



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



August 3, 2022

Edward Reyes
City of Livermore
1052 S. Livermore Avenue
Livermore, CA 94550
EIReyes@cityoflivermore.net

Subject: Incidental Take Permit 2081-2021-048-03 for the 2022 Livermore Stream Maintenance Program

Dear Edward Reyes:

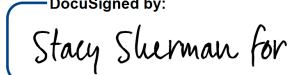
Enclosed you will find an electronic copy of the Incidental Take Permit for the above referenced Project, which has been digitally signed by the California Department of Fish and Wildlife (CDFW). Please read the permit carefully and sign the acknowledgement on the permit **no later than 30 days from 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 Marcia Grefsrud, Environmental Scientist, at Marcia.Grefsrud@wildlife.ca.gov; or Brenda Blinn, Senior Environmental Scientist (Supervisory), at Brenda.Blinn@wildlife.ca.gov.

Sincerely,

DocuSigned by:

Erin Chappell
Regional Manager
Bay Delta Region

Conserving California's Wildlife Since 1870



**California Department of Fish and Wildlife
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534**

California Endangered Species Act
Incidental Take Permit No. 2081-2021-048-03

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

I. Authority:

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

Permittee:	City of Livermore
Principal Officer:	Edward Reyes, Assistant Civil Engineer eireyes@cityoflivermore.net
Contact Person:	Leslie Koenig, Swaim Biological, Inc. (916) 849-0513
Mailing Address:	Community Development Department 1052 S. Livermore Avenue, Livermore, CA 94550

II. Effective Date and Expiration Date of this ITP:

This ITP shall become effective when signed by all parties and received by CDFW as described in the Notices section of this ITP. Unless renewed by CDFW, this ITP and its authorization to take the Covered Species shall expire on **December 31, 2026**.

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 7.8 of this ITP.

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".)

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

III. Project Location:

The 2022 Livermore Stream Maintenance Program (Project) is located within the City of Livermore, Alameda County (See Figure 1). The Project includes three locations: Bear Creek Basins/Bluffs Neighborhood, Saddleback Wetland, and Altamont Creek. All sites are on the edge of City Limits in the northeastern portion of the City (Figure 1).

Three of these sites (Sites 46, 47 and 56) occur within unnamed stormwater basins, which bisect the residential housing development at The Bluffs neighborhood. These sites are landscaped with non-native grasses and bordered by ornamental shrubs and trees although native willows and cottonwoods are present. Paved roads will be used to access Sites 46 and 47. Overland access to reach Site 56 will follow an existing access road/berm from Bluffs Court.

Site 48 occurs adjacent to the Bear Creek Basin (BS-1.6) immediately southwest of The Bluffs neighborhood, between Brookview Court and Meadow Glen Drive. This site will be accessed overland following an existing access road/berm from Lake Court. This site consists of mowed grassland, bordered by suburban ornamental plantings to the northeast and by grazed grasslands to the northwest, west and south.

These Project sites occur within the stormwater basins owned by the homeowners association (Bluffs In Livermore Owners Association) and managed by the City of Livermore (Assessor's Parcel Numbers (APN) 99B-8120-53 and 99B-8120-54); Figure 1.

The Saddleback Basin collectively refers to the stormwater, created wetland and road drainage system associated with the Saddleback residential development. Within this basin are two grassed swales (Sites 57a, 57b) that run parallel to Ames Street from the corner of Raymond Road to the north and Dalton Avenue to the south. The swales drain to a basin that is comprised of a seasonal created wetland and a drain pipe system that were installed to address stormwater and wetland impacts from the Saddleback development. The whole system connects to the Springtown Alakli Sink through two storm outfalls located at the corner of Dalton Avenue and Ames Street that connect to Altamont Creek downstream and through roadside culverts that flow under Ames Street directly into the sink.

The work will occur within the grassed swales, storm drain outfalls and road side ditches. Work sites will be accessed via paved roads and will require upland disturbances to access the grassed swales. These Project sites are all owned and maintained by the City of Livermore (APNs 99B-8118-63, 99B-8118-62, Figure 1)

Work at Site 68 will occur at the Laughlin Road Bridge Culvert on Altamont Creek. The bridge culvert is a low, concrete box culvert located at a gradual bend in the creek, with concrete wingwalls and aprons at each end. In both directions, the creek is provided with an ample lateral migration corridor. The culvert is located where the creek exits undeveloped grazing lands upstream and enters the modified channel where residential housing development begin on Livermore's eastern boundary.

The road box culvert is owned and maintained by the City of Livermore, the upstream culvert apron occurs within the City's right of way on BART owned property (APN 99B-5500-2-5) and the downstream culvert apron is within the right of way on Greystone Homes, Inc. property (APN 99B-5404-77, Figure 1). Access will be coordinated with the property owner, Zone 7 Water Agency and BART.

IV. Project Description:

The Project includes stream maintenance activities at three locations (a total of six sites; Figure 1). The extent of each project location is included in Figures A-1 through A-7. A description of activities at each site is included below.

Site 46 Sediment and Vegetation Outfall Management at Laughlin Road

Work at Site 46 (Figure A-1) will consist of sediment removal and vegetation management from a storm drain outfall. The outfall is located at the northwest corner of Laughlin Road and Bluffs Drive. Riprap was installed at this site in 2017 under the authority of ITP 2081-2015-053-03 to keep vegetation growth from obstructing the pipe; however, vegetation has grown in the riprap, capturing sediment and blocking flow. The work will occur at the outfall discharge area that accepts stormwater from Laughlin Road and surrounding drainage areas. The outfall discharge area is obstructed with sediment and vegetation, triggering flooding hazards to surrounding streets and homes.

The work requires excavating 3 cubic yards (CY) of sediment and removing the previously installed riprap from a permanently impacted 4-foot by 4-foot area at the storm drain outfall to a depth of approximately 24 inches (permanent impacts were previously mitigated at Ohlone West Conservation Bank under ITP 2081-2015-053-03). A 4-foot by 4-foot (16-square-foot (SF)) concrete pad will be installed in place of the riprap that was previously installed in 2017 because the riprap did not adequately minimize vegetation and sediment from filling in and obstructing the pipe. The concrete pad will allow for regular maintenance of the outfall area limiting the need to repeatedly impact aquatic resources and disturbance to surrounding habitat. This work will require minor localized grading around the storm drain outfall to reestablish the as-built grades and contours around the concrete pad. Approximately 3 CY of sediment and riprap will be excavated at the outfall and grading the surrounding area to original as-built design.

Vegetation management will also need to occur along with sediment removal, as several trees are clustered around the outfall opening and are causing sediment accumulation issues. One willow tree with a trunk diameter greater than 4 inches DBH will be removed. Trees less than 4 inches DBH to be removed include ornamental privet trees, willow scrub, and two coast live oaks. Upon removal of sediment and vegetation, the outfall pipe will be hydro-cleaned using a vacuum truck to ensure the storm drainpipe is clear and functions correctly.

The work will be conducted with an excavator from south side of the basin slope. The site will be accessed from a ruderal access road that runs parallel with the sidewalk and fence line

along Bluffs Drive. Staging will occur within the access limits in ruderal and grassland habitat and on Bluffs Drive.

Vegetation management also includes removal of pampas grass approximately 375 LF to the northwest of the Laughlin culvert at the Dry Creek Court cul-de-sac. Work will be performed by hand with assistance from an excavator to remove the root mass. Equipment will stage on the ruderal disturbed area between the end of the cul-de-sac and top of basin. No other work is proposed at the Dry Creek Court outfall.

Dewatering is not anticipated to be necessary at Site 46, as work is being conducted at an ephemeral stormwater basin that typically only receives flows on a seasonal basis.

Site 47 Sediment and Vegetation Outfall Management at Lake Drive

Work at Site 47 (Figure A-2) will consist of sediment removal and vegetation management from a storm drain culvert inlet area. Riprap was installed at this site in 2017 under the authority of ITP 2081-2015-053-03 to keep vegetation growth from obstructing the pipe; however, vegetation has grown in the riprap, capturing sediment and blocking flow. The work will occur at the upstream side of a 100-foot-long portion of a 12-inch basin culvert pipe that conveys flows under Lake Drive. The inlet is burdened with sediment and vegetation that is obstructing stormwater flows and is causing localized flooding to surrounding streets.

The work requires vegetation management, excavating sediment and removing the previously installed riprap from a permanently impacted 4-foot by 4-foot area at the culvert inlet area to a depth of approximately 24 inches (permanent impacts were previously mitigated at Ohlone West Conservation Bank under ITP 2081-2015-053-03). A 4-foot by 4-foot (16 SF) concrete pad will be installed as the riprap that was previously installed in 2017 has been filled in by sediment. The concrete pad will allow for regular maintenance of the outfall area limiting the need to repeatedly impact aquatic resources and disturbance to surrounding habitat. This work will require minor localized grading around the storm drain outfall to reestablish the as-built grades and contours around the concrete pad. Once sediment and riprap are excavated the surrounding area will be regraded to original as-built design.

Vegetation management will also need to occur with sediment removal, as one arroyo willow tree is blocking the culvert opening and is contributing to sediment accumulation issues. This arroyo willow tree with a trunk diameter greater than 4 inches DBH will be removed. Some willow scrub and nonnative ornamentals less than 4 inches DBH will be pruned for access, but none will be removed completely. Upon removal of sediment and vegetation, the culvert pipe will be hydro-cleaned using a vacuum truck to ensure the storm drainpipe is clear and functions correctly. The work will be conducted with an excavator from the north of the inlet culvert pipe along the side of the basin slope. Staging will occur within the access limits on ruderal and grassland habitat and Lake Drive.

Dewatering is not anticipated to be necessary at Site 47, as work is being conducted at an ephemeral stormwater basin that typically only receives flows on a seasonal basis.

Site 48 Sediment and Vegetation Outfall Management at Meadow Glen Drive

Work at Site 48 (Figure A-3) will consist of sediment removal and vegetation management from a storm drain outfall located near the dead end of the northern portion of Meadow Glen Drive. Sediment buildup and an adjacent coyote brush shrub along with nonnative grass/forb growth have affected the function of the outfall. Included with the outfall work is erosion repair. An erosion rill has formed from the outfall discharges, likely caused from outfall obstruction and improper function.

The work consists of excavating and removing the coyote brush shrub and sediment from a 5-foot by 5-foot area (25 SF) at the storm drain outfall to a depth of 18 inches and grading the surrounding area to original as-built design. Once excavated, a silt barrier fabric and 6-inch layer (5 CY) of ungrouted riprap will be placed in the bottom of the impacted excavated area to minimize erosion and vegetation regrowth. Erosion repair will involve using a backhoe to repair the incised rill and regrade a 3-foot by 60-foot (180 SF) drainage that will result in temporary impacts. Approximately 3 cubic yards of sediment will be excavated at the outfall and grading will involve 1.5 cubic yards of soil movement within the work area. The erosion repair will be regraded and a non-mesh coconut blanket with native seed mix will be installed. The work will be conducted with an excavator and backhoe, immediately adjacent to the outfall and erosion rill area.

The work area will be accessed from a previously disturbed access road at the end of Lake Court. Impacts to waters are not anticipated for access as the route is at the top of the basin bank and is regularly disturbed.

Dewatering is not anticipated to be necessary at Site 48, as work is being conducted at an ephemeral stormwater basin that typically only receives flows on a seasonal basis.

Site 56 – Sediment and Vegetation Outfall Management at Hillstone Court in Bear Creek Basins

Work at Site 56 (Figure A-4) will consist of sediment removal and vegetation management from a storm drain culvert outlet area. Vegetation has grown in the riprap apron which is capturing sediment and blocking flow. The work will occur at the outlet of the 12-inch concrete pipe that conveys storm flows from Hillstone Court.

The work will encompass one day of work and will include temporary impacts to excavate a 12-foot by 12-foot area (144 SF / 5 CY) around the pipe outfall, removing the previously installed riprap, removing vegetation (including 4 cottonwoods, less than 4 inches DBH) and excavating to a depth of approximately 12 inches to restore the freeboard around the outfall. Removed riprap will be replaced in-kind and grades restored to original contours to allow flow to reach the basin without backing up the outfall.

The work will be conducted with an excavator and loader that will access the basin from the north using existing access roads.

Dewatering is not anticipated to be necessary as work is being conducted at an ephemeral stormwater basin that typically only receives flows on a seasonal basis.

Site 57a – Saddleback Grassed Swale Regrading and Outfall Clean Out – Raymond Road to Martingale Lane

Work at Site 57a (Figure A-5) will consist of sediment and vegetation removal from a storm drain outfall and a 390 LF earthen stormwater swale (Swale A) that starts near the corner of Raymond Road and Ames Street. These structures were installed in 1998/1999 and associated with the adjacent Saddleback residential development. Together, the storm outfall and earthen swale collects stormwater from the nearby PG&E facility, the Dalton Reservoir and access road, and overland surface flow from the hillsides above the Saddleback development. The swale has been filled in with sediment over time and is no longer capturing stormwater but is instead overflowing in the grassy area that ends up flowing onto the adjacent Ames Street. The storm outfall has a rock rip rap apron that is completely filled in with sediment and cattails. The resulting overflow is contributing to surface water accumulation on the roadway causing public safety hazards and concerns.

The work will encompass one day of work and includes temporary impacts to excavate the earthen swale for 390 LF to as built designs (4 feet wide by 0.5 feet deep) including removal of 1560 SF / 30 CY of sediment and removal of five willows and one mugwort that are growing within the bottom of the swale. The remaining trees on-site will be selectively limbed up and woody debris removed. The storm drain outfall rip rap apron will be cleared and approximately 260 SF / 9 CY of sediment and vegetation (cattails) removed to clear the rip rap outfall to allow for capture of storm flow.

The site will be accessed from Martingale Lane and equipment work access will occur in a 12-foot area parallel to the grassed swale. Equipment will be staged on the street. Work will be conducted with a mini rubber tracked excavator, a dump truck and a loader. Sediment, vegetation and debris will be hauled to the Vasco dump or the waste water treatment plant for later disposal as there is not an appropriate location to stage materials or leave chipped vegetation on site. Dewatering is not anticipated to be necessary.

Site 57b – Saddleback Grassed Swale Regrading and Outfall Clean Out – Martingale Lane to Saddleback Basin

Work at Site 57b (Figure A-5) will consist of sediment and vegetation removal from a 380 LF earthen stormwater swale that connects to Swale A which connects to a culvert/storm drain north of Martingale Lane and travels under the street, outfalling into a grassed swale to the south (Swale B). Swale B is obstructed with cattails for approximately 150 LF and filled with sediment, willows and coyote brush for the remaining extent.

The work will encompass one day of work and will include temporary impacts to excavate Swale B for 380 LF to as built conditions (4 feet wide by 0.5 feet deep) including removal of 1520 SF / 28 CY of sediment/vegetation and removal of one coyote brush that is growing

within the bottom of the swale. The remaining trees on site will be limbed up and downed woody debris that is within the swale will be removed.

The site will be accessed from Martingale Lane and equipment work access will occur in a 12-foot area parallel to the grassed swale. Equipment will be staged on the street. Work will be conducted with a mini rubber tracked excavator, a dump truck and a loader. Sediment, vegetation and debris will be hauled to the Vasco dump or the waste water treatment plant for later disposal as there is not an appropriate location to stage materials or leave chipped vegetation on site. Dewatering is not anticipated to be necessary.

Site 57c – Dalton Avenue and Ames Street Vegetation, Sediment and Debris Removal

Work at Site 57c (Figure A-6) will consist of sediment removal from an approximately 150 LF roadside v-ditch that collects stormwater flow from Ames Street. The v-ditch connects to a culvert/storm drain on the corner of Dalton Avenue and Ames Street and then outfalls south of the road. The v-ditch is filled in with sediment and grasses affecting capacity and the designed road pattern. The ditch no longer conveys flow from the road to the storm drain, resulting in seepage and standing water on the road. The outfall southwest of the Dalton/Ames corner is also filled with trash, vegetation (tumbleweeds and perennial pepperweed) and debris.

The work will encompass one day of work and will include temporary impacts to excavate the 150 LF v-ditch 3 feet wide and 1-foot deep and will include removal of 450 SF / 17 CY of sediment. There is an approximately 3-foot by 5-foot rip rap apron at the culvert inlet that will be removed and replaced in kind. Vegetation, trash and debris removal from the southern storm drain outfall will be conducted by hand and/or vacuum truck. Dewatering is not anticipated to be necessary.

Work to restore the v-ditch will be conducted with a mini rubber tracked excavator, a dump truck and a loader. Equipment will stage on the road/sidewalk with traffic control. Sediment, vegetation, trash and debris will be hauled off as there is not an appropriate location to stage materials on-site.

Site 68 – Laughlin Bridge Culvert Sediment Management Along Altamont Creek

Work at Site 68 (Figure A-7) consists of managing sediment at the box culvert structure of the Laughlin Drive Bridge along Altamont Creek. At the culvert, a concrete apron with wingwalls lines the channel bed and banks 20-feet upstream and 25-feet downstream of the bridge where the channel is 40-50 feet wide (top-of-bank to top-of-bank). Sediment build up has occurred within the box culvert with enough sediment present that a willow tree has established on the upstream concrete apron. This work is focused on removing the willow and sediment to keep the stream functioning and reduce flooding. Sediment has established however emergent vegetation is not present.

The work will be completed in one day and includes temporary impacts associated with sediment and willow removal. The stream is seasonal in this stretch and it is assumed work

can be conducted in the fall during dry conditions without the need to dewater. Sediment removal will be conducted with an excavator, small hand-push compact track loader (under culvert), dump truck and vacuum truck. Approximately 2,400 SF / 178 CY of sediment will be removed along 100 LF of the stream (maximum estimated disturbance). The work area will be accessed from the adjacent pedestrian trail on the downstream portion and from adjacent private land on the upstream portions.

Excavated or vacuumed materials will be off-hauled and disposed of properly. The willow tree will be chipped on site with mulch being placed in appropriate upland areas along the pedestrian trail.

V. Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

<u>Name</u>	<u>CESA</u>
1. California tiger salamander (<i>Ambystoma californiense</i>)	Threatened ³

This species and only this species is the "Covered Species" for the purposes of this ITP.

VI. 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 transport of vehicles, equipment, supplies and workers to and from the Project; storage of construction materials and equipment on site; vegetation removal; excavation of sediment around and within drainage ditches, culverts and outfalls; replacement of rip rap with concrete pads; slope and channel grading; removal of trash and debris; and clearing outfall pipes using a vacuum truck (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 removing sediment and vegetation, and grading activities associated with the maintenance activities. This could include injury or mortality from being crushed by equipment, excavation activities, or placement of maintenance materials. Excavation of soil with small mammal burrows may result in the mortality of Covered Species (i.e. crushed by equipment or trapped in collapsed burrows) using burrows for refugia. Excavation associated with vegetation, sediment and rip rap removal and other noise and vibration caused by equipment operation may cause Covered Species individuals to leave the work areas, if present. This disturbance may increase the potential for individual Covered Species to become victims of predation and/or desiccation. Covered Species individuals are also more likely to disperse overland in mesic conditions. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species from relocating Covered

³ See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(3)(G).

Species out of harm's way. The areas where authorized take of the Covered Species is expected to occur include: Project sites, and staging and access areas (collectively, the Project Area).

The Project is expected to cause the permanent loss of a total of 25 SF (0.001 acres)⁴ of aquatic habitat for the Covered Species, and temporary loss of a total of 17,914 SF (0.411 acres) of upland habitat for the Covered Species. 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: degradation of nearby habitat due to the potential for increased non-native plant cover, stress resulting from noise and vibrations, capture and relocation, and long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

VII. 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.

VIII. Conditions of Approval:

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

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Mitigated Negative Declaration and Initial Study (SCH No.: 2015042027) adopted by City of Livermore on September 17, 2015 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

⁴ Permanent impacts at Site 46 (former Site 5) and Site 47 (former Site 1) were already mitigated when rip rap was placed at a pipe outlets in 2017 under ITP No. 2081-2015-053-03 for 2015 SMP Projects. Permanent impacts that occurred in 2021 do not exceed permanent impact locations from the 2015 SMP cycle and therefore do not require additional mitigation.

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. 1600-2012-0217-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 Programmatic Biological Opinion for U.S. Army Corps of Engineers (Corps) Permitted Projects Utilizing the East Alameda County Conservation Strategy that May Affect Federally Listed Species in East Alameda County, California (Corps File Number 2011-00230S) (No.08ESMFOO-2012-F-0092-1) as appended, 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(s), Biological Monitor(s). Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist(s) and Biological Monitor(s) using the Biologist Resume Form (Attachment 2) or another format containing the same information at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) and Biological Monitor(s) are knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist(s) and Biological Monitor(s) shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist(s) and Biological Monitor(s) in writing before starting Covered Activities and shall also obtain approval in advance, in writing, if the Designated Biologist(s) or Biological Monitor(s) must be changed.

- 6.3. Designated Biologist Authority.** To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall immediately stop any activity that does not comply with this ITP and/or order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species. Permittee shall provide unfettered access to the Project Site and otherwise facilitate the Designated Biologist in the performance of his/her duties. If the Designated Biologist is unable to comply with the ITP, then the Designated Biologist shall notify the CDFW Representative immediately. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non-compliance or take. Failure to notify CDFW of any non-compliance or take or injury of a Covered Species as a result of such agreement or contract may result in CDFW taking actions to prevent or remedy a violation of this ITP.
- 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, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. 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. 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 Documentation.** The Designated Biologist(s) and Biological Monitor(s) shall maintain construction-monitoring documentation on-site in either hard copy or digital format 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 documentation 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, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs. Plastic water bottles and plastic bags shall be picked up and removed daily.

- 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. 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 Materials.** Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 6.9. Firearms and Dogs.** Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during Covered Activities, except those in the possession of authorized security personnel or local, State, or federal law enforcement officials.
- 6.10. Delineation of Property Boundaries.** Before starting Covered Activities along each part of the route in active construction, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.
- 6.11. 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.
- 6.12. 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 traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour within the Project Area to avoid Covered Species on or traversing the roads. 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.
- 6.13. Staging Areas.** Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.12 of this ITP.

6.14. 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.

6.15. 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.

6.16. 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 if 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 follow up within 24 hours with a written report to CDFW describing, in detail, any non-compliance with this ITP and suggested measures to remedy the situation.

7.3. Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to:

- (1) minimize incidental take of the Covered Species;
- (2) prevent unlawful take of species;
- (3) check for compliance with all measures of this ITP;
- (4) check all exclusion zones; and
- (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area.

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

- 7.4. Weekly Compliance Monitoring.** During periods of inactivity or after clearing, grubbing, and grading are completed compliance inspections by the Designated Biologist may be reduced to a minimum of one day per week only after Permittee obtains written approval from CDFW. Daily compliance inspections shall resume if the Designated Biologist or CDFW finds the Permittee is out of compliance with any conditions of this ITP including the failure to maintain the temporary barrier described in Condition of Approval 8.3.
- 7.5. Quarterly Compliance Report.** The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.3 and 7.4 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Marcia Grefsrud (Marcia.Grefsrud@wildlife.ca.gov) and Headquarters CESA Program email is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.
- 7.6. 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 Quarterly Compliance Reports for that year identified in Condition of Approval 7.5; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species.
- 7.7. CNDDDB Observations.** The Designated Biologist shall notify the CDFW Representative immediately when a Covered Species is seen or taken. The Designated Biologist shall submit all observations of Covered Species to CDFW's

California Natural Diversity Database (CNDDDB) within 2 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.

- 7.8. 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 Quarterly 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.
- 7.9. Notification of Take or Injury.** Permittee shall notify the Designated Biologist by the end of the business day if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 482-2002 and the CDFW Representative at (707) 644-2812 by the end of the business day. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. If the take or injury is a result of Covered Activities then following initial notification, Permittee shall send CDFW a written report within two calendar days of the discovery. The report shall include the date and time of the finding or incident, GPS location of the Covered Species, photographs of the location and the Covered Species, explanation as to cause of take or injury, and any other pertinent information.
- 7.9.1.** If a California tiger salamander is found recently deceased, a ½- inch portion of the tail tip shall be removed and placed in a labeled tissue tube with 95% ethanol. The remaining carcass, if salvageable, shall be immediately bagged, labeled, and preserved in a freezer. The label shall include time and date, GPS location, circumstances surrounding death (if known), and ITP tracking number. Tail specimens shall be delivered to:

CDFW Bay Delta Region
 Attention: Marcia Grefsrud
 2825 Cordelia Road, Suite 100
 Fairfield, CA 94534

Incidental Take Permit
 No. 2081-2021-048-03
 CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

The remaining carcasses shall be delivered to the following address within two calendar days of the discovery:

CDFW Wildlife Health Lab
Attention: Deana Clifford
1701 Nimbus Road, Suite D
Rancho Cordova, CA 95670

- 7.10. Additional Impacts to Habitat.** No take beyond the permanent loss of 0.001 acre of habitat for the Covered Species, and temporary (less than one year) loss of 0.411 acre of habitat for the Covered Species authorized in this ITP shall occur unless this ITP is amended by CDFW prior to additional impacts.
- 7.11. Temporary Impact Criteria.** To be considered a temporary impact, all temporary impacts must meet the following criteria: (1) recontouring and seeding of each temporary impact area shall occur by October 31 of the year of the temporary impact; and (2) temporary impact sites have achieved vegetation success as described in the Vegetation Restoration Plan (see Condition of Approval 7.13).
- 7.12. Temporary Impact Restoration Schedule.** Prior to initiating any temporary impacts, Permittee shall ensure that a Temporary Impact Restoration Schedule has been developed that ensures: (1) removal of gravel, recontouring and seeding of temporary impact areas shall occur prior to October 31 of each year where the impacts occur; and (2) all temporary impacts from prior years have met the October 31 recontouring and seeding criteria and have achieved vegetation success as described in the Vegetation Restoration Plan (See Condition of Approval 7.13).
- 7.13. Vegetation Restoration.** Permittee shall prepare a Vegetation Restoration Plan (Restoration Plan) to restore Covered Species habitat that will be temporarily disturbed during construction to pre-Project or better conditions. Permittee shall submit the Restoration Plan to CDFW for approval within at least 15 days prior to the start of restoration activities. The Restoration Plan shall identify plant species damaged or removed during Project activities. The Restoration Plan shall include the following restoration standards:
- 7.13.1. Performance Standards.** To be considered a successful restoration site, Permittee shall meet the following performance standards:
- 7.13.1.1.** Permittee shall pre-designate each restoration area for establishment of a specific native vegetation community, based on slope, aspect, hydrological conditions, and if applicable, adjacent native vegetation. The seed mix for each restoration site shall be tailored to achieve the species composition of the pre-designated vegetation community. The distribution of vegetation communities within the restoration area shall be roughly proportionate to any native vegetation communities

impacted. Following restoration, the species composition of each restoration site shall closely match that of the associated reference site;

7.13.1.2. Seed mixes shall include only locally native species at a ratio appropriate to the site, with an emphasis on native bunchgrasses and other grassland species. Local native wildflower may also be included in the mix. Seed may be collected from within the Project Area. Additional seed shall be sourced from within 50 miles of the Project Area (i.e., original genetic material shall have been collected within this radius); however, the seed may be purchased from a seed farm outside of this area. For seeding and mulching exposed slopes, the seed blend may include one or two sterile non-native perennial grass species.

7.13.1.3. Permittee shall complete seeding prior to winter rains, but no later than November 15 of the year of the impact. At the discretion of CDFW, all exposed areas where seeding is unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.

7.13.1.4. No more than 15 percent (%) of the vegetation in each restoration site shall consist of species designated as high or moderate invasive plants in the California Invasive Plant Council's (Cal-IPC) California Invasive Plant Inventory Database (<https://www.cal-ipc.org/plants/inventory/>). If the presence of invasive species exceeds this threshold, Permittee is responsible for conducting appropriate control activities in coordination with the property owner.

7.13.2. Monitoring and Maintenance. Permittee is responsible for monitoring and maintaining the restored areas for a period of three (3) years or until the Restoration Plan success criteria have been met, whichever is longer. After the first six months following completion of restoration activities, Permittee shall submit a brief monitoring report (10 pages or less, not including figures) detailing vegetation establishment, percent invasive plant cover, and other relevant observation regarding success of the restoration project to CDFW. If restoration has been successful as outlined in Condition of Approval 7.13.1, Permittee may submit the following report at the end of Year 1 and annually thereafter.

7.13.3. If the survival and/or cover requirements are not meeting the performance standards outlined in Condition of Approval 7.13.1, Permittee is responsible for replacement planting, additional watering, weeding, invasive plant eradication, or any other practice, to achieve these requirements. Permittee shall continue to submit annual restoration reports (see Condition 6.4) to CDFW until the standards have been met. Replacement plantings shall be monitored with the same survival and growth requirements for three (3) years after planting.

Incidental Take Permit
No. 2081-2021-048-03
CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

7.14. Tracking Impacts. Permittee shall track temporary and permanent impacts and notify CDFW if take authorization is likely to be exceeded in the coming month. Permittee shall submit an appropriately revised Project construction schedule (see Condition of Approval 7.18) within seven (7) days in order to ensure temporary impacts remain within the temporary impact criteria according to Condition of Approval 7.11. If temporary impact criteria cannot be met, then the Permittee shall apply for an amendment to this ITP to address additional impacts.

7.14.1. If CDFW determines in writing that the take authorization for temporary or permanent impacts has been exceeded, Permittee shall cease all new construction activities until appropriate take authorization has been provided if so directed in writing by CDFW.

Invasive Species

7.15. Invasive Plant Species Control-Baseline. Permittee shall ensure that pre-Project baseline conditions are established for documenting type, location and general abundance of invasive plant species within the Project Area. These baseline conditions will be used for post-construction monitoring of restored areas (see Condition of Approval 7.13). The Designated Biologist(s) qualified to do botanical surveys and approved by CDFW shall submit the sampling methodology to CDFW at least 30 days prior to conducting baseline surveys. The baseline survey shall include both a qualitative (windshield and pedestrian) and quantitative assessment of target species within the Project Area.

7.15.1. Permittee shall ensure that baseline sampling at control transects is conducted prior to the start of Project construction activities. Sampling shall be conducted during the appropriate season for detecting invasive plant species, and shall be based on an appropriate number monitoring plots (treatment and control sets) approved by CDFW. The Designated Biologist(s) shall conduct sampling for target invasive plant species ranked by the Cal-IPC's Inventory as High or Moderate (<https://www.cal-ipc.org/plants/inventory/>).

7.16. Prevention of Spread of 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, bacteria, etc.), from one Project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the Cal-IPC'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/>.

7.17. Invasive Plant Species Control Plan. Permittee shall prepare an Invasive Plant Species Control Plan (Invasive Plant Plan) to effectively control and monitor invasive plants within Covered Species habitat that will be temporarily disturbed and subsequently restored. The Invasive Plant Plan shall include the results of baseline surveys (see Condition of Approval 7.15). Permittee shall submit the Invasive Plant

Plan to CDFW for approval within 30 days prior to the start of restoration activities. The Permittee shall oversee the management of invasives within the Project Area and may use control methods such as hand removal, mechanical removal and/or focused herbicide application within seeding and planting areas following vegetation restoration. The Designated Biologist shall ensure that invasive plant removal does not result in damage to adjacent Covered Species habitat or to root systems of installed plants. Herbicides may be used if hand or mechanical removal of invasives is unsuccessful or infeasible. Herbicides shall not be used within or near aquatic habitat and shall only be applied by an applicator holding a valid license issued by the California Department of Pesticide Regulation.

Construction

7.18. Construction Schedule. Permittee shall submit a final construction schedule to CDFW within 15 calendar days prior to the start of Project construction activities. During the Project construction period, Permittee shall notify CDFW of any major changes in the construction schedule at least seven (7) days prior to the change being implemented.

7.19. Emergency Response Plan. Before the onset of work, Permittee shall prepare an Emergency Response Plan describing actions that will be taken in case of a human-generated disaster, such as a spill or release of hazardous materials. An emergency phone tree, including contact information for all appropriate disaster management agencies and natural resources agencies, shall be included in the plan and should be posted on-site in a visible location. The Emergency Response Plan shall specify containment procedures for hazardous substances, with emphasis on avoidance of the aquatic features at the Project site.

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

8.1. California Tiger Salamander Relocation. The Designated Biologist shall relocate any California tiger salamander found within the Project Area to be impacted to an active rodent burrow system located no more than 300 feet outside of the Project Area unless otherwise approved by CDFW in writing. The Designated Biologist shall document both the capture and relocation areas by photographs and GPS positions. The California tiger salamander shall be photographed and measured (Snout-Vent) for identification purposes prior to relocation. All documentation shall be provided to the CDFW within 24 hours of California tiger salamander relocation.

8.2. California Tiger Salamander Relocation Plan. The Designated Biologist(s) shall prepare a California Tiger Salamander Relocation Plan (Relocation Plan). The Relocation Plan shall include, but not be limited to, an identification of the survey and hand excavation, capture, handling, and relocation methods; and identification of

Incidental Take Permit
No. 2081-2021-048-03
CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

where the individuals will be relocated to. Relocation areas shall be identified by the Designated Biologist based upon best suitable habitat available and time of year and approved by CDFW prior to the start of Covered Activities. The Relocation Plan shall be submitted to CDFW for approval prior to the beginning of Covered Activities. Covered Activities anywhere within the Project Area may not proceed until the Relocation Plan is approved in writing by CDFW. Only the approved Designated Biologist(s) are authorized to capture and handle the Covered Species.

- 8.3. Temporary Covered Species Barrier.** Prior to commencing any other Covered Activities, Permittee shall install a temporary barrier to prevent the Covered Species from dispersing into the Project Area. The barrier shall be designed to allow Covered Species to leave the Project Area using a one-way funnel or other method approved by CDFW. The Designated Biologist, or other trained staff during periods when no Covered Activities occur, shall inspect the barrier daily, and during and after storm events. The Permittee shall maintain and repair the barrier immediately to ensure that it is functional and without defects. Permittee shall provide refuge opportunities, such as coverboards or straw wattles, along the exclusion fence on both sides of the fence. Permittee shall submit to CDFW for approval, the location and design of the barrier and refuge opportunities no less than 30 days prior to the proposed start of Covered Activities. The Designated Biologist shall inspect refuge areas each morning during and after rain events. Animals found within the interior fence shall be relocated outside the fence line no more than 300 feet from the Project boundary. California tiger salamanders found shall be relocated by the Designated Biologist per the Relocation Plan described in Condition of Approval 8.1 and 8.2.
- 8.4. Covered Species Barrier Monitoring and Surveys.** The Designated Biologist or other trained staff during periods when no Covered Activities occur, shall inspect all of the temporary and permanently installed barriers each morning. The barriers shall be monitored until the permanent barrier is completely installed and approved by CDFW, and until all ground disturbing activities are completed. Any Covered Species found along the barrier shall be relocated in accordance with Condition of Approval 8.1 and 8.2. Refuge opportunities shall be provided along or near both sides of the barrier. The Designated Biologist shall survey the Project Area for the Covered Species during and after all evening/nighttime storm events occurring prior completion of grading and scraping. Survey methodology shall be provided to CDFW for approval prior to conducting surveys.
- 8.5. Inspection of Pipes and Culverts.** All construction pipes, culverts, or similar structures with a diameter of 2 inches or greater that are stored in the Project Area for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the Designated Biologist(s) and/or the construction foreman/manager for the Covered Species or other animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Covered Species is found, it shall be relocated as described in Condition of Approval 8.1 and 8.2.

- 8.6. Open Trenches and Keyways.** To prevent inadvertent entrapment of the Covered Species during construction, the Designated Biologist shall check all excavated open holes, sumps, trenches, and keyways for California tiger salamander no later than 0900 each day for trapped animals. If a California tiger salamander is trapped in these features, the Designated Biologist shall remove and relocate the animal(s) to a safe location within suitable habitat (see Condition of Approval 8.2) prior to the start of work activities at that site. At the close of each working day, the Designated Biologist shall ensure all excavated, steep-walled holes or trenches more than 6 inches deep are provided with one or more escape ramps constructed of earthen fill or wooden planks with a slope of 3:1 (run: rise). Before Permittee fills trenches or holes, the Designated Biologist shall thoroughly inspect them for trapped Covered Species. If a Covered Species is discovered by the Designated Biologist or anyone else, the Designated Biologist shall move the individual as required by Condition of Approval 8.1 and 8.2.
- 8.6.1.** If the open holes, sumps, trenches or excavations cannot be covered then a temporary barrier shall be installed around any trenches, holes, sumps, or other excavations to prevent Covered Species from becoming trapped. Refuge opportunities, such as coverboards (3-foot x 3-foot plywood) or straw wattles shall be provided on the outside perimeter of the barrier.
- 8.7. Augering and Excavation.** The Designated Biologist shall inspect all augering and excavation soils material for Covered Species. The Permittee shall ensure auger bits are cleaned by shaking the soil loose and not cleaned by spinning. The Permittee shall ensure excavation is coordinated with the Designated Biologist to allow sufficient time to survey the excavated soil.
- 8.8. Pre-Activity Surveys.** The Designated Biologist shall inspect all ruts and holes near root structures, etc. for Covered Species immediately prior to and during excavation or removal. A Designated biologist shall survey the open areas adjacent to ongoing construction. Multiple biologists may be necessary to survey the area appropriately. If a Covered Species is discovered by the Designated Biologist or anyone else, the Designated Biologist shall move the animal to a safe nearby location (e.g., mouth of ground-squirrel burrow outside of the temporary barrier) per Condition of Approval 8.1 and 8.2 and monitor it until it is determined that it is not imperiled by predators or other dangers.
- 8.9. Time of Day Work Restriction.** Permittee shall terminate all Covered Activities 30 minutes before sunset and shall not resume Covered Activities until 30 minutes after sunrise during the Covered Species migration/active season from November 1 to June 15. The Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for determining when Covered Activities shall terminate and resume.
- 8.10. Wet Season Work Restriction.** Covered Activities involving ground disturbing and heavy equipment use (such as excavation, grading, and contouring) during the wet

season (November 1 to April 30) shall be subject to approval of CDFW. If approved by CDFW, Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the Project Area. Covered Activities involving ground disturbing activities and heavy equipment use shall cease 24 hours prior to a 40 percent or greater forecast of rain. Covered Activities may continue 24 hours after the rain ceases if and there is less than a 40 percent change of precipitation in the 24-hour forecast.

8.10.1. If CDFW approves wet season work, a Designated Biologist(s) shall survey the Project site EACH day rain is forecast and the morning after all storm events. If rain exceeds 0.25 inches during a 24-hour period, work shall cease until there is a less than a 40 percent change of precipitation in the 24-hour forecast.

8.11. Covered Species Handling and Injury. Covered Species shall be handled and assessed according to the Restraint and Handling of Live Amphibians USGS, National Wildlife Health Center (D. Earl Greene, ARMI SOP NO. 100; 16 February 2001) (Attachment 3). If an injured Covered Species is found during the Project term, the individual shall be evaluated by the Designated Biologist who shall then immediately contact the CDFW Regional Representative, via email and telephone, to discuss the next steps. If the CDFW Regional Representative cannot be contacted immediately, the injured Covered Species shall be placed in a shaded container and kept moist. If the CDFW Regional Representative is not available or has not responded within 15 minutes of initial attempts then the following steps shall be taken by the Designated Biologist:

If the injury is minor or healing and the Covered Species is likely to survive, the salamander shall be released immediately in accordance with the Condition of Approval 8.1 and 8.2.

If it is determined that the Covered Species has major or serious injuries as a result of Project-related activities, the Designated Biologist shall immediately take it to the Lindsay Wildlife Experience or another CDFW approved facility. If taken into captivity the individual shall remain in captivity and not be released into the wild unless it has been kept in quarantine and the release is authorized by the CDFW and U.S. Fish and Wildlife Service. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The circumstances of the injury, the procedure followed and the final disposition of the injured animal shall be documented in a written incident report as described in Condition of Approval 7.9.

8.12. Notification of Non-Native Tiger Salamanders or Hybrids. The Designated Biologist shall immediately notify CDFW if a non-native barred tiger salamander (*Ambystoma tigrinum mavortium*) or California tiger salamander hybrid is found or suspected within the Project Area within 24 hours by calling CDFW's Regional Representative. The Designated Biologist shall not release any non-native or hybrid salamanders back to the wild until directed to do so by CDFW. The Designated Biologist shall follow the Covered Species Handling and Injury measures outlined in this ITP (see Condition of Approval 7.9).

9. Habitat Management Land Acquisition and Restoration: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result from 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 protected acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall either purchase 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank pursuant to Condition of Approval 9.2 below OR shall provide for both the permanent protection and management of 0.41 acre of Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. Purchase of Covered Species credits OR permanent protection and funding for perpetual management of HM lands 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. The Permittee shall also restore on-site 0.41 acre of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.6 below.

9.1. Cost Estimates. For the purposes of determining the Security amount, CDFW has estimated the cost sufficient for CDFW or its contractors to complete acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:

9.1.1. Purchase of 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank is estimated at \$25,000.00.

9.1.2. Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at \$10,000.00/acre for 0.41 acre: **\$4,100.00.**

9.2. Covered Species Credits. If the Permittee elects to purchase Covered Species credits to complete compensatory mitigation obligations, then Permittee shall purchase 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below. Prior to purchase of Covered Species credits, Permittee shall obtain CDFW approval to ensure the mitigation or conservation bank is appropriate to compensate for the impacts of the Project. Permittee shall submit to CDFW a copy of the Bill of Sale(s) and Payment Receipt prior to initiating Covered Activities or within 18 months from issuance of this ITP if Security is provided.

9.3. Protection. If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall:

- 9.3.1. Fee Title.** Transfer fee title of 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.
- 9.3.2. Conservation Easement.** 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 elects not to be named as the grantee for 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 Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the “doctrine of merger” could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.
- 9.3.3. 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, documentation identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project’s impacts on Covered Species;
- 9.3.4. HM Lands Documentation.** Provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CDFW for document list). 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;
- 9.3.5. Land Manager.** Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the

change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified. The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of CDFW in its sole discretion.

9.3.6. Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=137386&inline>) (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;

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

9.4. Endowment Fund. If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this

ITP, the conservation easement, and the management plan required by Condition of Approval 9.3.6. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

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

- 9.4.1. Identify an Endowment Manager.** The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.

Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).

Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(3).

- 9.4.2. Calculate the Endowment Funds Deposit.** After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The Permittee shall submit to CDFW for review and approval the results of the endowment assessment 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 endowment assessment and adjust for any additional administrative, periodic, or annual fees.
- 9.4.2.2. Endowment Buffers/Assumptions.** Permittee shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:
- 9.4.2.2.1. 10 Percent Contingency.** A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.
- 9.4.2.2.2. Three Years Delayed Spending.** The endowment shall be established assuming spending will not occur for the first three years after full funding.
- 9.4.2.2.3. Non-annualized Expenses.** For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.
- 9.4.3. Transfer Long-term Endowment Funds.** Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above.
- 9.4.4. Management of the Endowment.** 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.

Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of CDFW in its sole discretion. Permittee shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.

Notwithstanding Probate Code sections 18501-18510, if CDFW determines in its sole discretion that an expenditure needs to be made from the Endowment

to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from CDFW. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from CDFW's decision to make such an expenditure.

9.5. Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable costs incurred by CDFW related to issuance and monitoring of this ITP, including, but not limited to transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.

9.6. Habitat Restoration. Permittee shall restore on-site the 0.41 acre of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Prior to the start of Covered Activities, the Permittee shall prepare a Vegetation Restoration Plan to facilitate revegetation of the 0.41 acre of temporary construction disturbance on-site, and shall ensure that the Plan is successfully implemented by the contractor. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The plan shall also indicate the best time of year for seeding to occur.

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

10.1. Security Amount. The Security shall be in the amount of **\$29,100.00** or in the amount identified in 9.1 specific to the obligation that has not been completed. This amount is determined by CDFW based on the cost estimates identified in Condition of Approval 9.1 above, sufficient for CDFW or its contractors to complete land acquisition, property enhancement, startup costs, initial management, long-term management, and monitoring.

10.2. Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 4) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.

10.3. Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.

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

10.5. Security Transmittal. Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 5) or by way of an approved instrument such as an escrow agreement, irrevocable letter of credit, or other.

10.6. Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.

10.7. Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:

- Copy of Bill of Sale(s) and Payment Receipt(s) or Credit Transfer Agreement for the purchase of Covered Species credits; and
- Timely submission of all required reports.

OR

- Written documentation of the acquisition of the HM lands;
- Copies of all executed and recorded conservation easements;
- Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and
- Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.

IX. 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.

X. Stop-Work Order:

If CDFW determines the Permittee has violated any term or condition of this ITP or has engaged in unlawful take, CDFW may issue Permittee a written stop-work order instructing the Permittee to suspend any Covered Activity for an initial period of up to 30 days or risk suspension or revocation of this ITP. CDFW can issue a stop-work order 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, regardless of whether that species is a Covered Species under this ITP. 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 30 additional days.

If Permittee fails to remedy the violation or to comply with a stop-work order, CDFW may proceed with suspension and revocation of this ITP. 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.

XI. 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.

XII. Notices:

The Permittee shall sign and return this ITP to CDFW. A manual or digital signature is acceptable, provided a digital signature complies with Government Code section 16.5. Digital signatures facilitated by CDFW will be automatically returned. Manual (wet) signatures on duplicate original paper copies shall be returned by the Permittee via registered first-class mail or overnight delivery to the following address:

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

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by 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 (2081-2021-048-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Erin Chappell, Regional Manager
California Department of Fish and Wildlife – Bay Delta Region
2825 Cordelia Road Suite 100
Fairfield, CA 94534
Telephone (707) 428-2002
R3CESA@wildlife.ca.gov

Incidental Take Permit
No. 2081-2021-048-03
CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

and a copy to:

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

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

Marcia Grefsrud
California Department of Fish and Wildlife – Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
Telephone (707) 644-2812
Marcia.Grefsrud@wildlife.ca.gov

XIII. Compliance with the California Environmental Quality Act:

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, City of Livermore. (See generally Pub. Resources Code, §§ 21067, 21069). The lead agency's prior environmental review of the Project is set forth in the Livermore Stream Maintenance Program (SMP) (SCH. 2015042027) dated April 2015 that the City of Livermore adopted for 2015 Stream Maintenance Projects on September 17, 2015. At the time the lead agency adopted the Mitigated Negative Declaration 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 Mitigated Negative Declaration 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.

Incidental Take Permit
No. 2081-2021-048-03
CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

XIV. Findings Pursuant to CESA:

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

CDFW finds based on substantial evidence in the ITP application, Livermore Stream Maintenance Program Mitigated Negative Declaration, the results of and consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Quarterly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 0.41 acre of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, 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

Incidental Take Permit
No. 2081-2021-048-03
CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM

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.

XV. Attachments:

FIGURE 1	Map of Project
FIGURES A-1 through A7	Map of Project Areas
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Biologist Resume Form
ATTACHMENT 3	Restraint and Handling of Live Amphibians
ATTACHMENT 4	Letter of Credit Form
ATTACHMENT 5	Mitigation Payment Transmittal Form

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

ON 8/3/2022.

DocuSigned by:

Stacy Sherman for

602D031D81CA4F7...

Erin Chappell, 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:

Edward P. Reyes

By: _____

F2AT23AT9F16490...

Date: 8/3/2022

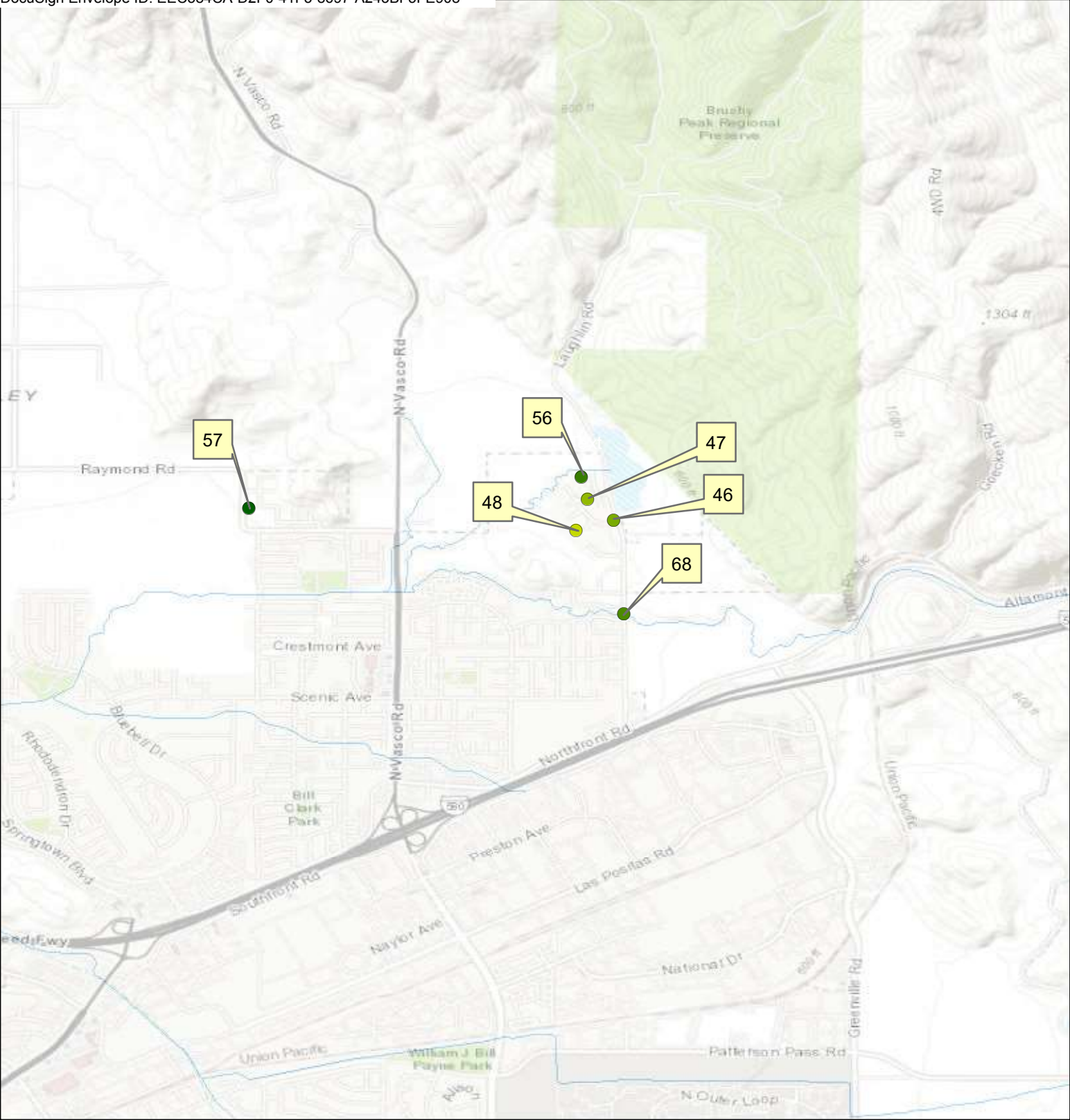
Printed Name: Edward Reyes

Title: Assistant Civil Engineer

Incidental Take Permit
No. 2081-2021-048-03

CITY OF LIVERMORE

2022 LIVERMORE STREAM MAINTENANCE PROGRAM









- 46
- 47
- 48
- 56
- 57
- 68



0 0.275 0.55 1.1 Miles

Figure 1
2022 SMP Locations
City of Livermore
2022 Stream Maintenance Program
March 2022

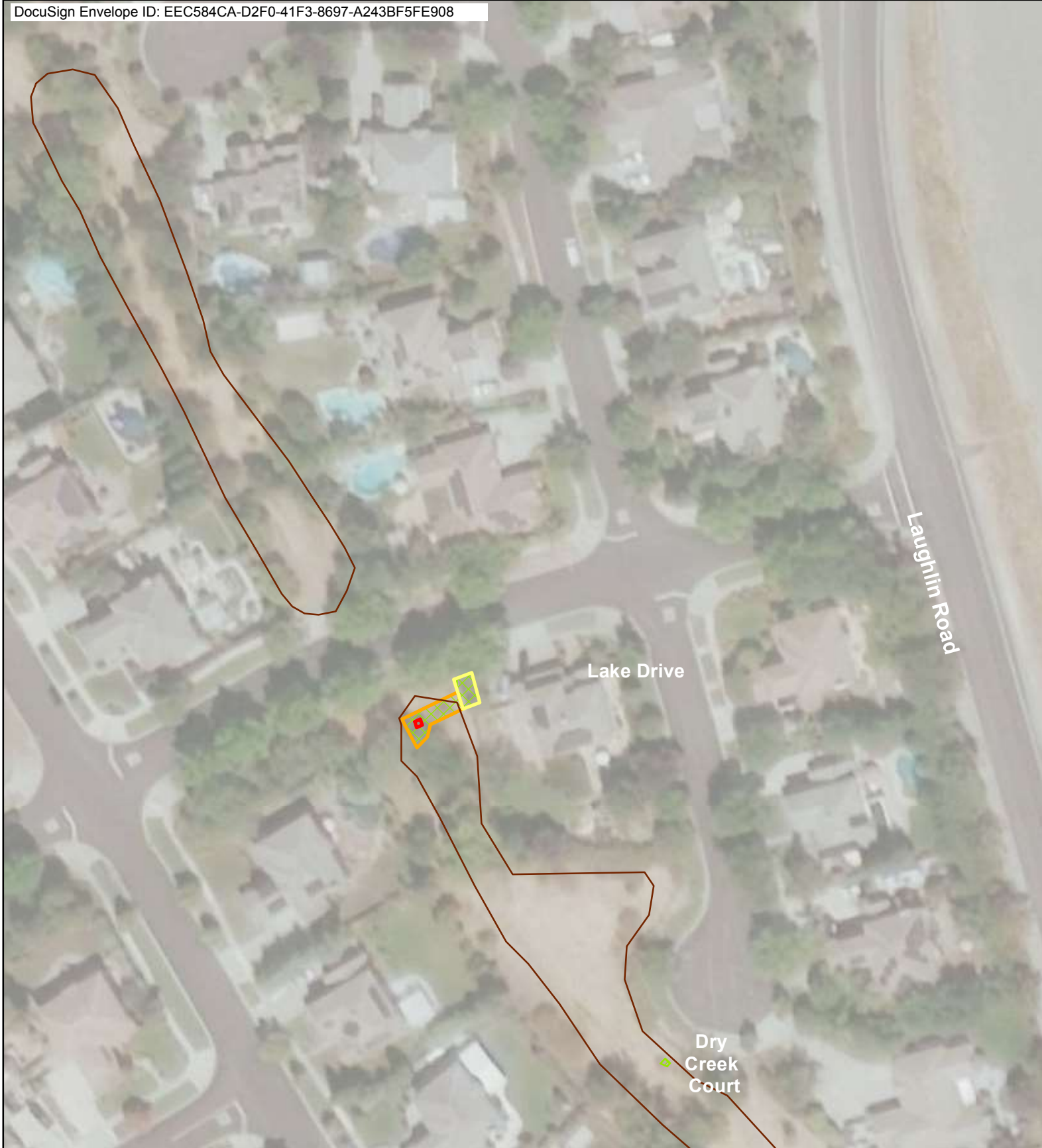


-  Unnamed Basin
-  46 - Access and Staging
-  46 - Temporary - Pampas Grass Removal
-  46 - Temporary
-  46 - Permanent
-  Upland dispersal



0 0.0125 0.025 0.05 Miles

Figure A-1
Site 46 - Bear Creek Basins
City of Livermore
2022 Stream Maintenance Program
March 2022



- Unnamed Basin
- 47 - Access
- 47 - Temporary
- 47 - Permanent
- Upland dispersal

Equipment will be staged on Lake Drive

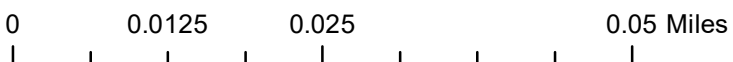


Figure A-2
Site 47 - Bear Creek Basins
City of Livermore
2022 Stream Maintenance Program
March 2022



- | | | | |
|--|---|--|----------------------|
| | 48 - Access (existing maintenance road) | | Existing Access Road |
| | 48 - Coyote Brush Removal | | Upland habitat |
| | 48 - Staging - Temporary | | Bear Creek Basins |
| | 48 - Temporary Erosion Rill Repair | | |
| | 48 - Temporary Outfall Maintenance | | |
| | 48 - Permanent Outfall Maintenance | | |

0 0.015 0.03 0.06 Miles

Figure A-3
Site 48 - The Bluffs Neighborhood

City of Livermore
2022 Stream Maintenance Program
March 2022
















-  56 - Access
-  56 - Temporary (Outfall Sediment and Vegetation Revmoval)
-  Unnamed Stormwater Basin
-  Upland dispersal
-  Existing access road

Figure A-4
Site 56 - The Bluffs Neighborhood
 City of Livermore
 2022 Stream Maintenance Program
 March 2022



0 0.01 0.02 0.04 Miles



-  57a - Access
-  57a - Temporary (Outfall Sediment and Vegetation Removal)
-  57a - Temporary (Sediment and Vegetation Removal)
-  57b - Access
-  57b - Temporary (Sediment and Vegetation Removal)
-  Upland Habitat



0 0.015 0.03 0.06 Miles








Figure A-5
Site 57a and 57b - Saddleback
City of Livermore
2022 Stream Maintenance Program
March 2022

Springtown Alkali Sink

Ames Street

Saddleback Wetland

Dalton Avenue

-  57b - Access
-  57b - Temporary (Sediment and Vegetation Removal)
-  57c - Access and Staging
-  57c - Temporary (Sediment)
-  57c - Temporary (Vegetation and Debris Removal*)
-  Existing Disturbed Area
-  Upland habitat

*57c - Vegetation and debris removal does not include ground disturbance

Figure A-6
Site 57b and 57c - Saddleback

City of Livermore
2022 Stream Maintenance Program
March 2022

0 0.0175 0.035 0.07 Miles










-  68 - Access Downstream
-  68 - Access Upstream
-  68 - Temporary (Sediment and Vegetation Removal)
-  Non Breeding Aquatic
-  Upland habitat

Figure A-7
Site 68 Laughlin Road Bridge Culvert

City of Livermore
2022 Stream Maintenance Program
March 2022

0 0.01 0.02 0.04 Miles



Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE MITIGATION MONITORING AND REPORTING PROGRAM (MMRP) CALIFORNIA ENDANGERED SPECIES ACT INCIDENTAL TAKE PERMIT NO. 2081-2021-048-03

PERMITTEE: City of Livermore

PROJECT: 2022 Livermore Stream Maintenance Program

PURPOSE OF THE MMRP

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

OBLIGATIONS OF PERMITTEE

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

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

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

TABLE OF MITIGATION MEASURES

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

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	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(s), Biological Monitor(s). Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist(s) and Biological Monitor(s) using the Biologist Resume Form (Attachment 2) or another format containing the same information at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) and Biological Monitor(s) are knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist(s) and Biological Monitor(s) shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist(s) and Biological Monitor(s) in writing before starting Covered Activities and shall also obtain approval in advance, in writing, if the Designated Biologist(s) or Biological Monitor(s) must be changed.	ITP Condition # 6.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
3	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, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. 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. 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	
4	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, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs. Plastic water bottles and plastic bags shall be picked up and removed daily.	ITP Condition # 6.6	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	

5	Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.	ITP Condition # 6.7	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
6	Delineation of Property Boundaries. Before starting Covered Activities along each part of the route in active construction, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.	ITP Condition # 6.10	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
7	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.	ITP Condition # 6.11	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
8	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	Before commencing ground- or vegetation-disturbing activities	Permittee	
9	Temporary Impact Restoration Schedule. Prior to initiating any temporary impacts, Permittee shall ensure that a Temporary Impact Restoration Schedule has been developed that ensures: (1) removal of gravel, recontouring and seeding of temporary impact areas shall occur prior to October 31 of each year where the impacts occur; and (2) all temporary impacts from prior years have met the October 31 recontouring and seeding criteria and have achieved vegetation success as described in the Vegetation Restoration Plan (See Condition of Approval 7.13).	ITP Condition # 7.12	Before commencing ground- or vegetation-disturbing activities	Permittee	
10	<p>Vegetation Restoration. Permittee shall prepare a Vegetation Restoration Plan (Restoration Plan) to restore Covered Species habitat that will be temporarily disturbed during construction to pre-Project or better conditions. Permittee shall submit the Restoration Plan to CDFW for approval within at least 15 days prior to the start of restoration activities. The Restoration Plan shall identify plant species damaged or removed during Project activities. The Restoration Plan shall include the following restoration standards:</p> <p>Performance Standards. To be considered a successful restoration site, Permittee shall meet the following performance standards:</p> <p>Permittee shall pre-designate each restoration area for establishment of a specific native vegetation community, based on slope, aspect, hydrological conditions, and if applicable, adjacent native vegetation. The seed mix for each restoration site shall be tailored to achieve the species composition of the pre-designated vegetation community. The distribution of vegetation communities within the restoration area shall be roughly proportionate to any native vegetation communities impacted. Following restoration, the species composition of each restoration site shall closely match that of the associated reference site;</p> <p>Seed mixes shall include only locally native species at a ratio appropriate to the site, with an emphasis on native bunchgrasses and other grassland species. Local native wildflower may also be included in the mix. Seed may be collected from within the Project Area. Additional seed shall be sourced from within 50 miles of the Project Area (i.e., original genetic material shall have been collected within this radius); however, the seed may be purchased from a seed farm outside of this area. For seeding and mulching exposed slopes, the seed blend may include one or two sterile non-native perennial grass species.</p>	ITP Condition # 7.13	Before commencing ground- or vegetation-disturbing activities	Permittee	

	<p>Permittee shall complete seeding prior to winter rains, but no later than November 15 of the year of the impact. At the discretion of CDFW, all exposed areas where seeding is unsuccessful after 90 days shall receive appropriate soil preparation and a second application of seeding, straw, or mulch as soon as is practical on a date mutually agreed upon.</p> <p>No more than 15 percent (%) of the vegetation in each restoration site shall consist of species designated as high or moderate invasive plants in the California Invasive Plant Council's (Cal-IPC) California Invasive Plant Inventory Database (https://www.cal-ipc.org/plants/inventory/). If the presence of invasive species exceeds this threshold, Permittee is responsible for conducting appropriate control activities in coordination with the property owner.</p>				
11	<p>Monitoring and Maintenance. Permittee is responsible for monitoring and maintaining the restored areas for a period of three (3) years or until the Restoration Plan success criteria have been met, whichever is longer. After the first six months following completion of restoration activities, Permittee shall submit a brief monitoring report (10 pages or less, not including figures) detailing vegetation establishment, percent invasive plant cover, and other relevant observation regarding success of the restoration project to CDFW. If restoration has been successful as outlined in Condition of Approval 7.13.1, Permittee may submit the following report at the end of Year 1 and annually thereafter.</p> <p>If the survival and/or cover requirements are not meeting the performance standards outlined in Condition of Approval 7.13.1, Permittee is responsible for replacement planting, additional watering, weeding, invasive plant eradication, or any other practice, to achieve these requirements. Permittee shall continue to submit annual restoration reports (see Condition 6.4) to CDFW until the standards have been met. Replacement plantings shall be monitored with the same survival and growth requirements for three (3) years after planting.</p>	ITP Condition # 7.13.2, 7.13.3	Before commencing ground- or vegetation-disturbing activities	Permittee	
12	<p>Invasive Plant Species Control-Baseline. Permittee shall ensure that pre-Project baseline conditions are established for documenting type, location and general abundance of invasive plant species within the Project Area. These baseline conditions will be used for post-construction monitoring of restored areas (see Condition of Approval 7.13). The Designated Biologist(s) qualified to do botanical surveys and approved by CDFW shall submit the sampling methodology to CDFW at least 30 days prior to conducting baseline surveys. The baseline survey shall include both a qualitative (windshield and pedestrian) and quantitative assessment of target species within the Project Area.</p> <p>Permittee shall ensure that baseline sampling at control transects is conducted prior to the start of Project construction activities. Sampling shall be conducted during the appropriate season for detecting invasive plant species, and shall be based on an appropriate number monitoring plots (treatment and control sets) approved by CDFW. The Designated Biologist(s) shall conduct sampling for target invasive plant species ranked by the Cal-IPC's Inventory as High or Moderate (https://www.cal-ipc.org/plants/inventory/).</p>	ITP Condition # 7.15	Before commencing ground- or vegetation-disturbing activities	Permittee	
13	<p>Invasive Plant Species Control Plan. Permittee shall prepare an Invasive Plant Species Control Plan (Invasive Plant Plan) to effectively control and monitor invasive plants within Covered Species habitat that will be temporarily disturbed and subsequently restored. The Invasive Plant Plan shall include the results of baseline surveys (see Condition of Approval 7.15). Permittee shall submit the Invasive Plant Plan to CDFW for approval within 30 days prior to the start of restoration activities. The Permittee shall oversee the management of invasives within the Project Area and may use control methods such as hand removal, mechanical removal and/or focused herbicide application within seeding and planting areas following vegetation restoration. The Designated Biologist shall ensure that invasive plant removal does not result in damage to</p>	ITP Condition # 7.17	Before commencing ground- or vegetation-disturbing activities	Permittee	

	adjacent Covered Species habitat or to root systems of installed plants. Herbicides may be used if hand or mechanical removal of invasives is unsuccessful or infeasible. Herbicides shall not be used within or near aquatic habitat and shall only be applied by an applicator holding a valid license issued by the California Department of Pesticide Regulation.				
14	Construction Schedule. Permittee shall submit a final construction schedule to CDFW within 15 calendar days prior to the start of Project construction activities. During the Project construction period, Permittee shall notify CDFW of any major changes in the construction schedule at least seven (7) days prior to the change being implemented.	ITP Condition # 7.18	Before commencing ground- or vegetation-disturbing activities	Permittee	
15	Emergency Response Plan. Before the onset of work, Permittee shall prepare an Emergency Response Plan describing actions that will be taken in case of a human-generated disaster, such as a spill or release of hazardous materials. An emergency phone tree, including contact information for all appropriate disaster management agencies and natural resources agencies, shall be included in the plan and should be posted on-site in a visible location. The Emergency Response Plan shall specify containment procedures for hazardous substances, with emphasis on avoidance of the aquatic features at the Project site.	ITP Condition # 7.19	Before commencing ground- or vegetation-disturbing activities	Permittee	
16	California Tiger Salamander Relocation Plan. The Designated Biologist(s) shall prepare a California Tiger Salamander Relocation Plan (Relocation Plan). The Relocation Plan shall include, but not be limited to, an identification of the survey and hand excavation, capture, handling, and relocation methods; and identification of where the individuals will be relocated to. Relocation areas shall be identified by the Designated Biologist based upon best suitable habitat available and time of year and approved by CDFW prior to the start of Covered Activities. The Relocation Plan shall be submitted to CDFW for approval prior to the beginning of Covered Activities. Covered Activities anywhere within the Project Area may not proceed until the Relocation Plan is approved in writing by CDFW. Only the approved Designated Biologist(s) are authorized to capture and handle the Covered Species.	ITP Condition # 8.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
17	Temporary Covered Species Barrier. Prior to commencing any other Covered Activities, Permittee shall install a temporary barrier to prevent the Covered Species from dispersing into the Project Area. The barrier shall be designed to allow Covered Species to leave the Project Area using a one-way funnel or other method approved by CDFW. The Designated Biologist, or other trained staff during periods when no Covered Activities occur, shall inspect the barrier daily, and during and after storm events. The Permittee shall maintain and repair the barrier immediately to ensure that it is functional and without defects. Permittee shall provide refuge opportunities, such as coverboards or straw wattles, along the exclusion fence on both sides of the fence. Permittee shall submit to CDFW for approval, the location and design of the barrier and refuge opportunities no less than 30 days prior to the proposed start of Covered Activities. The Designated Biologist shall inspect refuge areas each morning during and after rain events. Animals found within the interior fence shall be relocated outside the fence line no more than 300 feet from the Project boundary. California tiger salamanders found shall be relocated by the Designated Biologist per the Relocation Plan described in Condition of Approval 8.1 and 8.2.	ITP Condition # 8.3	Before commencing ground- or vegetation-disturbing activities	Permittee	
18	Permittee shall either purchase 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank pursuant to Condition of Approval 9.2 below OR shall provide for both the permanent protection and management of 0.41 acre of Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. Purchase of Covered Species credits OR permanent protection and funding for perpetual management of HM lands 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	ITP Condition # 9	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

	obligations. The Permittee shall also restore on-site 0.41 acre of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.6 below.				
19	<p>Cost Estimates. For the purposes of determining the Security amount, CDFW has estimated the cost sufficient for CDFW or its contractors to complete acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:</p> <p>Purchase of 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank is estimated at \$25,000.00.</p> <p>Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at \$10,000.00/acre for 0.41 acre: \$4,100.00.</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	
20	Covered Species Credits. If the Permittee elects to purchase Covered Species credits to complete compensatory mitigation obligations, then Permittee shall purchase 0.41 acre of Covered Species credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities, or no later than 18 months from the issuance of this ITP if Security is provided pursuant to Condition of Approval 10 below. Prior to purchase of Covered Species credits, Permittee shall obtain CDFW approval to ensure the mitigation or conservation bank is appropriate to compensate for the impacts of the Project. Permittee shall submit to CDFW a copy of the Bill of Sale(s) and Payment Receipt prior to initiating Covered Activities or within 18 months from issuance of this ITP if Security is provided.	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	
21	<p>Protection. If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall:</p> <p>Fee Title. Transfer fee title of 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.</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	
22	Conservation Easement. 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 elects not to be named as the grantee for 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 Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and includes provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the "doctrine of merger" could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.	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	
23	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, documentation 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 # 9.3.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months	Permittee	

			of issuance of the ITP if Security is provided)		
24	HM Lands Documentation. Provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CDFW for document list). 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 # 9.3.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
25	Land Manager. Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified. The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of CDFW in its sole discretion.	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	
26	Start-up Activities. Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=137386&inline) (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;	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	
27	Interim Management (Initial and Capital). Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management. Permittee shall either (1) provide Security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.	ITP Condition # 9.3.7	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
28	Endowment Fund. If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were	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	

	<p>set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by Condition of Approval 9.3.6. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.</p> <p>After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.</p>				
29	<p>Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.</p> <p>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).</p> <p>Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(3).</p>	ITP Conditions # 9.4.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
30	<p>Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The Permittee shall submit to CDFW for review and approval the results of the endowment assessment before transferring funds to the Endowment Manager.</p>	ITP Conditions # 9.4.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
31	<p>Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the endowment assessment and adjust for any additional administrative, periodic, or annual fees.</p>	ITP Conditions # 9.4.2.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
32	<p>Endowment Buffers/Assumptions. Permittee shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:</p>	ITP Conditions # 9.4.2.2	Before commencing ground- or vegetation-disturbing activities	Permittee	

	<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>		(or within 18 months of issuance of the ITP if Security is provided)		
33	Transfer Long-term Endowment Funds. Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above.	ITP Conditions # 9.4.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
34	<p>Management of the Endowment. 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.</p> <p>Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of CDFW in its sole discretion. Permittee shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.</p> <p>Notwithstanding Probate Code sections 18501-18510, if CDFW determines in its sole discretion that an expenditure needs to be made from the Endowment to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from CDFW. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from CDFW's decision to make such an expenditure.</p>	ITP Condition # 9.4.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
35	Reimburse CDFW. Permittee shall reimburse CDFW for all reasonable costs incurred by CDFW related to issuance and monitoring of this ITP, including, but not limited to transaction fees, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.	ITP Conditions # 9.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	
36	Habitat Restoration. Permittee shall restore on-site the 0.41 acre of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions. Prior to the start of Covered Activities, the Permittee shall prepare a Vegetation Restoration Plan to facilitate revegetation of the 0.41 acre of temporary construction disturbance on-site, and shall ensure that the Plan is successfully implemented by the contractor. The Plan shall include detailed specifications for restoring all temporarily disturbed areas, such as seed mixes and application methods. The plan shall also indicate the best time of year for seeding to occur.	ITP Conditions # 9.6	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of the ITP if Security is provided)	Permittee	

37	<p>Security: The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:</p> <p>Security Amount. The Security shall be in the amount of \$29,100.00 or in the amount identified in 9.1 specific to the obligation that has not been completed. This amount is determined by CDFW based on the cost estimates identified in Condition of Approval 9.1 above, sufficient for CDFW or its contractors to complete land acquisition, property enhancement, startup costs, initial management, long-term management, and monitoring.</p> <p>Security Form. The Security shall be in the form of an irrevocable letter of credit (see Attachment 4) or another form of Security approved in advance in writing by CDFW's Office of the General Counsel.</p> <p>Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.</p> <p>Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.</p> <p>Security Transmittal. Permittee shall transmit it to CDFW with a completed Mitigation Payment Transmittal Form (see Attachment 5) or by way of an approved instrument such as an escrow agreement, irrevocable letter of credit, or other.</p> <p>Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.</p> <p>Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:</p> <ul style="list-style-type: none"> • Copy of Bill of Sale(s) and Payment Receipt(s) or Credit Transfer Agreement for the purchase of Covered Species credits; and • Timely submission of all required reports. <p>OR</p> <ul style="list-style-type: none"> • Written documentation of the acquisition of the HM lands; • Copies of all executed and recorded conservation easements; • Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and • Timely submission of all required reports. <p>Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 18 months from the effective date of this ITP. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required by law, if the Permittee does not complete these requirements within the specified timeframe.</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	
----	--	--------------------------	--	-----------	--

DURING CONSTRUCTION					
38	<p>Compliance Monitoring. The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections to:</p> <ul style="list-style-type: none"> (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. <p>The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.</p>	ITP Condition # 7.3	Entire Project	Permittee	
39	<p>Weekly Compliance Monitoring. During periods of inactivity or after clearing, grubbing, and grading are completed compliance inspections by the Designated Biologist may be reduced to a minimum of one day per week only after Permittee obtains written approval from CDFW. Daily compliance inspections shall resume if the Designated Biologist or CDFW finds the Permittee is out of compliance with any conditions of this ITP including the failure to maintain the temporary barrier described in Condition of Approval 8.3.</p>	ITP Condition # 7.4	Entire Project	Permittee	
40	<p>Quarterly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.3 and 7.4 into a Quarterly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Quarterly Compliance Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is Marcia Grefsrud (Marcia.Grefsrud@wildlife.ca.gov) and Headquarters CESA Program email is CESA@wildlife.ca.gov. CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.</p>	ITP Condition # 7.5	Entire Project	Permittee	
41	<p>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 Quarterly Compliance Reports for that year identified in Condition of Approval 7.5; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts</p>	ITP Condition # 7.6	Entire Project	Permittee	

	on the Covered Species.				
42	CNDDDB Observations. The Designated Biologist shall notify the CDFW Representative immediately when a Covered Species is seen or taken. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 2 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Quarterly Compliance Report or ASR, whichever is submitted first relative to the observation.	ITP Condition # 7.7	Entire Project	Permittee	
43	Notification of Non-compliance. The Designated Representative shall immediately notify CDFW if 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 follow up within 24 hours with a written report to CDFW describing, in detail, any non-compliance with this ITP and suggested measures to remedy the situation.	ITP Condition # 7.2	Entire Project	Permittee	
44	Construction Monitoring Documentation. The Designated Biologist(s) and Biological Monitor(s) shall maintain construction-monitoring documentation on-site in either hard copy or digital format 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 documentation is available for review at the Project site upon request by CDFW.	ITP Condition # 6.5	Entire Project	Permittee	
45	Erosion Control Materials. Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.	ITP Condition # 6.8	Entire Project	Permittee	
46	Firearms and Dogs. Permittee shall prohibit firearms and domestic dogs from the Project Area and site access routes during Covered Activities, except those in the possession of authorized security personnel or local, State, or federal law enforcement officials.	ITP Condition # 6.9	Entire Project	Permittee	
47	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 traffic to established roads, staging, and parking areas. Permittee shall ensure that vehicle speeds do not exceed 20 miles per hour within the Project Area to avoid Covered Species on or traversing the roads. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.	ITP Condition # 6.12	Entire Project	Permittee	
48	Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 6.12 of this ITP.	ITP Condition # 6.13	Entire Project	Permittee	
49	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 # 6.14	Entire Project	Permittee	

50	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.	ITP Condition # 6.15	Entire Project	Permittee	
51	Additional Impacts to Habitat. No take beyond the permanent loss of 0.001 acre of habitat for the Covered Species, and temporary (less than one year) loss of 0.411 acre of habitat for the Covered Species authorized in this ITP shall occur unless this ITP is amended by CDFW prior to additional impacts.	ITP Condition # 7.10	Entire Project	Permittee	
52	Temporary Impact Criteria. To be considered a temporary impact, all temporary impacts must meet the following criteria: (1) recontouring and seeding of each temporary impact area shall occur by October 31 of the year of the temporary impact; and (2) temporary impact sites have achieved vegetation success as described in the Vegetation Restoration Plan (see Condition of Approval 7.13).	ITP Condition # 7.11	Entire Project	Permittee	
53	Tracking Impacts. Permittee shall track temporary and permanent impacts and notify CDFW if take authorization is likely to be exceeded in the coming month. Permittee shall submit an appropriately revised Project construction schedule (see Condition of Approval 7.18) within seven (7) days in order to ensure temporary impacts remain within the temporary impact criteria according to Condition of Approval 7.11. If temporary impact criteria cannot be met, then the Permittee shall apply for an amendment to this ITP to address additional impacts. If CDFW determines in writing that the take authorization for temporary or permanent impacts has been exceeded, Permittee shall cease all new construction activities until appropriate take authorization has been provided if so directed in writing by CDFW.	ITP Condition # 7.14	Entire Project	Permittee	
54	Prevention of Spread of 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, bacteria, etc.), from one Project site and/or waterbody to another. Prevention BMPs and guidelines for invasive plants can be found on the Cal-IPC'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/ .	ITP Condition # 7.16	Entire Project	Permittee	
55	California Tiger Salamander Relocation. The Designated Biologist shall relocate any California tiger salamander found within the Project Area to be impacted to an active rodent burrow system located no more than 300 feet outside of the Project Area unless otherwise approved by CDFW in writing. The Designated Biologist shall document both the capture and relocation areas by photographs and GPS positions. The California tiger salamander shall be photographed and measured (Snout-Vent) for identification purposes prior to relocation. All documentation shall be provided to the CDFW within 24 hours of California tiger salamander relocation.	ITP Condition # 8.1	Entire Project	Permittee	
56	Covered Species Barrier Monitoring and Surveys. The Designated Biologist or other trained staff during periods when no Covered Activities occur, shall inspect all of the temporary and permanently installed barriers each morning. The barriers shall be monitored until the permanent barrier is completely installed and approved by CDFW, and until all ground disturbing activities are completed. Any Covered Species found along the barrier shall be relocated in accordance with Condition of Approval 8.1 and 8.2. Refuge opportunities shall be provided along or near both sides of the barrier. The Designated Biologist shall survey the Project Area for the Covered Species during and after all evening/nighttime storm events	ITP Condition # 8.4	Entire Project	Permittee	

	occurring prior completion of grading and scraping. Survey methodology shall be provided to CDFW for approval prior to conducting surveys.				
57	Inspection of Pipes and Culverts. All construction pipes, culverts, or similar structures with a diameter of 2 inches or greater that are stored in the Project Area for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the Designated Biologist(s) and/or the construction foreman/manager for the Covered Species or other animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a Covered Species is found, it shall be relocated as described in Condition of Approval 8.1 and 8.2.	ITP Condition # 8.5	Entire Project	Permittee	
58	Open Trenches and Keyways. To prevent inadvertent entrapment of the Covered Species during construction, the Designated Biologist shall check all excavated open holes, sumps, trenches, and keyways for California tiger salamander no later than 0900 each day for trapped animals. If a California tiger salamander is trapped in these features, the Designated Biologist shall remove and relocate the animal(s) to a safe location within suitable habitat (see Condition of Approval 8.2) prior to the start of work activities at that site. At the close of each working day, the Designated Biologist shall ensure all excavated, steep-walled holes or trenches more than 6 inches deep are provided with one or more escape ramps constructed of earthen fill or wooden planks with a slope of 3:1 (run: rise). Before Permittee fills trenches or holes, the Designated Biologist shall thoroughly inspect them for trapped Covered Species. If a Covered Species is discovered by the Designated Biologist or anyone else, the Designated Biologist shall move the individual as required by Condition of Approval 8.1 and 8.2. If the open holes, sumps, trenches or excavations cannot be covered then a temporary barrier shall be installed around any trenches, holes, sumps, or other excavations to prevent Covered Species from becoming trapped. Refuge opportunities, such as coverboards (3-foot x 3-foot plywood) or straw wattles shall be provided on the outside perimeter of the barrier.	ITP Condition # 8.6	Entire Project	Permittee	
59	Augering and Excavation. The Designated Biologist shall inspect all augering and excavation soils material for Covered Species. The Permittee shall ensure auger bits are cleaned by shaking the soil loose and not cleaned by spinning. The Permittee shall ensure excavation is coordinated with the Designated Biologist to allow sufficient time to survey the excavated soil.	ITP Condition # 8.7	Entire Project	Permittee	
60	Pre-Activity Surveys. The Designated Biologist shall inspect all ruts and holes near root structures, etc. for Covered Species immediately prior to and during excavation or removal. A Designated biologist shall survey the open areas adjacent to ongoing construction. Multiple biologists may be necessary to survey the area appropriately. If a Covered Species is discovered by the Designated Biologist or anyone else, the Designated Biologist shall move the animal to a safe nearby location (e.g., mouth of ground-squirrel burrow outside of the temporary barrier) per Condition of Approval 8.1 and 8.2 and monitor it until it is determined that it is not imperiled by predators or other dangers.	ITP Condition # 8.8	Entire Project	Permittee	
61	Time of Day Work Restriction. Permittee shall terminate all Covered Activities 30 minutes before sunset and shall not resume Covered Activities until 30 minutes after sunrise during the Covered Species migration/active season from November 1 to June 15. The Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for determining when Covered Activities shall terminate and resume.	ITP Condition # 8.9	Entire Project	Permittee	
62	Wet Season Work Restriction. Covered Activities involving ground disturbing and heavy equipment use (such as excavation, grading, and contouring) during the wet season (November 1 to April 30) shall be subject to approval of CDFW. If approved by CDFW, Permittee shall	ITP Condition # 8.10	Entire Project	Permittee	

	<p>monitor the National Weather Service (NWS) 72-hour forecast for the Project Area. Covered Activities involving ground disturbing activities and heavy equipment use shall cease 24 hours prior to a 40 percent or greater forecast of rain. Covered Activities may continue 24 hours after the rain ceases if and there is less than a 40 percent change of precipitation in the 24-hour forecast.</p> <p>If CDFW approves wet season work, a Designated Biologist(s) shall survey the Project site EACH day rain is forecast and the morning after all storm events. If rain exceeds 0.25 inches during a 24-hour period, work shall cease until there is a less than a 40 percent change of precipitation in the 24-hour forecast.</p>				
63	<p>Covered Species Handling and Injury. Covered Species shall be handled and assessed according to the Restraint and Handling of Live Amphibians USGS, National Wildlife Health Center (D. Earl Greene, ARMI SOP NO. 100; 16 February 2001) (Attachment 3). If an injured Covered Species is found during the Project term, the individual shall be evaluated by the Designated Biologist who shall then immediately contact the CDFW Regional Representative, via email and telephone, to discuss the next steps. If the CDFW Regional Representative cannot be contacted immediately, the injured Covered Species shall be placed in a shaded container and kept moist. If the CDFW Regional Representative is not available or has not responded within 15 minutes of initial attempts then the following steps shall be taken by the Designated Biologist:</p> <p>If the injury is minor or healing and the Covered Species is likely to survive, the salamander shall be released immediately in accordance with the Condition of Approval 8.1 and 8.2.</p> <p>If it is determined that the Covered Species has major or serious injuries as a result of Project-related activities, the Designated Biologist shall immediately take it to the Lindsay Wildlife Experience or another CDFW approved facility. If taken into captivity the individual shall remain in captivity and not be released into the wild unless it has been kept in quarantine and the release is authorized by the CDFW and U.S. Fish and Wildlife Service. Permittee shall bear any costs associated with the care or treatment of such injured Covered Species. The circumstances of the injury, the procedure followed and the final disposition of the injured animal shall be documented in a written incident report as described in Condition of Approval 7.9.</p>	ITP Condition # 8.11	Entire Project	Permittee	
64	<p>Notification of Non-Native Tiger Salamanders or Hybrids. The Designated Biologist shall immediately notify CDFW if a non-native barred tiger salamander (<i>Ambystoma tigrinum mavortium</i>) or California tiger salamander hybrid is found or suspected within the Project Area within 24 hours by calling CDFW's Regional Representative. The Designated Biologist shall not release any non-native or hybrid salamanders back to the wild until directed to do so by CDFW. The Designated Biologist shall follow the Covered Species Handling and Injury measures outlined in this ITP (see Condition of Approval 7.9).</p>	ITP Condition # 8.12	Entire Project	Permittee	
65	<p>Notification of Take or Injury. Permittee shall notify the Designated Biologist by the end of the business day if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 482-2002 and the CDFW Representative at (707) 644-2812 by the end of the business day. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. If the take or injury is a result of Covered Activities then following initial notification, Permittee shall send CDFW a written report within two calendar days of the discovery. The report shall include the date and time of the finding or incident, GPS location of the Covered Species, photographs</p>	ITP Condition # 7.9	Entire Project	Permittee	

	<p>of the location and the Covered Species, explanation as to cause of take or injury, and any other pertinent information.</p> <p>If a California tiger salamander is found recently deceased, a ½- inch portion of the tail tip shall be removed and placed in a labeled tissue tube with 95% ethanol. The remaining carcass, if salvageable, shall be immediately bagged, labeled, and preserved in a freezer. The label shall include time and date, GPS location, circumstances surrounding death (if known), and ITP tracking number. Tail specimens shall be delivered to: CDFW Bay Delta Region, Attention: Marcia Grefsrud, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534</p> <p>The remaining carcasses shall be delivered to the following address within two calendar days of the discovery: CDFW Wildlife Health Lab, Attention: Deana Clifford, 1701 Nimbus Road, Suite D, Rancho Cordova, CA 95670</p>				
66	<p>Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall immediately stop any activity that does not comply with this ITP and/or order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species. Permittee shall provide unfettered access to the Project Site and otherwise facilitate the Designated Biologist in the performance of his/her duties. If the Designated Biologist is unable to comply with the ITP, then the Designated Biologist shall notify the CDFW Representative immediately. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non-compliance or take. Failure to notify CDFW of any non-compliance or take or injury of a Covered Species as a result of such agreement or contract may result in CDFW taking actions to prevent or remedy a violation of this ITP.</p>	ITP Condition # 6.3	Entire Project	CDFW	
POST-CONSTRUCTION					
67	<p>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.</p>	ITP Condition # 6.16	Post-construction	Permittee	
68	<p>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 Quarterly 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.</p>	ITP Condition # 7.8	Post-construction and after completion of mitigation	Permittee	
69	<p>Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:</p>	ITP Condition # 10.7	Post-construction	CDFW	

	<p>Copy of Bill of Sale(s) and Payment Receipt(s) or Credit Transfer Agreement for the purchase of Covered Species credits; and</p> <p>Timely submission of all required reports.</p> <p>OR</p> <p>Written documentation of the acquisition of the HM lands;</p> <p>Copies of all executed and recorded conservation easements;</p> <p>Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and</p> <p>Timely submission of all required reports.</p>				
--	---	--	--	--	--



Department of Fish and Wildlife

BIOLOGIST RESUME COVER SHEET

SUBMIT EACH RESUME AS A SEPARATE DOCUMENT**Number of Resumes Included in Transmittal:** _____

Name	Requested Role(s) ¹	Species/Resource(s)

¹ Requested roles correspond to the biological staffing requirements indicated in the Lake and Streambed Alteration (LSA) Agreement or California Endangered Species Act Incidental Take Permit (ITP). Roles may include a "Qualified Biologist" or "Designated Biologist" with the necessary experience to survey for special status species, or a "Biological Monitor" with the necessary experience to monitor construction activities for special status species. An individual may request more than one role.



Department of Fish and Wildlife

BIOLOGIST RESUME FORM

This form requests information about the qualifications of the Qualified Biologist, Designated Biologist and Biological Monitor specified in California Endangered Species Act Incidental Take Permits (ITP) and Lake or Streambed Alteration (LSA) Agreements issued by California Department of Fish and Wildlife (CDFW).

Completing this form will ensure the receipt of adequate information and expedite CDFW review of qualifications.

SECTION I. NAME AND CONTACT INFORMATION

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

SECTION II. EDUCATION

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

SECTION III. ROLE(S) AND PERMIT REQUIREMENTS

Requested Role(s):	
Relevant LSA Agreement Measures or ITP Conditions ² :	

SECTION IV. SPECIES AND RESOURCE EXPERIENCE – SUMMARY

This section summarizes experience by special status species and other resource. Use one row for each species or other resource where surveys or special protections are required in the CESA ITP or LSA Agreement for which biologist approval is requested.³ If more space is needed, add rows to this table. Provide details in Section 5.

Species or Resource	Number of Field Seasons & Hours, Life Stages Observed <i>Provide project details in Section 5</i>	Life History Knowledge <i>Describe formal workshops & training with dates, or informal training details</i>	CDFW SCP, MOU, & USFWS 10a1a Authorization Number & Authorized Activities <i>This form does not fulfill SCP, MOU, & USFWS 10a1a reporting requirements</i>
Insert Species or Resource 1	Field seasons: Hours: Life Stages:		Issued to: Expiration: Agency contact:
Insert Species or Resource 2	Field seasons: Hours: Life Stages:		Issued to: Expiration: Agency contact:
Insert Species or Resource 3	Field seasons: Hours: Life Stages:		Issued to: Expiration: Agency contact:

² List all measures and conditions from the LSA Agreement or ITP requiring biological staff (i.e., Qualified Biologist, Designated Biologist, or Biological Monitor).

³ Often LSA Agreements/ITPs require surveys and other protections for multiple species and other resources. Include only those for which the biologist has experience and is requesting approval.

SECTION V. SPECIES AND RESOURCE EXPERIENCE – DETAILS

This section details experience from the three most recent and relevant projects for each species and resource identified in Section 4. If more space is needed, attach additional pages in the same table format (i.e., copy/paste format).

A. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s) ⁴ :	
Survey Type(s) ⁵ :		Construction Monitoring ⁶ :	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB ⁷ (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

⁴ Insert the role as described in the associated LSA Agreement, ITP or other agency permit. If these permits were not issued, describe the role based on the duties, e.g., "lead biologist with handling authorization" or "biological monitor."

⁵ For example, pre-construction survey or description of the protocol or guideline followed.

⁶ Include the number of days and describe the types of activities monitored (e.g., heavy equipment operation).

⁷ CNDDDB is the abbreviation for California Natural Diversity Database.

Project Name:
LSA Agreement/ITP Number(s):

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

B. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

Project Name:
LSA Agreement/ITP Number(s):

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

C. Species or Resource:			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

Project Name:**LSA Agreement/ITP Number(s):**

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

Attachment 3

http://www.nwhc.usgs.gov/publications/amphibian_research_procedures/handling_and_restraint.jsp

Restraint and Handling of Live Amphibians

STANDARD OPERATING PROCEDURE

ARMI SOP No. 100

Revised, 16 February 2001

- I. **PURPOSE:** Provide guidelines for humane handling of amphibians so that injury and distress to the amphibian are minimized.
- II. **SCOPE:** These guidelines apply to larvae and tadpoles, as well as adult frogs, toads, salamanders and neotenes. Because of their anatomically different and very delicate skin, tadpoles and larvae must be handled differently than post-metamorphic amphibians.
- III. **EQUIPMENT and SUPPLIES.**
 - A. Standard capture equipment (seine nets, dip nets, minnow traps)
 - B. Clear plastic bags (half liter or full liter size)
- IV. **BACKGROUND:** There are three main hazards associated with handling live amphibians: two to the amphibian and one to the handler. To amphibians, the main dangers of being handled are skin damage that could result in secondary skin infections, and bone and muscle injuries caused by struggling when being held. For the handler, the main danger comes from toxic skin secretions produced by some amphibians (in the USA, this is mostly newts and the introduced giant/marine toad). Tadpoles and larvae have thin delicate skin that is very easily damaged by the slightest handling. The skin of larvae lacks keratin and has fewer cell layers than adult amphibian skin. Therefore, direct contact handling of tadpoles and larvae is to be avoided; instead, these amphibian stages are examined through clear flexible plastic bags containing water. Although the skin of adult (post-metamorphic) amphibians has keratin and is less delicate than larval skin, their skin is still much more delicate than the skin of reptiles, birds and mammals. Rough handling of adult amphibians can easily result in skin abrasions, small tears, punctures, erosions and ulcers; normally, minor skin wounds heal quickly, but if contaminants, sewage or high levels of microorganisms are present in the pond or other environment, then wound infections are possible.
Frogs and Toads. All amphibians can be expected to struggle following capture. For anurans, there is a danger that vigorous kicking with the hindlimbs can cause joint dislocations or a broken (fractured) back; broken backs are a well-documented and major problem in another species that moves by hopping---rabbits. Therefore, proper

restraint of anurans, first and foremost involves inhibiting their ability to kick. Salamanders. For salamanders, there are three major dangers associated with handling: 1) loss (automizing) of the tail, 2) damage to the very delicate external gills (in neotenes), and 3) back injury during whip-like thrashing movements.

V. METHODS OF PHYSICAL RESTRAINT:

- A. Anurans. Medium and large size frogs and toads (those about 5 grams and larger) should be grasped around the waist with the hindlimbs fully extended. The animal should not be allowed to bend (flex) its hip and knee joints, since this would allow it to kick.
- B. Caudates. Medium and large size salamanders (those about 5 grams and larger) should be grasped in the middle of the body between the forelimbs and hindlimbs. Larval and neotenic salamanders should never be grasped around the head or neck, because the gills can be easily damaged. Under no circumstances should salamanders be grasped by the tail or picked up by the tail.
- C. Larvae. All larvae (including tadpoles) should be handled with nets or scoops. For examinations, the larvae should be placed in a clear plastic bag with a mild amount of water. Alternatively, larvae may be sedated with an anesthetic and examined in a dish or bowl of water. As much as possible, larvae should be examined only while they are in water. Larvae should not be grasped with bare hands.

VI. MISHAPS.

- A. Skin wounds: If an amphibian suffers a skin wound during handling, it is recommended that the wound be sprayed with the over-the-counter product, Bactine® (See the SOP on Toe Clipping of Frogs and Toads, NWHC ACUC Protocol 2001-004). All other topical antiseptics and disinfectants (sprays and ointments) are CONTRAINDICATED in amphibians. If possible, the animal should then be released on land rather than into water, since the antiseptic spray would be quickly washed off in water.
- B. Broken back: If a frog or toads suffers a broken back during capture or handling, it should be promptly euthanized. It would be inhumane to release such a crippled animal. An animal with a broken back will have serious damage to the spinal cord and should show almost immediate paralysis of the hindlimbs and tail. Recommended methods of humane euthanasia include (see NWHC ACUC Protocol 1999-009, Methods of Euthanasia):
 - 1. Pithing
 - 2. Overdosing in anesthetic solutions of MS222 or benzocaine

3. Application of a benzocaine-based topical ointment (as used by humans to relieve tooth-aches) to the top of the head and dorsum of the body.
-
- C. Broken leg: If a major bone of a limb is broken during capture or handling, the animal should be euthanized or taken to a wildlife rehabilitation center or veterinarian for treatment. A broken leg bone typically is recognized as an abnormal bend in the leg where there is no joint; other signs of a broken leg bone are protrusion of a bone fragment through the skin, inability of the animal to move a limb or position a leg in its normal resting posture. After treatment, amphibians with broken bones might be given to a zoo or placed in a captive breeding program. Only if the injured amphibian is kept isolated from all other fish, amphibians and reptiles (eg, in a separate cage) during treatment, can it later be considered for release at the point of capture. Injuries to digits (toes and fingers) generally are not life-threatening; if the skin of the injured toe also is wounded, then treatment with Bactine® prior to immediate release is acceptable. If a toe bone is broken and protruding through the skin, the affected toe may be amputated just proximal to the site of the fracture, the stump should be sprayed with Bactine®, and the animal may be released.
 - D. Automized tail: If a salamander automizes (detaches) its tail during capture or handling, the stump should be treated (sprayed) with Bactine®; the salamander can then be promptly released.
 - E. Crushing injuries to head and body. Amphibians that have serious injuries to skin, muscles and bones should be promptly euthanized. Crushing injuries that are limited to a limb or tail will require treatment at a wildlife rehabilitation center or a veterinary clinic; alternatively, the animal may be euthanized, but it would be inhumane to release a seriously injured amphibian.
 - F. Snout abrasions. Amphibians that are held in glass or clear plastic containers may jump head-first into the glass, or may rub their snout against the container in attempts to burrow out. If amphibians are held for more than an hour in a clear container (bottle, aquarium, etc), they should be examined for evidence of skin injury at the tip of the snout and elsewhere around the head prior to release. If abrasions are detected, they should be sprayed with Bactine® prior to release.
 - G. Toxic skin secretions. All amphibians have glands in their skin that secrete a vast number of chemicals; some of which are merely noxious and repellent-like, while others may cause skin or eye irritation, and some may actually kill. The poison-dart frogs of Central America are an example of a frog with toxic secretions that can kill a human. Among the native amphibians of the United

States, the two amphibians of greatest concern are giant toads (also called cane toads, marine toads, aka toads; *Bufo marinus*) and western newts of the genus, *Taricha*.

Giant toads secrete a potent white mucoid substance from their parotid glands (large warts just behind the eyes) that affects the heart, but it is not absorbed through the intact human skin; however, the toxin is readily absorbed through the eyes and mouth. Hence, the best way to prevent poisoning is to carefully avoid rubbing the eyes or putting fingers in the mouth after handling a giant toad. If skin secretions of giant toads contact the eye or mouth, then flush promptly with generous amounts of clean fresh water or contact lens wetting solution, and then seek emergency care at a clinic or hospital if stinging or numbness of the eye or mouth develops.

Newts of the genus, *Taricha*, also secrete toxins from their skin; it is presumed that the entire body of these newts secretes toxins (newts and other salamanders do not have parotid glands). Their skin secretions are very irritating to the eyes and mouth. Temporary blindness (lasting about 24 hrs) has been reported by field biologists that handled newts and then rubbed their eyes. If sensations of blurred vision, or burning or stinging of the eyes occur after handling any genus or species of newt, wash the eyes with copious amounts of fresh clean water (or contact lens wetting solutions) and promptly seek medical care. Persons with newt skin secretions in their eyes are advised not to drive a vehicle or operate other dangerous or heavy equipment.

Finally, it is possible that other amphibian species in the USA besides giant toads and newts, could produce skin secretions that are irritants to the eyes. Furthermore, amphibians may carry some bacteria in their intestines and feces that are human pathogens, such as the bacteria, *Salmonella* and *Leptospira*. Hence, it is always best to practice good personal hygiene after handling any amphibian (namely, thoroughly wash your hands with soap and water).

VII. CITED LITERATURE:

1. MARTIN, D., and H. HONG. 1991. The use of Bactine® in the treatment of open wounds and other lesions in captive anurans. *Herpetol Rev* 22: 21.

[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 or the Principal Sum will be reduced upon receipt by us of Certificate of Cancellation/Reduction, 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

CERTIFICATE FOR DRAWING

[**CDFW Letterhead**]

[**Date**]

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

Re: Irrevocable Standby Letter of Credit No. [**number issued by financial institution**]

The undersigned, a duly Authorized Representative of the California Department of Fish and Wildlife ("CDFW"), as defined in paragraph 12 of the above-referenced 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 this ____ day of [**month**], [**year**].

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

[**Insert one of the following:** "Director" **or** "General Counsel" **or** "Regional Manager, [**Name of Regional Office**]" **or** "Chief, Habitat Conservation Planning Branch"]

ATTACHMENT B

CERTIFICATE FOR CANCELLATION/REDUCTION

[**CDFW Letterhead**]

[**Date**]

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

Re: Irrevocable Standby Letter of Credit No. [**number issued by financial institution**]

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 presented documentary evidence of compliance with the following Mitigation Requirement[(s)] referenced in paragraph 3 of the Credit: [**insert brief description of requirement(s) or requirement number(s) completed**]." **or** "The Applicant has provided CDFW with an equivalent security approved by CDFW to replace the Credit."]
2. [**Insert one of the following statements:** "CDFW therefore requests the cancellation of the Credit." **or** "CDFW therefore requests a reduction in the Principal Sum in the amount of \$_____, thereby making the new Principal Sum \$_____."]

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

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

[**Insert one of the following:** "Director" **or** "General Counsel" **or** "Regional Manager, [**Name of Regional Office**]" **or** "Chief, Habitat Conservation Planning Branch"]

State of California - Department of Fish and Wildlife

MITIGATION PAYMENT TRANSMITTAL FORM

DFW 1057 (REV.05/18/21)

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: _____	

Please send this form to asbmitigation@wildlife.ca.gov