit"), hereby certifies to the Issuer that:

1. [***Insert one of the following statements:*** "In the opinion of CDFW, the Applicant has failed to complete the Mitigation Requirements referenced in paragraph 3 of the Credit." ***or*** "As set forth in paragraph 13, the Issuer has informed CDFW that the Credit will not be extended and the Applicant has not provided CDFW with an equivalent security approved by CDFW to replace the Credit."]
2. The undersigned is authorized under the terms of the Credit to present this Certificate as the sole means of demanding payment on the Credit.
3. CDFW is therefore making a drawing under the Credit in amount of U.S. \$_____.
4. The amount demanded does not exceed the Principal Sum of the Credit.

Therefore, CDFW has executed and delivered this Certificate as of the ____ day of [***month***], [***year***].

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

BY: _____

[***Insert one of the following:*** "DIRECTOR" ***or*** "GENERAL COUNSEL" ***or*** "REGIONAL MANAGER, [NAME OF REGIONAL OFFICE]" ***or*** "BRANCH CHIEF, HABITAT CONSERVATION PLANNING BRANCH"]

ATTACHMENT B

IRREVOCABLE LETTER OF CREDIT NO. [***number issued by financial institution***]
CERTIFICATE FOR CANCELLATION

To:

[***Name of financial institution and address***]

Re: [***Insert:*** "Lake" ***or*** "Streambed"] Alteration Agreement (No. [***permit number***])

The undersigned, a duly Authorized Representative of the California Department of Fish and Wildlife ("CDFW"), as defined in the paragraph 12 in the above-referenced Irrevocable Standby Letter of Credit ("Credit"), hereby certifies to the Issuer that:

1. [***Insert one of the following statements:*** "The Applicant has presented documentary evidence of full compliance with the Mitigation Requirements referenced in paragraph 3 of the Credit." ***or*** "The Applicant has provided CDFW with an equivalent security approved by CDFW to replace the Credit."]
2. CDFW therefore requests the cancellation of the Credit.

Therefore, CDFW has executed and delivered this Certificate for Cancellation as of the ____ day of [***month***], [***year***].

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

BY: _____

[***Insert one of the following:*** "DIRECTOR" ***or*** "GENERAL COUNSEL" ***or*** "REGIONAL MANAGER, [NAME OF REGIONAL OFFICE]" ***or*** "BRANCH CHIEF, HABITAT CONSERVATION PLANNING BRANCH"]

State of California - Department of Fish and Wildlife

MITIGATION PAYMENT TRANSMITTAL FORM

DFW 1057 (NEW 07/28/17)

Project Applicant Instructions: Please fill out and attach this form to payment. For conservation banks, also attach the Bill(s) of Sale for credits sold. One form may be used for multiple transactions, **BUT YOU MUST USE A SEPARATE FORM FOR EACH CHECK YOU TRANSMIT.** Make sure to include Project Name, Project Tracking Number, and ASB Mitigation Tracking Number (if available) on the attached payment type.

1. DATE: _____ TO: _____ Regional Manager _____ Region Office Address	2. FROM: _____ Name _____ Mailing Address _____ City, State, Zip _____ Telephone Number/FAX Number
3. RE: _____ Project Name as appears on permit/agreement	

4. AGREEMENT/ACCOUNT INFORMATION: (check the applicable type)
☐ 2081 Permit ☐ Conservation Bank ☐ 2835 NCCP ☐ 1802 Agreement ☐ 1600 Agreement ☐ Other _____

 Project Tracking Number
5. PAYMENT TYPE (One check per form only): The following funds are being remitted in connection with the above referenced project:Check information:

Total \$ _____ Check No. _____

Account No. _____ Bank Routing No. _____

a. Endowment: for Long-Term Management Subtotal \$ _____

b. Habitat Enhancement Subtotal \$ _____

c. Security:

1. Cash Refundable Security Deposit Subtotal \$ _____

2. Letter of Credit Subtotal \$ _____

1. Financial Institution: _____

2. Letter of Credit Number: _____

3. Date of Expiration: _____

ACCOUNTING OFFICE USE ONLY	
Description	FI\$Cal Coding
Speedchart (Project, Program, Reference, Fund)	
Reporting Structure	
Category	
Date Established: _____ By: _____	