

Appendix B Avoidance, Minimization and/or Mitigation Measures Summary

To ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as shown in the proposed Environmental Commitments Record that follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Farmland

Caltrans would provide relocation advisory assistance to any person, business, farm, or non-profit organization that would be displaced, or have onsite investments, such as wells and irrigation systems, displaced because of acquisition of real property for public use (see Appendix A for the Caltrans Title VI Policy Statement). In addition, any right-of-way acquisition would be purchased at fair market value.

Emergency Services

The project would require the implementation of a Traffic Management Plan that would identify necessary signage and the locations of potential temporary detours. This plan would help to ensure that local access to homes and businesses, as well as bus and emergency vehicle access, is available during construction of the project. The plan would specify time frames for temporary detours if needed. The plan would also specify the process for notifying residents, businesses, emergency services, and the traveling public of the construction period and any required detours.

Relocation and Real Property

For any person(s) whose real property interests would be impacted by the proposed project, the acquisition of those property interests would comply fully with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The act is a federally mandated program that applies to all acquisitions of real property or displacements of persons resulting from federally assisted programs or projects. It was created to provide for and ensure the fair and equitable treatment of all such persons.

Also, the Fifth Amendment of the U.S Constitution provides that private property may not be taken for public use without payment of “just compensation.” All impacted owners would be provided with notification of the acquiring agency’s intent to acquire an interest in their property, including a written offer letter of just compensation specifically describing those property interests. A right-of-way specialist would be assigned to each property owner to assist with this process.

Cultural Resources

Archaeology

The following avoidance and minimization measures will be incorporated into the construction contract to ensure that any impacts caused by the project will have no significant adverse impacts on archaeological resources:

- **Environmentally Sensitive Area Designation:** The establishment of environmentally sensitive areas will be designated by environmentally sensitive area fencing within Caltrans’ right-of-way. “Environmentally sensitive area” information will be shown on contract plans and discussed in Section 14-1.02 of the Caltrans 2018 Standard Specifications. “Environmentally sensitive area” provisions may include but are not necessarily limited to the use of temporary orange fencing or other high-visibility marking to identify the proposed limit of work in areas next to sensitive resources or to locate and exclude sensitive resources from potential construction impacts. Contractor encroachment into “environmentally sensitive areas” will be prohibited, and immediate work stoppage and notification to the Caltrans resident engineer are required if an “environmentally sensitive area” is breached. “Environmentally sensitive area” provisions will be implemented as the first order of work and remain in place until all construction activities are complete.
- Caltrans Standard Special Provision Section 14-1.02A will be required to mark over the boundary of the archaeological resource, given the archaeological resource temporary ID Number 2567-1, which will prevent the contractor from disturbing the site during construction.

- Caltrans Standard Special Provision Section 14-1.03B: Archaeological Monitoring Areas will be included in the construction contract. An archaeologist and Native American monitor will be onsite during construction to ensure the integrity of the environmentally sensitive areas and see any unexpected discoveries that might become exposed through construction activities.

Architectural History

No mitigation measures are anticipated.

Hazardous Waste

Pending the Preliminary Site Investigation results, any asbestos-containing material and/or lead-based paint exceeding regulatory levels will be disposed of appropriately.

Wetlands and Other Waters

Avoidance and Minimization Measures

Environmentally Sensitive Area Designation: Additional direct and indirect impacts to sensitive biological resources throughout the project area would be avoided or minimized by designating “environmentally sensitive areas.” All areas outside of the proposed construction footprint shall be considered an environmentally sensitive area. In addition, included is any area determined by a qualified biologist during project planning or during pre-construction surveys to qualify for environmentally sensitive area designation.

Designated Biologist: A Designated Biologist or biologists shall be onsite during any activities that have the potential to affect sensitive biological resources. The Designated Biologist will monitor regulated species and habitats; ensure that construction activities do not result in the unintended take of regulated species or disturbances to regulated habitats; ensure that construction activities comply with any permits, licenses, agreements, or contracts; immediately notify the Caltrans Resident Engineer of any take of regulated species, disturbances to regulated habitats, or breaches of environmentally sensitive areas; and prepare, submit, and sign notifications and reports. A Designated Biologist who performs specialized activities must have demonstrated field experience working with the regulated species or performing the specialized task, and regulatory agency approval will be required prior to Caltrans’ acceptance of the Designated Biologist.

Containment Measures/Construction Site Best Management Practices: To contain construction-related material and prevent debris and pollutants from entering receiving waters and to reduce the potential for discharge to receiving waters, the contractor shall follow all applicable guidelines and requirements in Section 13 of the Caltrans 2018 Standard Specifications or

any Special Provisions in Section 13 regarding water pollution control and general specifications for preventing, controlling, and abating water pollution in streams, waterways, and other bodies of water.

Worker Environmental Awareness Training for Construction Personnel:

Before any work occurs in the project area, a qualified Designated Biologist (Designated Biologist; familiar with the resources to be protected) will conduct a mandatory “Worker Environmental Awareness Training” for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid and minimize effects to sensitive biological resources (e.g., jurisdictional wetlands and other waters, threatened and endangered species, other special-status species, roosting bats, nesting birds, etc.) within and adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The Designated Biologist will inform all construction personnel about the life history and habitat requirements of special-status habitats and species known to occur or with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of regulatory requirements.

Restore and Revegetate Temporarily Disturbed Areas Onsite: Disturbed areas within the construction limits will be graded to minimize surface erosion and siltation into receiving waters. Disturbed areas will be re-contoured to as close to pre-project condition as possible and will be stabilized as soon as feasible (and no later than October 15 of each construction season) to avoid erosion during subsequent storms and runoff. Permanent erosion control seeding will be performed at all disturbed sites by hydro-seeding over the course of construction as each site is completed, with all sites seeded by the completion of construction activities.

Compensatory Mitigation

Permanent losses of waters of the United States would be compensated by participation in the Nation Wildlife Federation’s Sacramento District California In-Lieu Fee Program.

Animal Species

Western Burrowing Owl

Avoidance and Minimization Efforts

- Nesting Bird Avoidance—Limited Operation Period—If possible, construction activities within the nesting bird habitat should occur during the non-nesting season (between October 1 and January 31). If not feasible, then pre-construction surveys or nesting bird avoidance measures would be required.
- Nesting Bird Avoidance—Pre-Construction Surveys During Nesting Season—If ground-disturbance, vegetation removal, or other construction

activities are scheduled during the nesting season of protected raptors and migratory birds (February 1 to September 30), a focused survey for active nests of such birds shall be conducted by a qualified biologist within 15 days prior to the beginning of project-related activities. If a lapse in project-related work of 15 days or longer occurs, another survey and, if required, consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife will be required before the work can be reinitiated. Pre-construction surveys for nesting migratory birds and raptors shall be specified under Caltrans 2018 Standard Specification and/or Standard Special Provision 14-6.03A (Species Protection) and/or 14-6.03(B) (Bird Protection).

- Nesting Bird Avoidance—Avoid Active Nests—If active nests are found, a protective no-work buffer will be established, and Caltrans shall consult with the U.S. Fish and Wildlife Service regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and with the California Department of Fish and Wildlife to comply with provisions of the Fish and Game Code of California. The no-work buffer for burrowing owls would be 655 feet from April 1 to October 15 and 165 feet from October 16 to March 31.

Compensatory Mitigation

Compensatory mitigation is not required for the burrowing owl.

Swainson's Hawk and Other Migratory Birds

Avoidance and Minimization Efforts

To the maximum extent feasible, the project has been designed, modified, and amended to avoid and minimize potential project-related impacts to the Swainson's hawk. However, if this species is present within the biological study area during implementation of the project, individual birds and their habitat could be impacted. The following measures will be implemented to avoid and minimize potential impacts to the Swainson's hawk:

- Worker Environmental Awareness—Training for Construction Personnel—Before any work occurs in the project area, a qualified Designated Biologist (Designated Biologist; familiar with the resources to be protected) will conduct a mandatory “Worker Environmental Awareness Training” for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid and minimize effects to sensitive biological resources (e.g., jurisdictional wetlands and other waters, threatened and endangered species, other special-status species, roosting bats, nesting birds, etc.) within and adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The Designated Biologist will inform all construction personnel about the life history and habitat requirements of special-status habitats and species known to occur or with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of regulatory requirements.

- **Designated Biologist**—A Designated Biologist or biologists shall be onsite during any activities that have the potential to affect sensitive biological resources. The Designated Biologist will monitor regulated species and habitats; ensure that construction activities do not result in the unintended take of regulated species or disturbances to regulated habitats; ensure that construction activities comply with any permits, licenses, agreements, or contracts; immediately notify the Caltrans Resident Engineer of any take of regulated species, disturbances to regulated habitats, or breaches of environmentally sensitive areas; and prepare, submit, and sign notifications and reports. A Designated Biologist who performs specialized activities must have demonstrated field experience working with the regulated species or performing the specialized task, and regulatory agency approval will be required prior to Caltrans' acceptance of the Designated Biologist.
- **Conduct Pre-construction Surveys for Nesting Migratory Birds and Raptors, including Special-Status Species, and Establish Protective Buffers**—A qualified wildlife biologist will conduct nesting bird surveys if construction occurs between February 1 and September 30. These nesting bird surveys will include a minimum of two separate surveys to look for active nests of migratory birds, including raptors. Surveys will include a search of all trees and shrubs, and ruderal areas that provide suitable nesting habitat for birds within 100 feet of construction disturbance. In addition, a 0.5-mile area from the biological study will be surveyed for nesting raptors to identify raptors that might be affected by construction disturbances, particularly special-status raptors (i.e., northern goshawk, great gray owl, and California spotted owl). The biologists conducting the surveys should have experience with all special-status birds that could potentially nest within the survey area. In areas where access is not permitted, the surveyors will use binoculars and spotting scopes to inspect any potential nest trees, particularly large trees and snags. Surveys should occur during the height of the breeding season (March 1 to June 1), with one survey occurring within 1 week prior to the start of construction.

If no special-status raptor species or active nests are detected during these surveys, no additional measures are required. If an active nest is found in the survey area, a no-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (September 30) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by the Caltrans Designated Biologist in coordination with any applicable agencies (as determined by species) and will depend on the level of noise or construction disturbance taking place, line-of-sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers.

Suitable buffer distances may vary between species; however, a minimum of 50 feet for songbirds and 300 feet for raptors is typical.

See also the measures listed under western spadefoot toad below for measures that may affect more than one species.

Compensatory Mitigation

Compensatory mitigation is not required for the burrowing owl.

Western Spadefoot Toad

Avoidance and Minimization Efforts

The following measures would be included:

- Worker Environmental Awareness Training for Construction Personnel— Before any work occurs in the project area, a qualified biologist will conduct mandatory worker education training to all construction personnel.
- Environmentally Sensitive Area Designation—All areas outside the proposed construction footprint and designated sensitive areas shall be considered an environmentally sensitive area. These areas will be designated on the construction plans and may be marked off by temporary orange fencing or other high visibility markings. Work inside these areas is forbidden.
- The Designated Biologist shall be onsite for work at culvert locations STA-4-3.09, STA-4-3.25, STA-4-4.02, STA-4-4.23, and STA-4-5.44. The Designated Biologist shall monitor regulated species and habitats, and ensure construction activities comply with permits, licenses, agreements and contracts. The Designated Biologist will notify the Caltrans Resident Engineer of any take of regulated species or disturbances to regulated habitats, or any break of environmentally sensitive areas. The Designated Biologist will prepare, submit and sign notifications and reports.
- Construction best management practices will be in place during construction.
- Retain a Qualified Biologist to conduct pre-construction surveys for the western spadefoot toad.
- All areas disturbed during construction would be re-contoured if necessary and stabilized as soon as possible following completion of construction. Roadside areas would be re-vegetated with Caltrans-approved weed-free and non-invasive plant seed mixture.
- Install Exclusion Fencing Between the Work Area and Suitable Habitat for Western Spadefoot Toad—To prevent western spadefoot toads from entering the active work area during construction at culvert locations STA-4-3.09, STA-4-3.25, STA-4-4.02, STA-4-4.23, and STA-4-5.44, Caltrans shall install wildlife exclusion fencing between the designated work limits and adjacent suitable habitat (open grasslands). Exclusion fencing will be

at least 3 feet high, and the lower 6 inches of the fence will be buried in the ground to prevent animals from crawling under. The remaining 2.5 feet will be left above ground to serve as a barrier for animals moving on the ground surface. The fence will be pulled taut at each support to prevent folds or snags. Fencing shall be installed and maintained in good condition during all construction activities. Such fencing shall be inspected and maintained daily until completion of the work at that site.

- Check for Animals under Construction Equipment and Vehicles Prior to Moving—Prior to being moved, vehicles and equipment will be checked for any sensitive wildlife sheltering underneath them. If an animal is observed, the vehicles/equipment will not be moved until the individual has vacated the area of its own accord.
- Install Escape Ramps in Holes or Trenches Measuring more than 6 Feet Deep—To prevent the inadvertent entrapment of the western spadefoot toad or other animals during construction, any excavated, steep-walled holes or trenches measuring more than 6 inches deep either will be covered at the close of each working day using plywood or similar materials (without openings) or will be provided with one or more escape ramps constructed of earth fill or wooden planks in the event that the holes/trenches cannot be fully covered. All holes or trenches will be checked daily for trapped wildlife; they also will be thoroughly inspected before being filled. If at any time a trapped animal is discovered, the Service-approved biologist(s) will install escape ramps or other appropriate structures (if not already in place) to enable the individual the opportunity to escape on its own.
- Limit the Use of Artificial Lighting—The use of temporary artificial lighting onsite will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding habitat.
- Properly Dispose of Food-Related Trash and Remove from Project Site Daily—All food-related trash items such as wrappers, cans, bottles, and food scraps generated by project-related activities and personnel will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.
- Prohibit Pets and Firearms from Being Brought to the Project Site—To eliminate the potential for disturbance or injury to, or death of, any species resulting from the presence of pets and firearms, neither (with the exception of firearms carried by authorized law enforcement officials) will be allowed on the project site.

Compensatory Mitigation

Compensatory mitigation is not required for the western spadefoot toad.

Threatened and Endangered Species

Greene's Tuctoria

Avoidance and Minimization Efforts

Pre-Construction Surveys-Special-Status Plants:

- The qualifications of any proposed biological monitor(s) will be presented to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for review and written approval at least 2 weeks prior to conducting project activities at the project site.
- No more than 24 hours prior to any ground disturbance in a given location, pre-construction surveys will be conducted by a California Department of Fish and Wildlife-approved biologist for sensitive plant species using California Department of Fish and Wildlife-approved survey protocols.
- If sensitive plant species are detected within areas that will be disturbed by construction activities, then no work will take place at these locations until Caltrans has consulted with the California Department of Fish and Wildlife.
- New sightings of sensitive plant species shall be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of where the sensitive plant species were observed should also be provided to the California Department of Fish and Wildlife.

Compensatory Mitigation

Compensatory mitigation is not required for Green's tuctoria.

Vernal Pool Fairy Shrimp/Vernal Pool Tadpole Shrimp

Avoidance and Minimization Efforts

Implementation of the following measures would ensure that construction activities avoid and minimize impacts to the vernal pool fairy shrimp during construction:

- Worker Environmental Awareness Training for Construction Personnel— Before any work occurs in the project area, a qualified designated biologist (Designated Biologist; familiar with the resources to be protected) will conduct a mandatory "Worker Environmental Awareness Training" for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid and minimize effects to sensitive biological resources (e.g., jurisdictional wetlands and other waters, threatened and endangered species, other special-status species, roosting bats, nesting birds, etc.) within and adjacent to construction areas and the penalties for not

complying with applicable state and federal laws and permit requirements. The Designated Biologist will inform all construction personnel about the life history and habitat requirements of special-status habitats and species known to occur or with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of regulatory requirements.

- **Environmentally Sensitive Area Designation**—Additional direct and indirect impacts to sensitive biological resources throughout the project area would be avoided or minimized by designating “environmentally sensitive areas.” All areas outside of the proposed construction footprint shall be considered as environmentally sensitive areas, as well as any areas determined by a qualified biologist during project planning or during pre-construction surveys to qualify for environmentally sensitive area designation.
- **Designated Biologist**—A Designated Biologist or biologists shall be onsite during any activities that have the potential to affect sensitive biological resources. The Designated Biologist will monitor regulated species and habitats; ensure that construction activities do not result in the unintended take of regulated species or disturbances to regulated habitats; ensure that construction activities comply with any permits, licenses, agreements, or contracts; immediately notify the Caltrans Resident Engineer of any take of regulated species, disturbances to regulated habitats, or breaches of environmentally sensitive areas; and prepare, submit, and sign notifications and reports. A Designated Biologist who performs specialized activities must have demonstrated field experience working with the regulated species or performing the specialized task, and regulatory agency approval will be required prior to Caltrans’ acceptance of the Designated Biologist.
- **Work Windows**—Construction activities within 250 feet of suitable vernal pool habitat (locations STA-4 post mile 3.09, STA-4 post mile 3.25, STA-4 post mile 4.02, STA-4 post mile 4.23, and STA-4 post mile 5.44) will be avoided from the first day of the first significant rain (1 inch or greater) until June 1, or until suitable wetlands remain dry for 72 hours and no significant rain is forecast on the day construction is proposed.
- **Pre-construction Surveys**—Prior to the start of work at culvert locations STA-4-3.09, STA-4-3.25, STA-4-4.02, STA-4-4.23, and STA-4-5.44, a qualified biologist will inspect the work areas to ensure that the work areas are dry, that environmentally sensitive area fencing is installed at the limits of the temporary work area around the inlet structures, and that erosion control materials (such as burlap-wrapped fiber rolls) are installed between the work areas.
- **Herbicide Restrictions**—No herbicide will be applied within 100 feet of aquatic habitat.

Compensatory Mitigation

Compensatory mitigation is proposed through the purchase of mitigation credits. Credits will be purchased through an approved mitigation bank that has vernal pool fairy shrimp credits.

California Tiger Salamander

Avoidance and Minimization Efforts

Implementation of the following measures would ensure that construction activities avoid and minimize impacts to the California tiger salamander during construction:

- Worker Environmental Awareness Training for Construction Personnel— Before any work occurs in the project area, a qualified designated biologist (Designated Biologist; familiar with the resources to be protected) will conduct a mandatory “Worker Environmental Awareness Training” for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid and minimize effects to sensitive biological resources (e.g., jurisdictional wetlands and other waters, threatened and endangered species, other special-status species, roosting bats, nesting birds, etc.) within and adjacent to construction areas and the penalties for not complying with applicable state and federal laws and permit requirements. The Designated Biologist will inform all construction personnel about the life history and habitat requirements of special-status habitats and species known to occur or with potential for occurrence onsite, the importance of maintaining habitat, and the terms and conditions of regulatory requirements.
- Environmentally Sensitive Area Designation—Additional direct and indirect impacts to sensitive biological resources throughout the project area would be avoided or minimized by designating “environmentally sensitive areas.” All areas outside of the proposed construction footprint shall be considered as environmentally sensitive areas, as well as any areas determined by a qualified biologist during project planning or during pre-construction surveys to qualify for environmentally sensitive area designation.
- Work Windows—Construction activities within 250 feet of suitable vernal pool habitat (locations STA-4 post mile 3.09, STA-4 post mile 3.25, STA-4 post mile 4.02, STA-4 post mile 4.23, and STA-4 post mile 5.44) will be avoided from November 1 to May 1.
- Construction Best Management Practices—Construction best management practices (best practices) that are consistent with the most recent Caltrans manuals (including the Construction Site Best Management Practices Manual and the Stormwater Pollution Prevention Plan and Water Pollution Control Program Manuals) will be developed for

the project and will be implemented throughout the course of construction to avoid or reduce adverse effects to water quality. Best practices associated with an erosion control plan will be prepared for avoiding discharge of pollutants from vehicle/equipment cleaning into aquatic and other sensitive habitats. Caltrans personnel and the contractor will perform routine inspections of the construction areas to verify that the best practices are being properly implemented and maintained and are operating effectively as designed. A water quality inspector will inspect sites before and after a rain event to ensure that stormwater best practices are adequate.

- Re-contour and Revegetate Disturbed Areas—To control erosion and restore habitat value, all areas within the work areas that are disturbed during construction will be re-contoured if necessary and stabilized as soon as possible following the completion of construction. Roadside areas will be revegetated with a Caltrans-approved, appropriate weed-free and non-invasive plant seed mixture.
- Retain a Qualified Biologist to Conduct Pre-construction Surveys for California Tiger Salamander—No more than 14 days prior to the start of ground-disturbing activities (including vegetation removal and equipment staging) within suitable habitat for the California tiger salamander and western spadefoot toad at culvert locations STA-4-3.09, STA-4-3.25, STA-4-4.02, STA-4-4.23, and STA-4-5.44, a qualified biologist(s) will conduct visual encounter pre-construction surveys of each site. The survey will pay particular attention to detecting any burrows, crevices, and other cover sites that could be used as refugia by the species. If any burrows are discovered, they will be flagged or otherwise marked, and avoided. Any sightings of a California tiger salamander and/or western spadefoot toad will be immediately reported to Caltrans, and construction will not commence at that location until the species has moved out of the work area on its own accord and the appropriate agencies are consulted on the need for additional protection measures.
- Install Exclusion Fencing Between the Work Area and Suitable Habitat for California Tiger Salamander—To prevent the California tiger salamander from entering the active work area during construction at culvert locations STA-4-3.09, STA-4-3.25, STA-4-4.02, STA-4-4.23, and STA-4-5.44, Caltrans shall install wildlife exclusion fencing between the designated work limits and adjacent suitable habitat (open grasslands). Exclusion fencing will be at least 3 feet high, and the lower 6 inches of the fence will be buried in the ground to prevent animals from crawling under. The remaining 2.5 feet will be left above ground to serve as a barrier for animals moving on the ground surface. The fence will be pulled taut at each support to prevent folds or snags. Fencing shall be installed and maintained in good condition during all construction activities. Such fencing shall be inspected and maintained daily until completion of the work at that site.

- Check for Animals under Construction Equipment and Vehicles Prior to Moving—Prior to being moved, vehicles and equipment will be checked for any California tiger salamanders, or other sensitive wildlife sheltering underneath them. If an animal is observed, the vehicles/equipment will not be moved until the individual has vacated the area of its own accord.
- Install Escape Ramps in Holes or Trenches Measuring more than 6 Feet Deep—To prevent the inadvertent entrapment of the California tiger salamander or other animals during construction, any excavated, steep-walled holes or trenches measuring more than 6 inches deep either will be covered at the close of each working day using plywood or similar materials (without openings) or will be provided with one or more escape ramps constructed of earth fill or wooden planks in the event that the holes/trenches cannot be fully covered. All holes or trenches will be checked daily for trapped wildlife; they also will be thoroughly inspected before being filled. If at any time a trapped animal is discovered, the Service-approved biologist(s) will install escape ramps or other appropriate structures (if not already in place) to enable the individual the opportunity to escape on its own.
- Limit the Use of Artificial Lighting—The use of temporary artificial lighting onsite will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction will be confined to areas within the construction footprint and directed away from surrounding habitat.
- Properly Dispose of Food-Related Trash and Remove from Project Site Daily—All food-related trash items such as wrappers, cans, bottles, and food scraps generated by project-related activities and personnel will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting predator species.
- Prohibit Pets and Firearms from Being Brought to the Project Site—To eliminate the potential for disturbance or injury to, or death of, any species resulting from the presence of pets and firearms, neither (with the exception of firearms carried by authorized law enforcement officials) will be allowed on the project site.

Threatened and Endangered Species

Implementation of the following measures will ensure that the project minimizes effects on riparian habitat adjacent to the project construction area (additional avoidance and minimization measures may be agreed upon during the project permitting process):

- Weed-Free Construction Equipment and Vehicles—To minimize the potential for the transport of weed propagules to the Action Area from sources outside of the project area, construction equipment and vehicles are recommended to be cleaned and washed at the contractor's facilities

prior to arrival to the construction site. Any vehicle or equipment cleaning that occurs onsite during construction activities shall conform with Caltrans 2018 Standard Specifications or any Special Conditions under Section 13-4.03E(3) and Section NS-08 (Vehicle and Equipment Cleaning) of the Caltrans 2017 Construction Site Best Management Practices Manual, which require the contractor to contain and dispose of any waste resulting from vehicle or equipment cleaning.

- **Weed Control During Construction**—To minimize the potential for spreading weed propagules originating from within the project Environmental Study Limits during the course of construction activities, including initial vegetation clearing and at onsite revegetation areas, weed control would be accomplished in accordance with Caltrans 2018 Standard Specifications or Special Provisions under Section 20-1.03C(3). The use of herbicides for weed control activities would be discouraged but may be considered on a case-by-case basis depending upon the weed species, the extent of infestation, or any regulatory restrictions.
- **Weed-Free Erosion Control and Revegetation Treatments**—To minimize the risk of introducing weed propagules to the Action Area from sources outside of the project area, only locally adapted plant species appropriate for the project area will be used in any erosion control or revegetation seed mix or stock. The Caltrans Biologist will consult with the Caltrans Landscape Architect to develop appropriate seed and planting palettes for use in revegetation and/or erosion control applications. Any compost, mulch, tackifier, fiber, straw, duff, topsoil, erosion control products, or seed must meet Caltrans 2018 Standard Specification or any Special Provisions under Section 21-2.02 for these materials. Any hydro-seed used for revegetation activities must also be certified weed-free per Caltrans 2018 Standard Specifications Section 21-2.02F.