

18) **Streambed Alteration Agreement for Murrieta Creek Multi-use Trail Project**

Approve and authorize the City Manager to execute a Streambed Alteration Agreement with the California Department of Fish and Wildlife (CDFW) for the Murrieta Creek Multi-Use Trail project in such final form as approved by the City Attorney.



REPORT TO CITY COUNCIL

To: Honorable Mayor and Members of the City Council

From: Jason Simpson, City Manager

Prepared by: Remon Habib, City Engineer

Date: December 10, 2024

Subject: Streambed Alteration Agreement for Murrieta Creek Multi-use Trail Project

Recommendation

Approve and authorize the City Manager to execute a Streambed Alteration Agreement with the California Department of Fish and Wildlife (CDFW) for the Murrieta Creek Multi-Use Trail project in such final form as approved by the City Attorney.

Background

The Murrieta Creek Multi-Use Trail is a multi-jurisdiction, active transportation trail that is identified in the City's General Plan and Eastlake Specific Plan adopted in 2017. The proposed Murrieta Creek Multi-Use Trail extends Skylark Drive and the Lake Levee Trail.

The City is currently in final design for the Murrieta Creek Multi-Use Trail project. The City's consultant, Chen Ryan Associates, is providing services to complete the final design, permitting, and acquisition of right-of-way and mitigation credits for the project.

Discussion

Streambed Alteration Agreement (SAA) would be entered between the California Department of Fish and Wildlife (CDFW) and the City of Lake Elsinore. CDFW has determined the Murrieta Creek Multi-Use Trail project could substantially adversely affect existing fish or wildlife resources. Necessary mitigation measures to protect the impacted resources are identified in the SAA, and the City must satisfy each measure identified in the SAA to mitigate the impacts of the Murrieta Creek Multi-Use project. Measures included are administrative, general wildlife protection and prevention, compensatory, and reporting.

Execution of the SAA would allow for the project to request ATP grant funding allocation for the construction phase of the project.

Streambed Alteration Agreement MCT

Fiscal Impact

ATP Cycle 4 grant funding was used to cover the cost of the City's consultant to prepare the final Streambed Alteration Agreement documents for the Murrieta Creek Multi-Use Trail project.

Attachments

Attachment 1 - Streambed Alteration Agreement



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
INLAND DESERTS REGION
3602 INLAND EMPIRE BLVD, SUITE C-220
ONTARIO, CA 91764



STREAMBED ALTERATION AGREEMENT
EPIMS-RIV-43632-R6
Murrieta Creek

CITY OF LAKE ELSINORE
MURRIETA CREEK MULTI-USE TRAIL PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the City of Lake Elsinore (Permittee) or as represented by Remon Habib.

RECITALS

WHEREAS, pursuant to Fish and Game Code section 1602, Permittee notified CDFW on September 19, 2023 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to Fish and Game Code section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The Murrieta Creek Multi-Use Trail Project (Project) is located northeast of Grand Avenue and northeast of Corydon Road, in the City of Lake Elsinore, County of Riverside, State of California; Latitude 33.630132° N, Longitude -117.315142 ° W; Township 6 South, Range 4 West, U.S. Geological Survey (USGS) map Lake Elsinore (Exhibit 1). The Project is located within Assessor's Parcel Numbers 371-100-020, 371-100-003, 370-120-001, and 370-120-063.

PROJECT DESCRIPTION

The Project is limited to construction of a multi-use trail that will be a 10-foot-wide paved trail within the Lake Elsinore Back Basin. Split rail fencing will be mounted on either side of the trail with a 2-foot-wide decomposed granite (DG) or native landscape recovery

zone between the fence and the asphalt path, for a total permanent impact width of 20 feet.

The proposed Project will also include a single Arizona crossing and a span bridge and the replacement and extension of a pipe culvert to cross four existing ephemeral drainage features that intercept the trail. The Arizona crossing will be located at the northernmost corner of Como Street and Stoneman Street and will consist of a concrete apron and rock splash pad within the planned permanent impact area to allow water to pass while establishing a defined trail and eliminating long-term maintenance needs. The approximately 55 feet long span bridge will be located at the terminus of Ontario Way and will be constructed either as cast-in-place concrete abutments spanned by hollow-core precast concrete planks, or an alternate clear span design such as open bottom arch culverts. It will completely span the ephemeral feature, with no footings or other material placed within the feature. It is anticipated that the crossings will require the use of a backhoe and/or mini excavator for the cast-in-place concrete abutments, and an articulated lift to hoist the hollow-core precast concrete planks into position. Impacts from the installation of the crossings will be confined to the permanent and temporary impact footprint. The existing culvert located at the eastern end of the trail will be replaced and extended to accommodate the trail width.

The Project will require a total of approximately 2,765 cubic yards of asphalt (consisting of 655 cubic yards (cy) of hot mix asphalt, 1,850 cy of Class II aggregate base, and 260 cy of DG) imported to the site. Earthwork would include approximately 9,405 cy of cut and 6,375 cy of fill, resulting in export of 8,363cy and import of 5,335 cy. Cut and fill slopes would be a maximum 2:1 gradient.

Temporary steel plate bridges and/or other temporary clear span means required of the contractor would be implemented during construction should any of the avoided features need to be temporarily crossed during construction. Temporary construction access will be provided via existing paved roadways, the Levee Trail, and within the temporary impact area. Temporary construction staging areas will also be located onsite within the mapped temporary impact area or off-site within the existing disturbed and developed areas.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

BIRDS: Bell's sparrow (*Artemisiospiza belli belli*), burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), Cooper's hawk (*Accipiter cooperii*), least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), northern harrier (*Circus hudsonius*), coastal California gnatcatcher (*Poliophtila californica californica*), tricolored blackbird (*Agelaius tricolor*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), western snowy plover (*Charadrius nivosus nivosus*), white-faced ibis (*Plegadis chihi*), white-tailed kite (*Elanus leucurus*), yellow-breasted chat (*Icteria virens*), and yellow warbler (*Setophaga petechia*);

PLANTS: California Orcutt grass (*Orcuttia californica*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), Hammitt's clay-cress (*Sibaropsis hammittii*), long-spined spineflower (*Chorizanthe polygonoides* var. *longispina*), Munz's onion (*Allium munzii*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), San Diego ambrosia (*Ambrosia pumila*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), thread-leaved brodiaea (*Brodiaea filifolia*), and Tecate cypress (*Hesperocyparis forbesii*).

MAMMALS: Stephen's kangaroo rat (*Dipodomys stephensi*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), northwest San Diego pocket mouse (*Chaetodipus fallax fallax*), and southern grasshopper mouse (*Onychomys torridus ramona*);

AMPHIBIANS AND REPTILES: coast horned lizard (*Phrynosoma coronatum blainvillii*), western spadefoot toad (*Spea hammondi*), California glossy snake (*Arizona elegans occidentalis*), orange-throat whiptail (*Aspidoscelis hyperythra*), red-diamond rattlesnake (*Crotalus ruber*), western pond turtle (*Emys marmorata*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*);

CRUSTACEANS: Riverside fairy shrimp (*Streptocephalus woottoni*);

INSECTS: Crotch's bumble bee (*Bombus crotchii*), quino checkerspot butterfly (*Euphydryas editha quino*), and senile tiger beetle (*Cicindela senilis frosti*).

The adverse effects the Project could have on the fish or wildlife resources identified above include: change to, or loss or decline of natural bed substrate; disturbance from Project activity; disturbance to, alteration of, and/or loss of: nesting, roosting, foraging, and refugia habitat, and wildlife corridors; and reduction and loss of habitat coverage, composition, distribution, and cross-pollination/reproductive opportunity; changes in the bed, bank, or channel. The Project will temporarily impact 2.63 acres and permanently impact 1.34 acres associated with Murrieta Creek and the Lake Elsinore Back Basin. The Project will impact a total of 3.97 acres of stream bed, bank, and channel, which are the limits of the Project impacts authorized under this agreement.

Table 1: Project Impacts to Stream Bed, Bank, and Channel

Habitat	Impacts (acres)*		
	Temporary	Permanent	Total
Riparian/Riverine			
Riparian Woodland	0.20	0.08	0.28
Tamarisk Scrub (above 1,265)	0.01	0.01	0.02
Tamarisk Scrub (below 1,265 feet)	0.88	0.53	1.41
Non-native Woodland (below 1,265 feet)	0.35	0.15	0.50
Riversidean sage scrub (below 1,265 feet)	0	0	0
Disturbed/Ruderal (below 1,265 feet)	1.09	0.55	1.64
Riparian Subtotal	2.52	1.31	3.83
Riverine			
Streambed	0.11	0.03	0.14
Riverine Subtotal	0.11	0.03	0.14
Total	2.63	1.34	3.97

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the Project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the Project at the Project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the Project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the Project site at any time to verify compliance with the Agreement.
- 1.5 Compliance within Western Riverside County Multiple Species Habitat Conservation Plan (MSCHP) and Take of Listed Species. Take of any California Endangered Species Act (CESA)-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080, 2085 & 2800). Consequently, if a Project, including Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation. Additionally, the issuance of a draft or final Agreement does not infer that the Project is consistent with the MSHCP or that the Project has demonstrated that it is a Biologically Equivalent or Superior Preservation Alternative. If modifications to the Project are necessary for MSHCP compliance, then a request for an amendment to this Agreement will be required.
- 1.6 Take of Nesting Birds. Fish and Game Code section 3503 makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by Fish and Game Code or any regulation made pursuant thereto. Fish and Game Code section 3503.5 makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) to take, possess, or destroy the nest or eggs of any such bird except as otherwise

provided by Fish and Game Code or any regulation adopted pursuant thereto. Fish and Game Code Section 3513 makes it unlawful to take or possess any migratory nongame bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act 1918, as amended (16 U.S.C. § 703 et seq.). The issuance of this Agreement does not in any way exempt or excuse compliance with these statutes.

- 1.7 Additional Project Impacts. Permittee shall submit to CDFW a request to amend this Agreement if any additional impacts to Fish and Game Code section 1602 resources, or additional operations and maintenance activities not identified in this Agreement are anticipated. No additional impacts to Fish and Game Code section 1602 resources are authorized unless the impacts and/or activities are expressly authorized by CDFW by amendment to this Agreement.
- 1.8 Notify CDFW Prior to Work. Permittee shall notify CDFW by email **at least five (5) working days prior to initiation of Project activities.** See contact information below.
- 1.9 Reporting of Violations. Permittee shall report any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, to the CDFW contact identified below within 48 hours of the violation occurring.
- 1.10 Dead or Injured Species. Permittee shall report any dead or injured CESA- or ESA-listed threatened, endangered, or fully protected species, or species of special concern found along roads or in Project areas to CDFW within 24 hours via email according to contact information below. The Permittee shall report whether the dead or injured species was found on site, or caused due to Project activities, the location, cause of death, species found, and any other relevant information.
- 1.11 Compliance with other Agencies. The Agreement does not relieve the Permittee of responsibilities for compliance with applicable federal, state, or local laws, ordinances or grant conditions.
- 1.12 Work According to Plans. Final stamped engineered design plans shall be submitted to CDFW **a minimum of 30 days prior to start of Project activities**, for review by CDFW prior to Project start. The final plans shall be based on the Project design plans submitted to CDFW in the notification package. If the submitted Project plans differ substantially from the Project description, Permittee shall provide CDFW a detailed, written description of the changes made. CDFW may require an amendment to this Agreement or submission of a new notification prior to starting the Project if the Project designs have changed from those submitted in the Notification Package.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

General Wildlife Protection and Prevention Measures

- 2.1. Designated Biologist(s) and Biological Monitor(s). Permittee shall submit to CDFW for review and approval the names, qualifications, business addresses, and contact information of any qualified biologists (Designated Biologist(s)) and Biological Monitor(s) that will be utilized to conduct species/habitat surveys, biological monitoring, or mitigation planning and implementation activities **at least 30 days** before initiating ground- or vegetation- disturbing activities. Permittee shall specify the proposed responsibilities of each Designated Biologist(s) and/or Biological Monitor(s) and provide clear evidence of knowledge, experience, and capability of performing those proposed duties. Optional CDFW biologist resume form available here: [Lake and Streambed Alteration Program Resources](#).
 - 2.1.1. A qualified Designated Biologist(s) is an individual who holds a bachelor's degree from an accredited university and 1) is knowledgeable in relevant species' life histories and ecology, 2) can correctly identify relevant species, 3) has conducted field surveys for relevant species, 4) is familiar with relevant survey protocols, and 5) is knowledgeable of state and federal laws regarding the protection of sensitive species.
 - 2.1.2. A Biological Monitor(s) is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level biological monitoring, be able to recognize species that may be present within the Project area and be familiar with the habitats and behaviors of those species.
- 2.2. Responsibility of the Designated Biologist(s). The Designated Biologist(s) shall be responsible for monitoring activities addressed by this Agreement, including, but not limited to all activities that result in clearing, grading, drilling, and/or other ground-disturbing activities. To ensure compliance with the measures of this Agreement, the Designated Biologist(s) shall confirm and monitor the limits of Project activities addressed by this Agreement.
- 2.3. Authority of Designated Biologist(s). To ensure compliance with the measures of this Agreement, the Designated Biologist(s) shall have the authority to immediately halt any activity that does not comply with this Agreement, order any reasonable measure to avoid the violation of any measure of this Agreement, and directly contact CDFW for any reason. If the Designated Biologist(s) determines that the Project may have an adverse effect on any special-status species (threatened, endangered, candidate, species of special concern, etc.), they shall halt construction and notify the appropriate agencies immediately. Unless authorized by CDFW, the Designated Biologist(s) shall not have the authority to handle any special-status species (threatened, endangered, candidate, species of special concern, etc.).
- 2.4. Authority of Biological Monitor(s). The Permittee or Designated Biologist shall designate a person to monitor onsite compliance with all conditions of this

Agreement. The Biological Monitor shall halt Project Activities to comply with the terms of this Agreement and otherwise avoid impacts to species or habitats.

- 2.5. Delineate Work Area Boundary. In consultation with the Designated Biologist(s), Permittee shall clearly delineate the outer perimeter of the work areas and access routes with appropriate fencing, signage, and/or flagging to prevent damage to adjacent habitats **prior to start of Project activities**. The delineation materials shall be in place during all periods of operation and all persons employed or otherwise working on the Project site shall be instructed about the restrictions. Permittee shall ensure the delineation materials are monitored daily, and maintained, repaired, or replaced immediately if the materials are damaged, lost, stolen, or become ineffective in any way. The Designated Biologist(s) shall ensure the delineation materials do not create a barrier to wildlife movement and will not pose a risk to wildlife safety.
- 2.6. Environmentally Sensitive Areas. The Designated Biologist shall determine and clearly delineate any necessary avoidance and/or buffer areas with appropriate fencing, signage, and/or flagging. The delineation materials shall be visibly discernable from the 'standard work area boundary' materials and all persons employed or otherwise working on the Project site shall be instructed about the restrictions associated with these environmentally sensitive areas. Permittee shall ensure the delineation materials are monitored daily, and maintained, repaired, or replaced immediately if the materials are damaged, lost, stolen, or become ineffective in any way. The Designated Biologist(s) shall ensure the delineation materials do not create a barrier to wildlife movement and will not pose a risk to wildlife safety.
- 2.7. Wildlife Species. To avoid impact to any non-listed terrestrial wildlife species, a Designated Biologist shall inspect the Project area prior to any Project activities. Any individuals found shall not be harassed and shall be allowed to leave the Project area unharmed. If needed, a Designated Biologist may guide, handle, or capture an individual non-listed wildlife species to move it to a nearby safe location within nearby refugium, or it shall be allowed to leave the Project site of its own volition. Capture methods may include hand, dip net, lizard lasso, snake tongs and snake hook. If the wildlife species is discovered or is caught in any pits, ditches, or other types of excavations, the Designated Biologist shall release it into the most suitable habitat nearby the site of capture.
- 2.8. Educational Program. Permittee shall conduct an education program (Education Program) for all persons employed or otherwise working on the Project **prior to performing any work on site**. The Education Program shall consist of a presentation from a Designated Biologist(s) that includes a discussion of the biology of the habitats and species identified in this Agreement and present at the Project site. The Designated Biologist(s) shall also include as part of the Education Program information about the distribution and habitat needs of any protected species that may be present, legal protections for those species, penalties for violations and

Project-specific protective measures included in this Agreement. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on site. The Permittee shall prepare and distribute wallet-sized cards or a fact sheet that contains this information for workers to carry on site. Upon completion of the Education Program, employees shall sign a form stating they attended the Education Program and understand all protection measures. These forms shall be filed at the worksite offices and be available to CDFW upon request. The Education Program shall be repeated annually for part of the Project extending more than one (1) year. Copies of the Education Program's materials shall be maintained at the Project site for workers to reference as needed.

2.8.1. Invasive Species Education Program. Permittee shall include an invasive species education program for all persons working on the Project **prior to the performing any work on site**. The invasive species education program shall consist of a presentation from a Designated Biologist(s) that includes a discussion of the invasive species currently present within the Project site as well as those that may pose a threat to or have the potential to invade the Project site. The discussion shall include a physical description of each species and information regarding their habitat preferences, local and statewide distribution, modes of dispersal, and impacts. The invasive species education program shall also include a discussion of Best Management Practices (BMPs) to be implemented at the Project site to avoid the introduction and spread of invasive species into and out of the Project site.

2.9. Daily Clearance Survey. Before the start of daily Project activities, the Designated Biologist or construction monitor should survey the Project area to ensure wildlife incidentally trapped due to Project activities are allowed to escape.

2.9.1. Excavated Areas. At the end of each workday, Permittee shall, with the oversight of the Designated Biologist(s) or a trained construction management staff, secure any open trench or excavated area within the Project area addressed by this Agreement such that animals are unable to enter and become entrapped. The excavated areas must be secured using appropriate site- and species-specific methods, such as, placing plywood or other barrier materials over the excavated area, placing an escape ramp of suitable material and at an angle no greater than 30 degrees at each end of the open trench/excavated area, or installing temporary fencing around the perimeter of trenches or holes.

2.9.2. Check for Wildlife in Pipes/Construction Materials. Permittee shall visually inspect all sections of pipe/construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together or shall have the ends capped while stored on site to prevent wildlife from entering. After attaching the pipe sections

to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped in the pipeline. All pipes, hoses, or similar structures less than 12 inches in diameter shall be closed or covered to prevent animal entry.

- 2.10. Lighting and Fencing Impacts. No lighting shall be allowed to impact Murrieta Creek, its tributaries, or other avoided natural space areas. Lighting and fencing for infrastructure adjacent to these areas shall be designed or reviewed by a qualified biologist to allow wildlife to move within the streams and avoided natural areas without hindrance.

Nesting Bird Protection

- 2.11. Nesting Birds. It is the Permittee's responsibility to avoid impacts to nesting birds. Permittee shall ensure that impacts to nesting birds are avoided through the implementation of pre-construction surveys, ongoing monitoring, and if necessary, establishment of minimization measures.
- 2.11.1. Designated Biologist(s). The Permittee shall designate a biologist (Designated Biologist) with the following experience: identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology (e.g., Ralph et al. 1993¹) and United States Fish and Wildlife Service [USFWS] and/or CDFW-accepted species-specific survey protocols, available here: <https://wildlife.ca.gov/conservation/survey-protocols>; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success (e.g., Martin and Geupel 1993²); determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.
- 2.11.2. Pre-construction Surveys. Surveys shall be conducted by the Designated Biologist at the appropriate time of day/night, during appropriate weather conditions, **within three (3) days prior to the initiation of Project activities** addressed by this Agreement. Surveys shall encompass all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of area subject to this Agreement; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including

¹ Ralph, C.J., G.R. Geupel, P. Pyle, T.E. Martin, and D.F. DeSanta. 1993. Handbook of field methods for monitoring land birds. General Technical Report PSW-GTR 144. USDA Forest Service Pacific Southwest Research Station. Albany, CA.

² Martin, T.E. and G.R. Geupel. 1993. Nest-monitoring plots: methods for locating nests and monitoring success. Journal of Field Ornithology 64:507-514.

nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). If a nest is suspected, but not confirmed, the Designated Biologist shall establish a disturbance-free buffer until additional surveys can be completed, or until the location can be inferred based on observations. The Designated Biologist shall not risk failure of the nest to determine the exact location or status and will make every effort to limit the nest to potential predation as a result of the survey/monitoring efforts (e.g., limit number of surveyors, limit time spent at/near the nest, scan the site for potential nest predators before approaching, immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed, but thought to be inactive, the Designated Biologist shall monitor the nest for one hour (four hours for raptors during the non-breeding season) prior to approaching the nest to determine status. The Designated Biologist shall use their best professional judgement regarding the monitoring period and whether approaching the nest is appropriate. Results of pre-construction surveys shall be provided to CDFW at least one business day prior to commencement of Project activities, as identified in Measure 4.4. Results of ongoing monitoring surveys shall be provided to CDFW upon request.

2.11.3. Buffers. When an active nest is confirmed, the Designated Biologist shall immediately establish a conservative buffer surrounding the nest based on their best professional judgement and experience. The buffer shall be delineated to ensure that its location is known by all persons working within the vicinity but shall not be marked in such a manner that it attracts predators. Once the buffer is established, the Designated Biologist shall document baseline behavior, stage of reproduction, and existing site conditions, including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. The Designated Biologist shall monitor the nest at the onset of Project activities addressed by this Agreement, and at the onset of any changes in Project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Designated Biologist determines that Project activities may be causing an adverse reaction, the Designated Biologist shall adjust the buffer accordingly.

2.11.4. Ongoing Monitoring. The Designated Biologist shall be onsite daily to monitor all existing nests, the efficacy of established buffers, and to document any new nesting occurrences. The Designated Biologist shall document the status of all existing nests, including the stage of reproduction and the expected fledge date. If a nest is suspected to have been abandoned or failed, the Designated Biologist shall monitor the nest for a minimum of one hour (four hours for raptors), uninterrupted, during favorable

field conditions. If no activity is observed during that time, the Designated Biologist may approach the nest to assess the status.

- 2.11.5. Securing Site. The Permittee, under the direction of the Designated Biologist, may also take steps to discourage nesting on the Project site, including moving equipment and materials daily, covering material with tarps or fabric, and securing all open pipes and construction materials. The Designated Biologist shall ensure that none of the deterrent materials pose an entanglement risk to birds or other species. The Designated Biologist shall include a detailed account of any steps taken to discourage nesting within the Project site in the summary reports.
- 2.11.6. Reporting. The Designated Biologist shall be responsible for providing summary reports, as specified in Measure 4.5, where relevant, to CDFW no less than once weekly regarding the nesting species identified onsite, discovery of any of new nests, the status/outcome of any previously identified nest, buffer distances established for each nest, and any adjustments made to established buffers. If Project activities result in the abandonment of, or damage to a nest, Permittee shall notify CDFW within 24 hours of detection.

Least Bell's Vireo

2.12. Least Bell's Vireo. The Permittee shall not conduct **ANY** Project activities, including ground disturbance or vegetation removal activities, within 1,000 linear feet of least Bell's vireo nesting habitat if nesting birds are present. Focused surveys following USFWS protocol for least Bell's vireo shall be conducted to establish presence of nesting birds. The physical extent of the survey area shall include all areas within 500 feet of Project disturbance. Survey results shall be submitted in writing to CDFW for review. Nesting status will be determined by a Designated Biologist (see Measure 2.13.1 above) with expertise with the species in question, utilizing USFWS survey protocols and CDFW review of the nest monitoring data.

2.12.1. Survey protocol for least Bell's vireo can be found at:

<https://www.fws.gov/media/survey-guidelines-least-bells-vireo>.

2.12.2. If least Bell's vireo, or other listed bird species, are present within 500 feet of Project disturbance, the following avoidance measures shall be implemented:

2.12.2.1. No ground disturbance or vegetation removal activities shall take place until the young have fledged, or the nest has been determined to have failed.

2.12.2.2. If construction must take place within the buffer, a qualified acoustician shall monitor noise as construction approaches the edge

of the occupied vireo habitat as directed by the permitted biologist. If the noise meets or exceeds the 60 dB(A) Leq threshold, or if the biologist determines that construction activities are disturbing nesting activities, the biologist shall have the authority to halt construction and shall consult with CDFW to devise methods to reduce the noise and/or disturbance. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nesting birds and the activities, and working in other areas until the young have fledged. The CDFW-approved biologist shall monitor the nest daily until activities are no longer within 500 feet of the nest, or the fledglings become independent of their nest, or the nest has failed.

2.12.3. If least Bell's Vireo is present during Project activities, Permittee shall be responsible for addressing all potential impacts by obtaining the appropriate CESA authorization prior to the initiation of Project activities. If pile driving activities within the Lake Elsinore Back Basin or Murrieta Creek are required, the activities shall occur outside of the breeding season to the greatest extent feasible. If pile driving activities occur during nesting season, the following measures shall be implemented:

2.12.3.1. The Permittee shall sponsor placement of two cowbird traps for each nesting season that pile driving activities occur. This measure is meant to improve the productivity of least Bell's vireo during nesting season, to compensate for the potential temporary loss in reproductive output for any pile driving-related noise effects during nesting season.

2.12.3.2. Throughout the duration that pile driving activities occur during the least Bell's vireo nesting season, a Biological Monitor shall conduct daily site visits to document how pile driving activities affect nesting least Bell's vireo. The purpose of this monitoring is to gather information related to least Bell's vireo activity during pile driving activities to inform future decisions regarding noise minimization. Coordination with the CDFW and USFWS will be conducted prior to monitoring to discuss the information to be collected.

Burrowing Owl Protection

2.13. Burrowing Owl. Permittee shall ensure that impacts to burrowing owls are avoided through the implementation of pre-construction surveys, ongoing monitoring, and if necessary, establishment of minimization and mitigation measures.

2.13.1. Burrowing Owl Habitat Assessment. **Prior to the initiation of Project activities**, Permittee shall conduct a burrowing owl habitat assessment

consistent with the 2006 Burrowing Owl Survey Instructions³. A habitat assessment shall be conducted by Designated Biologist(s) knowledgeable of burrowing owl sign, habitat, ecology, and field identification of the species, during appropriate weather conditions, **at least thirty (30) calendar days prior** to the initiation of Project activities. The assessment shall consist of walking the Project site to identify the presence of burrowing owl habitat⁴. If habitat is found on the Project site, then walk a 150-meter (approximately 500 feet) buffer zone around the Project boundary, if permission to access the buffer area has been obtained. If access permission cannot be obtained, visually inspect the adjacent habitat areas with binoculars or spotting scopes. Survey duration shall take into consideration the size of the property; density, and complexity of the habitat; number of survey participants; survey techniques employed; and shall be sufficient to ensure the data collected is complete and accurate. A report summarizing the results of the habitat assessment shall be submitted to CDFW within 10 days of survey completion, as described in Measure 4.2.

2.13.2. Focused Survey for Burrowing Owls. If the burrowing owl habitat assessment identifies burrowing owl habitat onsite, Permittee shall have a qualified Designated biologist, pre-approved by CDFW, perform a survey for burrowing owls **between 30 and 60 days** prior to any Project impacts. If the Project site is in within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area, the following is required. A minimum of one site visit must occur, but additional visits may be warranted depending on the results of the first site visit. Surveys conducted during the breeding season March 1 - August 31 are required to describe if, when, and how the site is used by burrowing owls. All surveys shall be conducted as described in Parts A and B below. Surveys shall be conducted during weather that is conducive to observing owls outside their burrows and detecting burrowing owl sign. Surveys will not be accepted if they are conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90 °F. Part B surveys shall be conducted

³ Western Riverside County Multiple Species Habitat Conservation Plan (RCA). 2006. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Available for download at: https://www.wrc-rca.org/species/survey_protocols/burrowing_owl_survey_instructions.pdf

⁴ Burrowing owls use a variety of natural and modified habitats for nesting and foraging that is typically characterized by low-growing vegetation. Burrowing owl habitat includes but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey. Vegetation and features may include native and non-native grassland, interstitial grassland with shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made from fossorial (adapted for burrowing or digging) mammals such as ground squirrels or badgers, and often manmade structures such as earthen berms; cement culverts; cement, asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement

in the morning one hour before sunrise to two hours after sunrise or in the early evening two hours before sunset to one hour after sunset. Count and map all burrowing owl sightings, occupied burrows, and burrows with owl sign. Record the location of all owls including numbers of pairs and juveniles and any behavior such as courtship and mating. Map the extent of all suitable habitat. Owl signs may not be detectable if surveys under Part A are conducted within 5 days following rain. Absence of burrowing owl sign cannot be used to confirm absence of the species if the focused burrow survey (Part A) is conducted within 5 days of rain; therefore, in this instance, completion of all four focused burrowing owl surveys (Part B) is required.

Part A: Focused Burrow Surveys

A focused burrow survey that includes natural burrows or suitable man-made structures needs to be conducted as described below.

1. A systematic survey for burrows including burrowing owl sign shall be conducted by walking through suitable habitat over the entire survey area (i.e., the Project site and within 150 meters). Pedestrian survey transects need to be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approximately 100 ft.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey Projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys.
2. The location of all suitable burrowing owl habitat, potential owl burrows, burrowing owl signs, and any owls observed shall be recorded and mapped, including GPS coordinates. If the survey area contains natural or man-made structures that could potentially support burrowing owls, or owls are observed during the burrow surveys, the systematic surveys shall continue as described in Part B. If no potential burrows are detected, no further surveys are required. A written report including photographs of the Project site, location of burrowing owl habitat surveyed, location of transects, and burrow survey methods shall be prepared as described in Measure 2.15.1.

Part B: Focused Burrowing Owl Surveys

Focused Burrowing Owl Surveys shall consist of site visits on four separate days at least one week apart. The first one may be conducted concurrent with the Focused Burrow Survey.

1. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors using binoculars or spotting scopes shall scan all suitable habitat, location of mapped burrows, owl sign, and owls,

including perch locations to ascertain owl presence. This is particularly important if access has not been granted for adjacent areas with suitable habitat.

2. A survey for owls and owl sign shall then be conducted by walking through suitable habitat over the entire Project site and within the adjacent 150 m (approx. 500 feet), if permission to access the buffer area has been obtained. These “pedestrian surveys” should be spaced to allow 100% visual coverage of the ground surface. The distance between transect center lines should be no more than 30 meters (approx. 100 feet.) and should be reduced to account for differences in terrain, vegetation density, and ground surface visibility. To efficiently survey projects larger than 100 acres, it is recommended that two or more qualified surveyors conduct concurrent surveys. It is important to minimize disturbance near occupied burrows during all seasons.
3. If access is not obtained, then the area adjacent to the Project site shall also be surveyed using binoculars or spotting scopes to determine if owls are present in areas adjacent to Project site. This 150-meter buffer zone is included to fully characterize the population. If the site is determined not to be occupied, no further surveys are required except as described below.

2.13.3. Burrowing Owl Pre-Construction Inspection. If burrows or suitable burrowing owl habitat is found onsite, Permittee shall have a qualified biologist, pre-approved by CDFW, inspect all burrows that exhibit typical characteristics of owl activity within **three (3) days prior** to any ground disturbing or site-preparation activities. Evidence of owl activity may include presence of owls themselves, burrows, and owl signs at burrow entrances such as pellets, whitewash or other “ornamentation,” feathers, prey remains, etc. If owl presence is difficult to determine, Permittee shall monitor the burrows with motion-activated trail cameras for at least 24 hours to evaluate burrow occupancy. If it is evident that the burrows are actively being used, Permittee shall not commence activities until no sign is present that the burrows are being used by adult or juvenile owls or following CDFW approval of a Burrowing Owl Plan as described in Measure 2.15.6. CDFW shall be notified in writing of detection of active burrows **within three (3) days**.

2.13.4. Burrowing Owl Survey Results. Permittee shall submit the survey methodology and results **within ten days** of survey completion and at least **twenty-one days prior** to commencement of Project activities addressed by this Agreement to CDFW Inland Deserts Region at the address below under Contact Information. Results shall discuss the survey methodology, transect width, duration, conditions, and results of the survey. Appropriate maps showing burrow locations shall be included.

If the report indicates further surveys are not required, then the report should state the reason(s) why further focused burrowing owl surveys are not necessary.

2.13.5. Burrowing Owls Observed During Construction. If burrowing owls are observed within Project Site(s) during Project implementation and construction, Permittee shall notify CDFW immediately in writing at the address below under Contact Information (reference SAA# EPIMS-RIV-43632-R6). Further, Permittee shall be responsible for implementing appropriate avoidance and mitigation measures, including burrow avoidance, passive or active relocation, or other appropriate mitigation measures as identified in the Burrowing Owl Plan (Measure 2.15.6).

2.13.6. Burrowing Owl Plan. If burrowing owls are detected on the Project site, the Permittee shall prepare a Burrowing Owl Plan that shall be submitted to CDFW for review and approval **at least 30 days prior to** initiation of Project activities. If burrowing owls are detected after Project activities have been initiated, a Burrowing Owl Plan shall be submitted to CDFW for review and approval **within two weeks of detection** and no Project activity shall continue within 300 -1000 feet dependent upon burrowing owl nesting status and location. The Burrowing Owl Plan shall describe proposed avoidance, relocation, monitoring, minimization, and/or mitigation actions. If the site is within an MSHCP Criteria Area, then at least 90 percent of the area with long-term conservation value shall be included in the MSHCP Conservation Area. If the Project site (including adjacent areas) supports three or more pairs of burrowing owls and supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs shall be conserved onsite. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls shall also be included in the Burrowing Owl Plan. The Permittee shall implement the Burrowing Owl Plan following CDFW review and approval.

Crotch's Bumble Bee

2.14. Crotch's Bumble Bee – Habitat Mapping. **No less than 120 days prior** to the initiation of activities addressed by this Agreement, Permittee shall complete and submit to CDFW for review and comment a baseline habitat mapping report encompassing Fish and Game Code section 1602 resources (including channel side slopes) identified under this Agreement. Mapping will identify habitat alliances following Sawyer et al. (2009[1]) and the report will identify species composition for each mapped alliance. Results of the habitat mapping effort

shall be submitted to CDFW as specified in Measure 4.5.

2.15. Crotch's Bumble Bee – Surveys. If habitat mapping completed pursuant to Measure 2.16 identifies the presence of plants (e.g., genera *Antirrhinum*, *Phacelia*, *Clarkia*, *Cordylanthus*, *Dendromecon*, *Eschscholzia*, *Eriogonum*, *Hypericum*, *Lantana*, *Lupinus*, *Salvia*, *Asclepias*, *Cirsium*, *Monardella*, *Keckiella*, *Acmispon*, *Euthamia*, *Ehrendorferia*, *Vicia*, and/or *Trichostema*) or other suitable habitat, Permittee shall:

2.15.1. Retain an appropriately qualified biologist to prepare a draft survey plan, and conduct surveys for Crotch's bumble bee. **The name and qualifications of the proposed biologist shall be submitted to CDFW for review and comment prior to preparation of the draft survey plan (Measure 2.15.2) or commencement of surveys (Measure 2.15.3).** The qualifications shall clearly identify direct experience conducting surveys for and identification of Crotch's bumble bee.

2.15.2. **No Less than 90 days prior to initiation of Project activities addressed by this Agreement**, the qualified biologist identified in Measure 2.15.1 shall prepare and submit to CDFW for review and comment a draft survey plan for Crotch's bumble bee. Survey methodology shall generally follow the U.S. Fish and Wildlife Service protocol for the Rusty Patched bumble bee (USFWS 2019[2]). Crotch's bumble bee are typically active between March and September, with peak activity coinciding with peak forage blooming periods. CDFW recommends the completion of multiple surveys, coinciding with the peak blooming periods of the plant genera listed in Measure 2.15. The survey plan will identify the timing, number, and duration of survey efforts, and procedures to follow should Crotch's bumble bee be detected within the Project area. The survey plan shall be submitted to CDFW as described in Measure 4.6.

2.15.3. The qualified biologist identified in Measure 2.15.1 shall complete surveys for Crotch's bumble bee, following the CDFW-reviewed survey plan identified in Measure 2.15.2. Following completion of surveys, and **no less than 30 days prior to initiation of Project activities addressed by this Agreement, survey results shall be submitted to CDFW** for review and comment as described in Measure 4.7. Survey results will describe the number and timing of surveys, and results of survey efforts. **If Crotch's bumble bee are detected during surveys, Project activities shall NOT occur in any occupied habitat areas and the qualified biologist identified in Measure 2.15.1 shall immediately notify CDFW** via the email addresses and phone number listed below under Contact Information.

2.15.4. Permittee shall conduct flight/forage and nest search surveys for the species in the following manner:

2.15.4.1. Surveys shall be conducted during the appropriate season,

between February 1 and October 31.

2.15.4.2. Work sites containing any one or more of the following habitat requisites shall be surveyed: flowering vegetation, any potential preferred nectar plants, small mammal burrows, bunch grasses, thatch, brush piles, old bird nests, dead trees.

2.15.4.3. During the flight survey effort, if bumble bees are observed using any animal burrow entrances, the approved qualified biologist will block/cover any burrow entrance with a sandbag/jar/vial (or similar) of appropriate size and return in 30 minutes to determine if the bees are potential Crotch's bumble bee and if a potential nest could be present. If bumble bees are observed using bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, or hollowed logs, the resource area will be flagged and monitored by the approved qualified biologist for 15 minutes to determine if a potential nest could be present.

2.15.5. To reduce potential impacts to Crotch's bumble bee to the greatest extent feasible the following measures shall be included in the Crotch's bumble bee survey plan:

2.15.5.1. If during vegetation removal and ground clearing activities an overwintering or dead Crotch's bumble bee is observed, activities shall immediately stop and a 100 ft Environmentally Sensitive Area boundary will be erected. A Crotch's bumble bee approved qualified biologist will be notified and will evaluate the site. CDFW will be immediately notified thereafter for consultation.

Best Management Practices

2.16. Best Management Practices. Permittee shall actively implement BMPs to prevent erosion and the discharge of sediment and pollutants during Project activities. BMPs shall be monitored and repaired if necessary to ensure maximum erosion, sediment, and pollution control. Permittee shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the Project site shall be free of non- native plant materials. Fiber rolls or erosion control mesh shall be made of loose- weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread. Permittee shall ensure BMPs do not pose a barrier to wildlife movement and shall be installed to allow for the safe passage of wildlife movement, particularly of less vagile species (such as small mammals and reptiles), out of the Project area. Long, continuous lengths of silt-fencing or other BMP materials

installed without gaps can create a barrier to wildlife movement, trapping wildlife within the Project area. Areas of safe passage can be easily accommodated by leaving small gaps between parallel and overlapping lengths of BMPs.

- 2.17. If work is performed within the stream channel during the winter storm period, the Permittee shall monitor the five (5) day weather forecast. If it is forecasted for any precipitation, work activities shall involve the securing of the site, so as no materials may enter or be washed into the stream. The site shall be completely secured one (1) day prior to precipitation, unless prior written approval has been provided by CDFW. During period of precipitation, no construction activities may occur; activities involving the preventing of materials from entering the stream or being washed downstream may be conducted.

Equipment and Vehicles

- 2.18. Equipment and Vehicles. Any equipment or vehicles driven and/or operated within or adjacent to the stream/lake shall be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- 2.19. Stationary Equipment. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream/lake shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak. Clean up equipment such as extra booms, absorbent pads, skimmers, shall be on site prior to the start of construction.
- 2.20. Staging and Storage Areas. Staging/storage areas for equipment and materials shall be located outside of the stream/lake. Any materials placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life shall be removed from the Project site prior to inundation by high flows.
- 2.21. Equipment Maintenance. No equipment maintenance shall be done within or near any stream, channel, or lake margin where petroleum products or other pollutants from the equipment may enter these areas under any flow.

Trash and Pollution Measures

- 2.22. Trash Abatement and Refuse Removal. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at the end of each work day to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs. Upon completion of Project activities within each Project location, Permittee shall remove 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.

- 2.23. Pollution and Litter. Permittee shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws and it shall be the responsibility of Permittee to ensure compliance.
- 2.23.1. Spoil sites shall not be located within a lake, streambed, or flowing stream or locations that may be subjected to high storm flows, where spoil may be washed back into a lake, streambed, or flowing stream where it may impact streambed habitat and aquatic or riparian vegetation.
- 2.23.2. No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any lake, streambed, or flowing stream.
- 2.23.3. No equipment maintenance shall be done within or near any lake, streambed, or flowing stream where petroleum products or other pollutants from the equipment may enter these areas under any flow.
- 2.26 Turbidity and Siltation. All equipment that enters the streambed or habitat associated with the stream shall be clean and dry. Upon CDFW determination that turbidity/siltation levels resulting from Project-related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CDFW approved control devices are installed, or abatement procedures are initiated.
- 2.27 Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and cleanup activities onsite for use in an accidental spill. If a spill occurs the Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the cleanup activities. CDFW shall also be notified within 24 hours by the Permittee and consulted regarding clean-up procedures.
- 2.28 Disposal of Vegetation. Following any vegetation clearing/removal activities, Permittee shall immediately chip woody debris to pieces 1-inch in diameter or less and dispose of the materials using one of the following methods: a) solarize with clear tarp, b) compost at a commercial facility, c) burn at a biogeneration facility, or d) send to a landfill (can be utilized as Alternative Daily Coverage). Plant material infested with polyphagous shot hole borer will follow handling procedures found at <http://eskalenlab.ucr.edu/handouts/decisionmaking.pdf> .

Invasive Species

- 2.29 Prohibited Plant Species. Permittee shall not plant, seed or otherwise introduce invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <https://www.cal-ipc.org/plants/inventory/>.
- 2.30 Nonnative Plant Species. CDFW recommends the use of native plants to the greatest extent feasible in the landscaped areas near streams, open space/natural areas, and mitigation sites. Permittee shall not plant, seed, or otherwise introduce invasive nonnative plant species to the landscaped areas adjacent to and/or near streams, open space/natural areas, water quality/detention basins, or mitigation sites (minimum 150 meter setback). Invasive nonnative plant species not to be used include those species listed on the "California Invasive Plant Inventory, February 2006" and the "February 2007 Inventory Update", (which are updates to Lists A & B of the California Exotic Pest Plant Council's list of "Exotic Pest Plants of Greatest Ecological Concern in California as of October 1999"). This list includes: pepper trees, pampas grass, fountain grass, ice plant, myoporum, black locust, capeweed, tree of heaven, periwinkle, bush lupine, sweet alyssum, English ivy, French broom, Scotch broom, Spanish broom, and pepperweed. A copy of the complete list can be obtained by contacting the California Invasive Plant Council by phone at (510) 843-3902, at their website at www.cal-ipc.org, or by email at info@cal-ipc.org.
- 2.31 Clean Equipment Prior to Entering Area Regulated by Agreement. All equipment shall be free of materials deleterious to aquatic life including noxious and nuisance weeds, aquatic invasive species, oil, grease, hydraulic fluid, soil and other debris. The Permittee shall follow equipment washing guidelines (see Measures 2.31.1 to 2.31.6 below) The certification of clean equipment shall be completed by the Permittee for all equipment prior to initially entering areas regulated by this Agreement.
- 2.31.1 Clean Equipment Prior to Entering Stream. Prior to working within the stream, all equipment shall be closely examined for oil and fuel discharges. Any contaminants shall be cleaned prior to any work within a streambed and shall be maintained daily. In addition, equipment shall be cleaned daily to ensure non-natives are not introduced into mitigation areas, or spread throughout Project sites.
- 2.31.2 Inspection of Project Equipment. Permittee shall inspect all vehicles, tools, waders and boots, and other Project-related equipment and remove all visible soil/mud, plant materials, and animal remnants prior to initially entering areas regulated by this Agreement.
- 2.31.3 Decontamination of Project Equipment. Permittee shall decontaminate all tools, waders and boots, vehicles, trailers, and other equipment that will be used in areas regulated by this Agreement and make contact with

water or wetted soils prior to initially entering and upon reentering with verification that subsequent decontamination is required with the following specific guidance: Permittee shall decontaminate Project gear and equipment utilizing one of three methods: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. For all methods, Permittee shall begin the decontamination process by thoroughly scrubbing equipment, paying close attention to hard to reach areas and clean areas with a stiff-bristled brush to remove all plant, seeds, soil, and other organisms. To decontaminate by drying, Permittee shall allow equipment to dry thoroughly (i.e., until there is a complete absence of water and all plant, seeds, and soil), preferably in the sun, for a minimum of 48 hours. To decontaminate using a hot water soak, Permittee shall immerse equipment in 140°F or hotter water and soak for a minimum of 5 minutes. To decontaminate by freezing, Permittee shall place equipment in a freezer 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used in contact with water or wet soil within a different watershed, and returned to the Project site.

- 2.31.4 Decontamination of Vehicles and Equipment. Permittee shall decontaminate vehicles and other Project-related equipment too large to immerse in a hot water bath by pressure washing with hot water a minimum of 140°F at the point of contact or 155°F at the nozzle. Additionally, Permittee shall flush watercraft engines and all areas that could contain standing water (e.g., storage compartments) for a minimum of 10 minutes. Following the hot water wash, Permittee shall dry all vehicles, watercraft, and other large equipment as thoroughly as possible. Repeat decontamination is required only if vehicles and/or equipment is removed from the site and used in contact with water or wet soil within a different watershed and returned to the Project site.
- 2.31.5 Decontamination Sites. Permittee shall perform decontamination of vehicles, watercraft, and other Project gear and equipment in a designated location where runoff can be contained and not allowed to pass into any river, lake, or stream and associated riparian areas and other sensitive habitat areas. Cleaning of equipment may occur at a location that contains and recycles resulting wastewater.
- 2.31.6 Other Project Equipment. Permittee or designee shall require operators of equipment to re-certify equipment upon reentry to areas regulated by this Agreement. Permittee shall require operators of equipment subject to recertification that are reentering after contact with water and/or wet soil from a stream or lake in areas outside those regulated under this Agreement to follow equipment washing guidelines (see measures above).

- 2.32 Notification of Invasive Species. Permittee shall notify CDFW immediately if an invasive species not previously known to occur within the Project site is discovered during Project activities by submitting a completed Suspect Invasive Species Report (available online at: <https://wildlife.ca.gov/Conservation/Invasives/Report>) and photos to the Invasive Species Program by email at: invasives@wildlife.ca.gov. Notification may also be provided by calling (866) 440- 9530. Upon receiving notification, CDFW will provide Permittee with guidance for further action as appropriate to the species.

Downstream Flow

- 2.33 Maintain Historic Downstream Flows. Permittee shall design all flow conveyance structures to maintain downstream timing and volume of flows to Murrieta Creek and the Lake Elsinore Back Basin to historic flow patterns. Permittee shall ensure turbidity, siltation, or pollution is not increased to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have occurred. Normal flow shall be restored to the affected stream immediately upon completion of work at that location. Permittee shall monitor downstream conditions to ensure historic flow patterns are maintained.

Work Design

- 2.34 Work According to Plans. Final stamped engineered design plans shall be submitted to CDFW **a minimum of 30 days prior to start of Project activities**, for review by CDFW prior to Project start. The final plans shall be based on the Project design plans submitted to CDFW in the notification package. If the submitted Project plans differ substantially from the Project description, CDFW may require an amendment to this Agreement or submission of a new notification prior to starting the Project.

3. Compensatory Measures

To compensate for the temporary impacts to 2.63 acres and permanent impacts to 1.34 acres of stream bed, bank, and channel identified above, the Permittee shall provide for mitigation for temporary impacts through Measure 3.1 and permanent impacts through Measure 3.2.1 AND one of the options listed under Measure 3.2 and each measure thereafter:

- 3.1 Onsite Temporary Restoration. To compensate for temporary impacts to 2.63 acres of fish and wildlife resources subject to Fish and Game Code section 1600 et seq., Permittee shall restore no less than 2.63 acres of in-kind streambed and associated habitat (Onsite Temporary Restoration Area) immediately following the completion of Project activities.

- 3.1.1 Habitat Mitigation and Monitoring Plan (HMMP). **No less than 30 days prior to the initiation of Project activities**, the Permittee shall develop a Habitat Mitigation and Monitoring Plan (HMMP),

prepared by a biologist familiar with restoration of native plants. The HMMP shall include and is not limited to 1) plantings of both overstory and understory vegetation, 2) a list of tree species being removed from the Project site, 3) impacted areas shall be returned to original contours, 4) a hydroseed mix appropriate to wetland and riparian vegetation within the Project area, consisting entirely of seeds of native species. Permittee shall monitor the Onsite Temporary Restoration Areas for a minimum of 5 years until the success criteria within the HMMP is met (Measure 3.1.1.7). The HMMP shall also include a description of seed and/or plant numbers, container sizes, and planting location, by species; the proposed monitoring activities (e.g., locations, techniques, scheduling); success criteria; maintenance operations with particular emphasis on watering methods and schedules; and any/all other references to revegetation and restoration activities specified by this Agreement. A primary monitoring survey shall be conducted in Spring and Fall, and an annual quantitative survey (Annual Monitoring Report) shall be performed to determine the success of restoration efforts (survival, cover, and growth of plants).

- 3.1.1.1 Habitat Restoration Manager. Permittee shall identify a proposed Habitat Restoration manager. The Habitat Restoration manager may be the landowner or another party. Documents related to habitat restoration management shall identify both the Habitat Restoration Manager. Permittee shall notify CDFW of any subsequent changes in the Habitat Restoration manager within 30 days of the change.
- 3.1.1.2 Restoration Specialist. The HMMP shall be prepared by persons with expertise in southern California ecosystems and native plant re-vegetation techniques (restoration specialist). Planting, maintenance, monitoring, and reporting activities shall be overseen by the restoration specialist familiar with restoration of native plants.
- 3.1.1.3 Site Description. A description of the physical conditions and vegetation communities including a map and GIS shapefiles. Photo-documentation of restored areas shall be provided before and after restoration.
- 3.1.1.4 Native Plant Sources. Plant material for revegetation shall be derived from cuttings, materials salvaged from

disturbed areas, and/or seeds obtained from randomly selected native trees and shrubs occurring locally within the same drainages. Any replacement tree/shrub stock, if used, which cannot be grown from cuttings or seeds, shall be obtained from a native plant nursery, be ant-free, and shall not be inoculated to prevent heart rot.

3.1.1.5 Maintenance Activities. A description of maintenance operations with particular emphasis on invasive species control and watering methods and schedules; details on any irrigation to be used, if applicable, that includes method of watering; sprinkler placement, if applicable; and timing/schedule; irrigation may only be used to help the plants become established during the first three years following planting. Watering/ irrigation of the site shall be discontinued at least two years prior to completion of the monitoring period.

3.1.1.6 Corrective Actions: A description of corrective actions to be taken when restoration measures do not meet the proposed targets.

3.1.1.7 Success Criteria. The HMMP shall identify the success criteria for the habitat restoration site. The reference site shall be approved by CDFW. The success criteria shall include percent relative and absolute cover (invasive and native vegetation), species diversity, abundance, and any other measures of success deemed appropriate by CDFW. Permittee shall be responsible for any cost incurred during the restoration/mitigation or in subsequent corrective measures.

3.1.2 Mitigation Success. After the fifth monitoring year, if the Onsite Temporary Restoration Area has met the success criteria outlined in the HMMP, CDFW may request a site visit to determine if the Measure 3.1 is complete. The site shall be free of trash and any irrigation infrastructure if it was used (unless there is an acceptable justification for leaving the irrigation system in place).

3.1.3 Contingency Measures. If the survival and cover requirements have not been met as established in the HMMP, the Permittee shall follow contingency measures, including but not limited to, performing modifications to the existing habitat, extending restoration time period, or other actions. Any contingency actions will be determined in coordination with CDFW. If Permittee proposes to meet the success criteria through modifications to the

existing habitat or creation of additional habitat, Permittee shall be responsible for maintaining and monitoring these areas with the same survival and growth requirements for the Onsite Temporary Restoration Areas as outlined in the HMMP for five years after planting, or until CDFW deems the sites successful.

3.2 Permanent Impact- Habitat Rehabilitation and/or Re-establishment

3.2.1 Habitat Rehabilitation and/or Re-establishment – Off-site (Mitigation Bank). Permittee shall compensate for the permanent impacts of 1.27-acres of stream bed, bank, and channel, through the acquisition of no less than 1.27-acres of Re-establishment credits and 1.27 acres of Rehabilitation and/or Re-establishment credits through Riverpark Mitigation Bank. Mitigation credits shall be purchased, and receipt provided to CDFW, no later than 30 days prior to the initiation of Project Covered Activities, which includes staging and site preparation, unless security is provided pursuant to Measure 3.4.

3.2.2 Option 1: Habitat Rehabilitation and/or Re-establishment and Protection – Onsite (Mitigation Site). To compensate for the remaining permanent impacts to 0.07 acres of fish and wildlife resources subject to Fish and Game Code section 1600 et seq., Permittee shall restore and perpetually protect and manage no less than 0.21 acres of in-kind streambed and associated habitat (Mitigation Site) immediately following the completion of Project activities.

3.2.3 Option 2: Habitat Rehabilitation and/or Re-establishment and Protection – Off-site (Mitigation Site). Permittee shall compensate for the remaining permanent impacts to 0.07 acres to stream bed, bank, and channel, through the acquisition, rehabilitation/re-establishment, and perpetual conservation and management of a “Mitigation Site”, or several mitigation sites, containing no less than 0.21 acres of streambed and stream-associated habitat within the Lake Elsinore Back Basin or alternative location approved by CDFW within Riverside County.

3.3 Permittee Responsible Mitigation: For both Option 1 and Option 2, the Permittee shall prepare, or fund the preparation of, a Habitat Mitigation and Monitoring Plan (Mitigation HMMP; Measure 3.3.2); and a Long-Term Management Plan (LTMP; Measure 3.3.1.4) designed to sustain or surpass the habitat quality of the Mitigation Site in perpetuity. Permittee shall also establish long-term management funding (Measure 3.3.1.5). Permanent protection and funding for perpetual management of Mitigation Site lands must be complete **prior to initiation of Project activities, or within 18 months of starting Project activities if Security is provided pursuant to Measure 3.4 below for all uncompleted obligations.**

3.3.1 Habitat Acquisition and Protection. Permittee shall obtain written approval from CDFW for the proposed Mitigation Site(s) with a minimum of 2.75 acres of offsite streambed and stream-associated habitat. Permittee shall submit a proposed Mitigation Site for CDFW review and approval **no later than five months prior to the start of Project activities OR four months following start of Project activities if Security is provided.**

3.3.1.1 Long-Term Conservation of Mitigation Site(s). **After CDFW approval of the Mitigation Site (Measure 3.3.1) and no later than four months prior to the start of Project activities OR six months following start of Project activities if Security is provided, Permittee shall provide the following to CDFW.** Permittee shall use a CDFW-provided template and provide a draft Conservation Easement to CDFW for CDFW review and approval. Permittee shall also provide the necessary documents specified in the *CDFW Habitat Management Land Acquisition Package Checklist for Third Party Beneficiary (TPB) Project Applicants*, to be provided by CDFW, in preparation for conservation easement(s) recordation. All documents conveying the Mitigation Site(s) and all conditions of title are subject to the review and approval of CDFW. Permittee shall ensure the preservation and long-term management of the CDFW-approved 3.79 acres of streambed and stream-associated habitat within the Mitigation Site(s) through recordation of a conservation easement(s). Permittee shall record a conservation easement approved by CDFW with an entity, to be approved by CDFW, acting as grantee for a conservation easement. CDFW shall be expressly named in the conservation easement as a third-party beneficiary. CDFW shall, in its sole discretion, approve the entity to act as grantee. The conservation easement shall expressly require implementation of the LTMP by the land manager, as authorized by the landowner and shall expressly require the grantee to monitor implementation of the LTMP. Permittee shall record the conservation easement after CDFW approval of the conservation easement and **all associated documents prior to the start of Project activities OR within 18 months following start of Project activities if Security is provided.** Permittee shall be responsible for all costs in recording and funding the conservation easement, including conservation easement monitoring and long-term management costs.

3.3.1.2 Mitigation Site Land Manager. **After CDFW approval of the Mitigation Site (Measure 3.3.1) and no later than four months prior to the start of Project activities OR six**

months following start of Project activities if Security is provided, Permittee shall obtain CDFW approval of a land manager entity to manage the Mitigation Site. Permittee shall identify separate entities to fulfill the grantee and land manager roles. Permittee shall also obtain CDFW approval of an interim Mitigation Site land manager if they are different than the long-term Mitigation Site manager. The interim and/or long-term land managers may be the landowner or another party approved by CDFW. Documents related to land management shall identify both the interim and long-term land managers. **Permittee shall notify CDFW, for review and approval, of any subsequent changes in the land manager within 30 days of the change.**

- 3.3.1.3 Start-Up Activities. Permittee shall provide for the implementation of start-up activities, including the initial site protection of the CDFW-approved Mitigation Site(s). Start-up activities include, at a minimum: 1) preparing both a HMMP (Measure 3.3.2) and a LTMP (Measure 3.3.1.4) for CDFW approval, 2) conducting baseline biological assessment and land survey report during the first growing season, 3) developing and transferring to the Geographic Information Systems (GIS) data if applicable, 4) establishing initial fencing (if necessary), 5) conducting initial removal of litter and debris, and 6) installing signage.
- 3.3.1.4 Long Term Management Plan (Mitigation Site). **After CDFW approval of the mitigation Site (Measure 3.3.1) and no later than three months prior to the start of Project activities OR six months following start of Project activities if Security is provided, Permittee shall provide the following to CDFW** for review and written approval an LTMP. The LTMP be implemented in perpetuity and shall be designed to sustain or surpass the habitat quality of the Mitigation Site(s) upon achieving Mitigation Site HMMP success criteria as approved by CDFW in writing. At a minimum, the LTMP shall identify: 1) a description of the physical conditions of the Mitigation Site upon achieving Mitigation Site HMMP success criteria, including water resources and habitat types, and a map that identifies the location of the site; 2) goals related to sustaining habitat quality, wildlife usage, and overall function of the Mitigation Site; and 3) management strategies proposed to meet those goals, including but not limited to a monitoring and management schedule, adaptive management plans, strategies to address foreseeable site disturbances (e.g.,

dumping, wildfires, unauthorized recreational activities, etc.), and maintenance of signage and fencing. The Permittee shall be responsible for implementing the LTMP and shall submit a Management Report every five years documenting, at a minimum: 1) management activities completed within the previous five-year term, including: (a) any remedial measures completed, (b) details of non-native species removal including: (i) species and location where they were removed, (ii) the amount and frequency of removal, and (iii) the techniques used, (c) adaptive management strategies developed and how they were implemented, and (d) enforcement activity necessary; 2) an assessment of overall habitat quality within the Mitigation Site, including: (a) percent native and non-native vegetation cover, (b) any shifts in habitat type, (c) any loss of habitat cover, (d) any change in water resources, and (e) any new non-native species observed; and 3) an evaluation of the success or failure of management strategies implemented and any changes to management strategies proposed in response to the successes or failures. The Management Report shall include photos documenting the management activities.

3.3.1.5 Property Analysis Record for Mitigation Site HMMP and Long-Term Management Fund. Permittee shall provide, a Property Analysis Record (PAR), or substantially equivalent analysis, Mitigation Site developed in coordination with a conservation entity to CDFW for review and approval **no later than two months prior to the start of Project activities OR three months following start of Project activities if Security is provided.** The PAR shall identify the costs for implementation of the Mitigation Site HMMP and LTMP and calculate an endowment that is sufficient to fund the implementation of the LTMP in perpetuity (Long-term Endowment Fund; Endowment).

3.3.1.6 Endowment Fund (Permittee Responsible Mitigation). For Permittee Responsible Mitigation, the Permittee shall ensure that the Mitigation Site is perpetually managed, maintained, and monitored by the long-term land manager as described in this Agreement, the conservation easement, and the LTMP approved by CDFW. After obtaining CDFW approval of the Mitigation Site, Permittee shall provide long-term management funding for the perpetual management of the Mitigation Site by establishing a separate long-term management fund (Endowment) for the site. The Endowment is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, invasive species control (as needed),

monitoring, and other activities on the Mitigation Site consistent with the management plan(s) required by Measure 3.3.1.4. Endowment as used in this Agreement shall refer to the endowment deposit and all interest, dividends, other earnings, additions, and appreciation thereon. The Endowment shall be governed by this Agreement, 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 Mitigation Site according to LTMP. The long-term land manager shall be obligated to manage and monitor the Mitigation Site in perpetuity to preserve their conservation values in accordance with this Agreement, the conservation easement, and the LTMP. Such activities shall be funded through the Endowment.

- 3.3.1.7 Identify an Endowment Manager. The Endowment shall be held by the Endowment Manager, which shall be an entity qualified pursuant to Government Code sections 65965-65968, as amended, and approved in writing by CDFW in its sole discretion. Permittee shall submit to CDFW a written proposal for an Endowment Manager along with a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e). CDFW shall notify Permittee in writing of its approval or disapproval of the proposed Endowment Manager. If CDFW does not approve the proposed Endowment Manager, it shall provide Permittee with a written explanation of the reasons for its disapproval.
- 3.3.1.8 Calculate the Endowment Funds Deposit. After obtaining CDFW written approval of the Mitigation Sites, LTMP, and Endowment Manager, Permittee shall prepare a Long-Term Management Endowment PAR (or PAR-equivalent analysis) to calculate the amount of funding necessary to ensure the long-term management of the Mitigation Site (Endowment Deposit Amount). The Permittee shall submit to CDFW for review and approval the results of the Long-Term Management Endowment PAR before transferring funds to the Endowment Manager.
- 3.3.1.9 Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the Long-Term Management Endowment PAR and adjust for any additional administrative, periodic, or

annual fee. The capitalization rate used to calculate the PAR shall be 3.5% or less, unless otherwise approved in writing by CDFW.

3.3.1.10 Endowment Buffers/Assumptions. Permittee shall include in the Long-Term Management Endowment PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:

3.3.1.10.1 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.

3.3.1.10.2 Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.

3.3.1.10.3 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.

3.3.1.11 Transfer Long-term Endowment Funds. Permittee shall transfer the Long-Term Endowment Funds to the Endowment Escrow Account or the Endowment Fund Manager upon CDFW approval of the Endowment Fund Amount identified above prior to the start of Project activities OR within 18 months following start of Project activities **if Security is provided**. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this Agreement, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

3.3.2 Habitat Mitigation and Monitoring Plan. **After CDFW approval of the Mitigation Site (Measure 3.3.1) and no later than four months prior to the start of Project activities OR six months following start of Project activities if Security is provided**, Permittee shall submit to CDFW for review and written approval a Mitigation Site Habitat Mitigation and Monitoring Plan (HMMP). At a minimum, the Mitigation Site HMMP shall

include the following:

- 3.3.2.1 Restoration Specialist. Preparation of the Mitigation Site HMMP shall be by persons with expertise in southern California ecosystems and native plant re-vegetation techniques (restoration specialist). Planting, maintenance, monitoring, and reporting activities shall be overseen by the restoration specialist familiar with restoration of native plants.
- 3.3.2.2 Site Description. A description of the physical conditions and vegetation communities including a map and GIS shapefiles. Photo-documentation of restored areas shall be provided before and after restoration.
- 3.3.2.3 Planting Plan. Details of the site preparation consisting of a detailed contouring/grading plan and details of native plant installation (Planting Plan), including the type and number of materials to be used (e.g., local native seeds, cutting, and/or container stock), source(s) of the materials, planting location, methods of installation, and a local California native plant palette. This Planting Plan shall include plantings of both overstory and understory vegetation as appropriate. All seeded/planted species installed shall include only local California native container plants and cuttings and shall be typical of the existing native plant species present within, or immediately adjacent to the site. The Planting Plan shall have adequate detail regarding the sampling plan so that it can be duplicated by different people and shall include a sample data collection sheet that shows appropriate data to be collected per the proposed sampling methodology.
- 3.3.2.4 Native Plant Sources. Plant material for revegetation shall be derived from cuttings, materials salvaged from disturbed areas, and/or seeds obtained from randomly selected native trees and shrubs occurring locally within the same drainages. Any replacement tree/shrub stock, if used, which cannot be grown from cuttings or seeds, shall be obtained from a native plant nursery, be ant-free, and shall not be inoculated to prevent heart rot.
- 3.3.2.5 Sampling Techniques. The sampling techniques (e.g., quadrats, transects, or relevé) to be used to collect quantitative/qualitative data (e.g., vegetation relative/absolute cover, density, diversity indices, recruitment, survivorship, etc.) for baseline conditions and to establish and measure success criteria.
- 3.3.2.6 Survey Timing. The primary monitoring surveys to determine the success of restoration efforts (survival, cover, and growth of

plants) shall be conducted at a minimum twice annually, preferably in May and September.

- 3.3.2.7 Maintenance Activities. A description of maintenance operations with particular emphasis on invasive species control and watering methods and schedules; details on any irrigation to be used, if applicable, that includes method of watering; sprinkler placement, if applicable; and timing/schedule; irrigation may only be used to help the plants become established during the first three years following planting. Watering/ irrigation of the site shall be discontinued at least two years prior to completion of the monitoring period.
- 3.3.2.8 Corrective Actions: A description of corrective actions to be taken when restoration measures do not meet the proposed targets.
- 3.3.2.9 Success Criteria. The Mitigation Site Habitat Mitigation and Monitoring Plan shall identify the success criteria for the mitigation site and shall be compared against an appropriate reference site with as good or better-quality habitat than the pre-Project impact site. The reference site shall be approved by CDFW. The success criteria shall include percent relative and absolute cover (invasive and native vegetation), species diversity, abundance, and any other measures of success deemed appropriate by CDFW. Permittee shall be responsible for any cost incurred during the restoration/mitigation or in subsequent corrective measures.
- 3.3.3 Mitigation and Monitoring Reports. Permittee shall have the qualified restoration specialist monitor the recovery of plant, wildlife, and aquatic resources in the area following mitigation implementation. Monitoring of plant, wildlife, and aquatic resources shall be done twice a year as outlined in the Mitigation Site HMMP, through the term of restoration. The results and analysis shall be submitted with the annual restoration monitoring report to CDFW by February 1 of each year after mitigation implementation for at least 5 years and until mitigation success criteria have been met. This report shall include the status and any success trends (i.e., comparison throughout the 5 years of monitoring) for the success criteria outlined in the Mitigation Site HMMP. Photos from designated photo stations shall be included.
- 3.3.4 Mitigation Success. After the fifth monitoring year, if the site has met the success criteria outlined in the Mitigation Site HMMP, CDFW may request a site visit to determine if the mitigation portion of the Agreement is deemed complete. The site should be free of trash and any irrigation infrastructure shall be removed if it was used (unless there is an

acceptable justification for leaving the irrigation system in place).

- 3.4 **Security.** If permanent protection and funding for perpetual management of compensatory habitat is not complete prior to the initiation of Project activities, Permittee shall provide financial security in the form of a Letter of Credit (LOC) (Exhibit 3), for an amount sufficient for CDFW or its contractors to complete land acquisition, property enhancement/restoration, initial management and site protection, and perpetual management and monitoring of the 2.75-acre Mitigation Site. The LOC shall be submitted to CDFW for approval and shall be executed [no later than 30 days] prior to initiation of Project activities.
- 3.4.1 **Draft Copy of LOC.** The Permittee shall provide a draft copy of the LOC to CDFW at the address listed below for review and approval **prior to execution of security.** The LOC shall not be executed without CDFW's prior approval.
- 3.4.2 **Expiration of LOC.** In the event that the LOC will expire before the mitigation obligations have been met, the Permittee shall be responsible for providing CDFW a new LOC to replace the existing LOC **at least sixty (60) days prior to the expiration date.**
- 3.4.3 **Execution of LOC.** Upon execution of the LOC, the Permittee shall provide the original to the address listed on the LOC template, and one copy of the executed document to CDFW at the address listed below.
- 3.4.4 The LOC, or other form of security approved by CDFW, shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to complete the compensatory mitigation measures of this Agreement.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 4.1 **Notification at the Start and End of Work.** **The Permittee shall notify CDFW, in writing, at least five (5) days prior to re-initiation of Project-related activities and at least five (5) days prior to completion of Project and mitigation activities.** Permittee shall document compliance with all pre-Project Conditions of Approval before starting work through submitting a copy of the MMRP table with notes showing current implementation status and date of completion of each mitigation measure. Notification shall be sent to the email address: R6LSAReporting@wildlife.ca.gov, Reference # EPIMS- RIV-43632-R6, and cc: Katrina.Rehrer@wildlife.ca.gov.
- 4.2 **Reporting.** All surveys, pre- and post- construction notifications, monitoring reports, and any other required communication between the Permittee and CDFW shall be submitted in digital copy to R6LSAReporting@wildlife.ca.gov. Please reference #

EPIMS-RIV-43632-R6 and cc: Katrina.Rehrer@wildlife.ca.gov The electronic files shall include GIS shapefiles, along with the appropriate metadata, of the Project area and any mitigation areas. If CDFW requests hard copies of any documentation, Permittee shall mail hard copies to 3602 Inland Empire Blvd., Suite C- 220, Ontario, CA 91764, Attn: Lake and Streambed Program. Please reference # EPIMS-RIV-43632-R6.

- 4.3 Nesting Bird, Burrowing Owl, and Least Bell's Vireo Survey Report. Prior to commencement of Project activities addressed by this Agreement, the Permittee shall submit to CDFW the results of pre-construction nesting bird, burrowing owl, and least Bell's vireo surveys completed pursuant to this Agreement.
- 4.4 Nesting Bird Summary Report. Permittee shall prepare and submit to CDFW a summary, as described in Measure 2.11.6 of this Agreement of nesting species identified onsite, discovery of nests, the status/outcome of any previously identified nest, buffer distances established for each nest, and any adjustments made to established buffers. Summary reports shall be submitted on a weekly basis until there is no further evidence of nesting activity. If the Project results in the abandonment of or damage to a nest, Permittee shall notify CDFW within 24 hours.
- 4.5 Crotch's Bumble Bee – Habitat Mapping Report. No less than 120 days prior to initiation of activities addressed by this Agreement, Permittee shall submit a baseline habitat report of the project site (including channel side slopes). The report will identify habitat alliances following Sawyer et al. (2009), as well as species composition, as identified in Measure 2.14. A map of habitat alliances will be included in the report and GIS files of the habitat mapping will be submitted to CDFW with the report.
- 4.6 Crotch's Bumble Bee – Survey Plan. If habitat mapping identifies the presence of suitable habitat, no less than 90 days prior to initiation of project activities addressed by this Agreement, Permittee shall submit to CDFW for review and comment a survey plan for Crotch's bumble bee, as described in Measure 2.15.2. The survey plan shall be created in coordination with the Designated Biologist identified in Measure 2.15.1. The survey plan will identify the timing, number, and duration of survey efforts, and procedures to follow should Crotch's bumble bee be detected within the project area.
- 4.7 Crotch's Bumble Bee – Survey Results. Survey results shall be submitted to CDFW within 30 days completion of survey efforts. The report will be prepared by the Designated Biologist identified in Measure 2.15.1 and will describe survey results as identified in Measure 2.15.3.
- 4.8 Photo Documentation. The Permittee shall include, at minimum, pre-Project and post-Project color photographs taken from fixed locations of all Project areas within or directly adjacent to stream habitat. Two photo monitoring points shall be established at each stream impact area. Each photo point shall have an

unobstructed view of the disturbed streambed area. Photo documentation shall be performed from each photo point prior to Project initiation and after Project completion. These photos shall be included in the Project Completion Report (see Measure 4.9).

- 4.9 Project Completion Report. Permittee shall provide a Project Completion Report to CDFW via EPIMS no later than one month after the Project is fully completed. The Project Completion Report shall summarize all Project activities including the implementation of all items specified in Section 2 of this Agreement. The Project Completion Report shall demonstrate that impacts to streams are consistent with, and do not exceed, Project impacts authorized under this Agreement. This report shall include, at minimum, photo documentation (Measure 4.8), a quantification of the Project's final total acres of impacts to streams, avoidance/minimization measures implemented, maps that display work areas, biological survey notes (including construction monitoring), and a summary of temporary and permanent restoration efforts with photo documentation. Permittee shall include a copy of the Mitigation and Monitoring Reporting Plan table with notes showing status and date of implementation for each of the mitigation measures. The Permittee shall also provide GPS data, taken before and after Project construction activities, to demonstrate that impacts to streams are consistent with, and do not exceed, Project impacts authorized under this Agreement. Notification shall be submitted via EPIMS and emailed to: R6LSAReporting@wildlife.ca.gov, please reference Notification No. EPIMS-RIV-43632-R6, and cc: Katrina.rehrer@wildlife.ca.gov.
- 4.10 Notification to CNDDDB. If any special-status or listed species are/have been observed on or in proximity to the Project site, Permittee shall submit California Natural Diversity Data Base (CNDDDB) forms and maps to the CNDDDB within five working days of the sightings. The CNDDDB form is available online at: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. A digital copy of this information shall also be emailed within five days to CDFW. Please reference Notification No. EPIMS- RIV-43632-R6.
- 4.11 Compliance. CDFW shall verify compliance with protective measures to ensure the accuracy of the Permittee's mitigation, monitoring, and reporting efforts. CDFW may, at its sole discretion, review relevant documents maintained by the Permittee, interview the Permittee's employees and agents, inspect the work site, and take other actions to assess compliance with or effectiveness of protective measures in this Agreement.
- 4.12 List of Designated Biologist(s). The Permittee shall submit a proposed list of Designated Biologist(s) to CDFW for review at least 30 days prior to Project start (see Measure 2.1). CDFW will provide written response within 21 days of Permittee submittal, unless a shortened review period is otherwise agreed to by CDFW in writing (email or letter). The list may be updated at any time by CDFW or the Permittee with the prior approval of CDFW.

4.13 Emergency Response Plan. The Permittee shall submit an Emergency Response Plan to CDFW prior to start of ground disturbance. The plan shall identify the actions that shall be taken in the event of a spill of petroleum products, or other material harmful to aquatic or plant life, and the identification and uses of emergency response materials.

CONTACT INFORMATION

Any communication that Permittee or CDFW submits to the other shall be submitted through Environmental Permit Information Management System (EPIMS) as instructed by CDFW.

To Permittee:

City of Lake Elsinore
EPIMS-RIV-43632-R6
Murrieta Creek Multi-Use Trail Project
130 S. Main Street
Lake Elsinore, California 92530
rhabib@lake-elsinore.org

To CDFW:

Department of Fish and Wildlife
Inland Deserts Region
EPIMS-RIV-43632-R6
Murrieta Creek Multi-Use Trail Project
R6LSAReporting@Wildlife.ca.gov
cc: Katrina.rehrer@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the Project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the Project. The decision to proceed with the Project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with, or obtaining any other permits or authorizations that might be required under, other federal, state, or local laws or regulations before beginning the Project or an activity related to it. For example, if the Project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the Fish and Game Code including, but not limited to, Fish and Game Code sections 2050 *et seq.* (threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with Fish and Game Code section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall use the "Amendments & Extension" form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with Fish and Game Code section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the Project the Agreement covers (Fish & G. Code § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable Fish and Game Code section 711.4 filing fee listed at <https://www.wildlife.ca.gov/Conservation/CEQA/Fees>.

TERM

This Agreement shall expire on October 30, 2029, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term.

Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as Fish and Game Code section 1605, subdivision (a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. Exhibit 1. Project Location
- B. Exhibit 2. Project Site Breakdown and Delineation
- C. Exhibit 3. Letter of Credit

The documents listed below are included as attachments to the Agreement and incorporated herein by reference:

1. Minimization and Monitoring Reporting Table

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

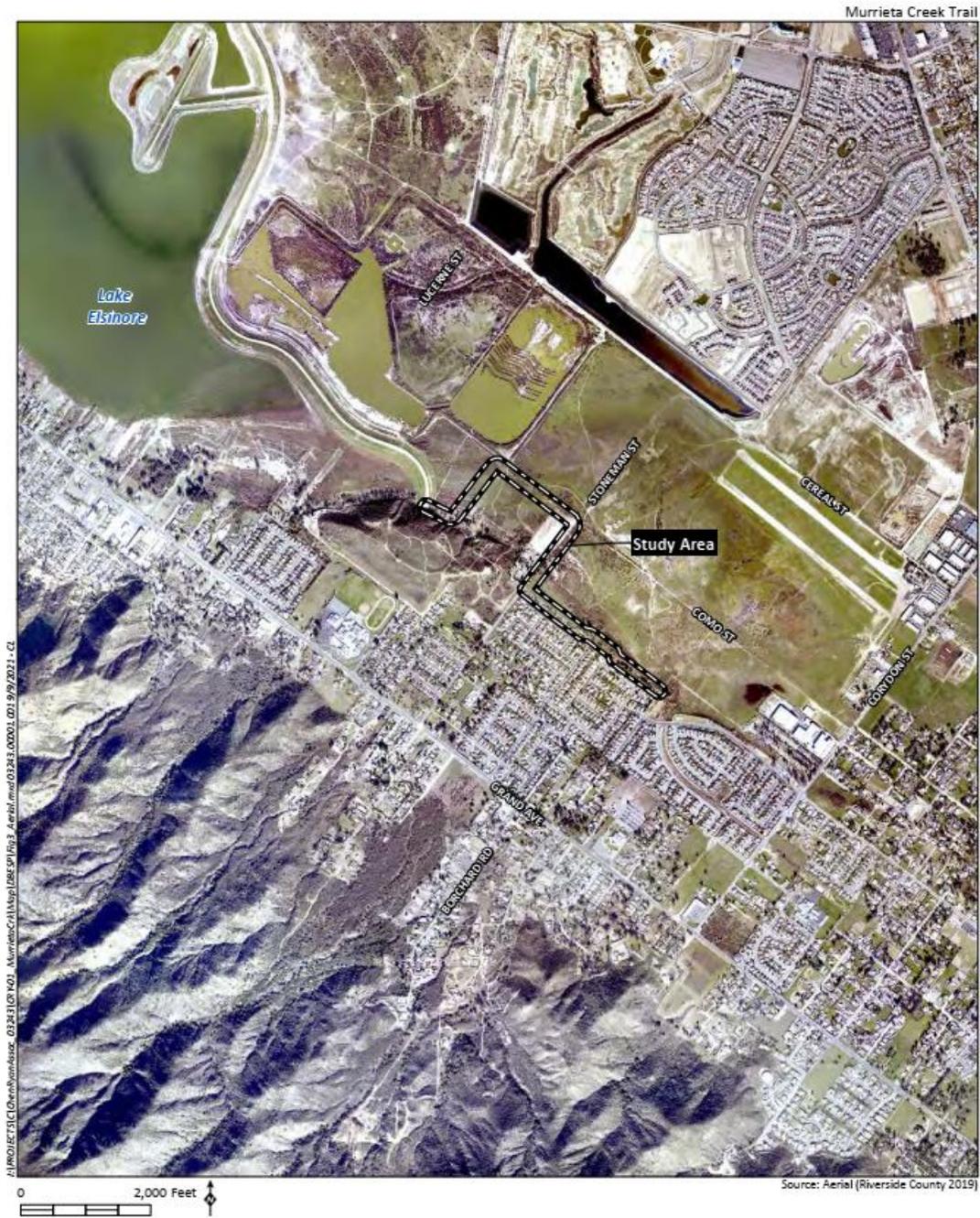
This Agreement authorizes only the Project described herein. If Permittee begins or completes a Project different from the Project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with Fish and Game Code section 1602.

CONCURRENCE

Through the electronic signature by the permittee or permittee's representative as evidenced by the attached concurrence from CDFW's EPIMS, the permittee accepts and agrees to comply with all provisions contained herein.

The EPIMS concurrence page containing electronic signatures must be attached to this agreement to be valid.

Exhibit 1



HELIX
Environmental Planning

Aerial Photograph

Figure 3

Exhibit 1. Project Location. Murrieta Creek Multi-Use Trail Project is located within the City of Lake Elsinore, Riverside County.

Exhibit 2



HELIX
Environmental Planning

Aerial Photograph

Figure 3

Exhibit 2. Project Site Delineation. Project area with depiction of resources and impacts.

Exhibit 3

Letter of Credit

[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 **[insert: "lake" or "streambed"]** alteration agreement (No. **[permit number]**) 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 in the Permit ("Mitigation Requirements").
4. We are finally informed that this Credit is intended by CDFW and the Applicant to serve as a security device for the performance by the Applicant of the Mitigation Requirements.
5. CDFW shall be entitled to draw upon this Credit only by presentation of a duly executed Certificate for Drawing ("Certificate") in the same form as Attachment A, which is attached hereto, at our office located at **[name and address of financial institution]**.

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

16. This Credit is subject to the International Standby Practices 1998 ("ISP 98"). As to matters not covered by the ISP 98 and to the extent not inconsistent with the ISP 98, this credit shall be governed by and construed in accordance with the Uniform Commercial Code, Article 5 of the State of California.
17. This Credit shall, if not canceled, expire on [**expiration date**], or any extended expiration date.
18. We hereby agree with CDFW that documents presented in compliance with the terms of this Credit will be duly honored upon presentation, as specified herein.
19. This Credit sets forth in full the terms of our undertaking. Such undertaking shall not in any way be modified, amended or amplified by reference to any document or instrument referred to herein or in which this Credit is referred to or to which this Credit relates, and any such reference shall not be deemed to incorporate herein by reference any document or instrument.

[Name of financial institution]

By: _____
Name: _____
Title: _____
Telephone: _____

ATTACHMENT A

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

[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 provided CDFW with an equivalent security approved by CDFW to replace the Credit."]
2. CDFW therefore requests the cancellation of the Credit.

Therefore, CDFW has executed and delivered this Certificate for Cancellation as of 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"]

Exhibit 3

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE MITIGATION MONITORING AND REPORTING PLAN (MMRP) LAKE OR STREAMBED ALTERATION AGREEMENT

LAKE OR STREAMBED ALTERATION AGREEMENT NO. EPIMS-RIV-43632-R6

PERMITTEE: City of Lake Elsinore

PROJECT: Murrieta Creek Multi-Use Trail Project

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact mitigation measures required by the Department of Fish and Wildlife (CDFW) for the above-referenced Lake or Streambed Alteration Agreement EPIMS No. RIV-43632-R6 (Agreement) are properly implemented, and thereby to ensure compliance with, section 15097 of the California Code of Regulations and section 21081.6 of the Public Resources Code. A table summarizing the mitigation measures required by Fish and Game Code 1600 et seq. 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 Agreement, 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

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 Agreement 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

Table 1. The following items are identified for each Mitigation Measure: Mitigation Measure number (#), Mitigation Measure Submittal, Timeline for Submittal, Date Submitted to CDFW, Date Reviewed or Approved by CDFW, and Notes on Status. The # column indicates the mitigation measure number in the Agreement. The Mitigation Measure column summarizes the mitigation, monitoring, and reporting requirements contained in the Agreement. The Timeline column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the entity 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. The Permittee must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining that status.

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
Pre-project Activities				
1.8	Notify CDFW Prior to Work	Minimum of 5 days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.1	Designated Biologist(s) and Biological Monitor(s) (approval)	Minimum of 45 days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.4	Delineate Work Area Boundary	Before commencing ground- or vegetation-disturbing activities.	Permittee	
2.8	Educational Program	Before commencing ground- or vegetation-disturbing activities.	Permittee	
2.8.1	Invasive Species Education Program	Before commencing ground- or vegetation-disturbing activities.	Permittee	
2.33	Diversion Plan (approval)	Minimum of 30 days before commencing ground- or vegetation-disturbing activities.	Permittee	

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
2.12.2	Pre-construction Surveys	Three days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.13.1	Burrowing Owl Habitat Assessment	Before commencing ground- or vegetation-disturbing activities.	Permittee	
2.13.2	Focused Survey for Burrowing Owls	30-60 days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.13.3	Burrowing Owl Pre-Construction Inspection	Within 3 days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.13.4	Burrowing Owl Survey Results	Within 10 days of survey completion and minimum of 21 days before commencing ground- or vegetation-disturbing activities	Permittee	
2.13.6	Burrowing Owl Plan	At least 30 days before commencing ground- or vegetation-disturbing activities.	Permittee	
2.14	Crotch's Bumble Bee Habitat Mapping Report	Minimum of 120 days prior to Project activities	Permittee	
2.15.2	Crotch's Bumble Bee Survey Plan	Minimum of 90 days prior to Project activities	Permittee	
2.15.3	Crotch's Bumble Bee Survey Results	Minimum of 30 days prior to Project activities	Permittee	
1.12	Work According to Plans	At least 30 days before commencing ground- or vegetation-disturbing activities.	Permittee	

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
3.2.1	Habitat Re-establishment/Rehabilitation – Offsite Mitigation Bank	At least 30 days before commencing ground or vegetation distribution activities	Permittee	
3.3.1	Habitat Protection (approval)	Five months before commencing ground- or vegetation-disturbing activities.	Permittee	
3.3.1.1	Mitigation Site Conservation Easement (approval)	18 months before commencing ground- or vegetation-disturbing activities.	Permittee	
3.3.1.2	Mitigation Site Land Manager (approval)	Four months before commencing ground- or vegetation-disturbing activities or six months following the start of project activities if security is provided.	Permittee	
3.3.2	Habitat Mitigation and Monitoring Plan (approval)	Four months before commencing ground- or vegetation-disturbing activities or six months following the start of project activities if security is provided.	Permittee	
3.3.1.4	Mitigation Site Long Term Management Plan (approval)	Three months before commencing ground- or vegetation-disturbing activities or seven months following the start of project activities if security is provided.	Permittee	

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
3.3.1.8	Endowment Funds Deposit (approval)	Three months before commencing ground- or vegetation-disturbing activities or seven months following the start of project activities if security is provided.	Permittee	
3.3.1.11	Transfer Long-term Endowment Funds (approval)	Prior to commencing ground- or vegetation-disturbing activities or within 18 months following the start of project activities if security is provided.	Permittee	
3.4	Security (approval)	At least 30 days prior to the initiation of project activities.	Permittee	
3.4.1	Draft Copy of LOC (approval)	No later than 60 days prior to initiation of project activities and prior to execution of security.	Permittee	
3.4.2	Expiration of LOC	At least 60 days prior to the expiration date.	Permittee	
4.1	Notification at the Start and End of Work	At least 5 days prior to initiation of project-related activities and at least 5 days prior to completion of project and mitigation activities.	Permittee	
4.3	Nesting Bird, Burrowing Owl, and Least Bell's Vireo Survey Report	At least one business day prior to commencement of Project activities	Permittee	

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
4.4	Nesting Bird Summary Report	On a weekly basis until there is no further evidence of nesting activity. If the Project results in the abandonment of or damage to a nest, Permittee shall notify CDFW within 24 hours	Permittee	
4.8	Diversion Plan (approval)	Minimum of 30 days before commencing ground- or vegetation-disturbing activities.	Permittee	
4.10	Onsite Resource Updates	On a monthly basis during periods of Project activity until Project completion or monitoring is complete	Permittee	
4.13	List of Designated Biologist(s) (approval)	At least 45 days prior to initiation of Project-related activities	Permittee	
4.15	Notification to CNDDDB	Within 5 working days of the sightings.	Permittee	
During Project Operations				
2.8	Excavated Areas	At the end of each workday.	Permittee/ Biologists	
2.11.6	Reporting	No less than once weekly.	Permittee	
2.12	Least Bell's Vireo	Approximate starting date of March 15 th	Permittee	
2.13.5	Burrowing Owls Observed During Construction	During project implementation and construction.	Permittee	

#	Mitigation Measures	Implementation Schedule	Responsible Party	Status/Date/Initials
3.1	Habitat Rehabilitation and/or Restoration – Onsite (Mitigation Site Temporary)	Within 18 months of starting project activities if security is provided.	Permittee	
Post-project Activities				
4.10	Project Completion Report.	No later than one month after the Project is fully completed.	Permittee	