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January 10, 2024

Doug Mathews
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City of Victorville
14343 Civic Drive
Victorville, CA 92392

City-Wide Environmental Maintenance Permits for Ephemeral Washes Project (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2023120308

Dear Mr. Mathews.

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the City of Victorville for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife resources. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Victorville-Wide Environmental maintenance Permits for Ephemeral Washes Project

Objective: The objective of the Project is for the City of Victorville to implement a City of Victorville-wide routine maintenance program for 127 City of Victorville-owned flood control facilities and detention basins maintained by the City of Victorville Public Works Department. The project would involve maintenance activities including vegetation removal or thinning, sediment, debris, and trash removal, bank stabilization, and inchannel erosion repair at various City of Victorville-owned properties, public right-ofway, and within dedicated easements.

Location: The City of Victorville and its sphere of influence consist of 74.16 square miles. Surrounding cities include Apple Valley to the east, Hesperia to the south, and Adelanto to the west. Interstate 15 (I-15), a major regional freeway, traverses the City of Victorville in a northeast-southwest orientation, while U.S. Route 395 (US395) traverses the City of Victorville's western portion in a north-south orientation. The project includes routine maintenance of a total of 127 storm water conveyance and detention facilities owned and operated by the City of Victorville, which are distributed throughout the City of Victorville limits.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City of Victorville in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends in Attachment A.

COMMENT #1: Special-Status Plant Species

Section #4.4, Page #4.4-2

Issue: The project concluded that two special-status plants including sagebrush loeflingia (Loeflingia squarrosa var. artemisiarum) and Beaver Dam breadroot (Pediomelum castoreum) had a moderate potential to be present. It also determined that pinyon rockcress (Boechera dispar), white pygmy-poppy (Canbya candida), Mojave spineflower (Chorizanthe spinosa), desert cymopterus (Cymopterus deserticola), Mojave monkeyflower (*Diplacus mohavensis*), Torrey's box-thorn (*Lycium torreyi*), solitary blazing star (Mentzelia eremophila), crowned muilla (Muilla coronata), short-joint beavertail (Opuntia basilaris var. brachyclada), Latimer's woodland-gilia (Saltugilia latimeri), and Mojave fish-hook cactus (Sclerocactus polyancistrus) all have a low potential to be present. Several of these species have a California Rare Plant Rank of 1B or 2B and any potential impacts require public disclosure of such impacts. The determinations of special-status plants potential to occur were made based on habitat assessments that were conducted between March 19 and November 12, 2020, and protocol-level botanical surveys were not conducted. Several of the surveys were outside of the flowering season for the target species and it appears that surveys according to CDFW 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018) where not conducted.

If sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the IS/MND. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d. 296; Gentry v. City of Murrieta (1995) 36 Cal. App. 4th 1359; Endangered Habitat League, Inc. v. County of Orange (2005) 131 Cal. App. 4th 777).

Specific impact: The project has the likely hood of project related impacts to special status plant species due to infrastructure maintenance, vegetation management, sediment and debris removal, bank stabilization and channel repair.

Why impact would occur: The Project has the potential to impact several special status plants and it is unclear why protocol surveys were not completed to determine and support the analysis within the IS/MND.

Evidence impact would be significant: The Biological Resources Analysis indicates that there is potential for the project to impact special status plant species. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Likewise, CDFW considers

State listed communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in the Manual of California Vegetation and California Native Plant Society (cnps.org) (CNPS 2023)

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measures for Biological Resources:

Mitigation Measure Biological Resources 5 (MM BIO-5):

Pre-construction rare plant clearance survey: Prior to Project implementation, and during the appropriate season, a qualified biologist shall conduct botanical field surveys within the Project area following protocols set forth in the California Department of Fish and Wildlife's (CDFW) 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special-status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. If any special-status plants are identified, the Project Applicant shall avoid the plant(s), with an appropriate buffer (i.e., fencing or flagging).

Mitigation Measure Biological Resources 6 (MM BIO 6):

If complete avoidance of a special status plant is not feasible, the Project Applicant shall mitigate the loss of the plant(s) through off-site compensation including: 1) permanent protection of an existing off-site native population; 2) permanent protection of an off-site introduced population; 3) a combination of 1) and 2); or 4) mitigation banking. The ratio of acquisition to loss must in most cases exceed 1:1 for any species. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats.

Comment #2 Booth's evening-primrose (Eremothera boothii ssp. boothii)

Section: Appendix B Biological Resources Analysis, Table E-1, Page 353

Issue: Table E-1 notes that Booth's evening-primrose (*Eremothera boothii*) is not expected to occur within the project site. Specifically, the table indicates that the survey areas are outside of the known elevation range for this species. CDFW believes that this determination of the potential to occur is a mistake and the author has switched the species elevational range from meters to feet. This species is known from within the City of Victorville, does have potential to be present, and project impacts should be addressed within the IS/MND.

Additionally, the Biological Resources Analysis identified that *Eremothera boothii* was present within the survey area, however failed to acknowledge the further identification of the subspecies as required by the CDFW 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities which states that the report must include "a list of all plant taxa occurring in the project area, with all taxa identified to the taxonomic level necessary to determine whether or not they are a special status".

Specific Impact: Booth's evening primrose is a California Rare Plant Rank of 2B.3 and occurs at elevations of 2675 - 7875 feet. The project has the potential for impacts due to activities included in the project description including infrastructure maintenance, vegetation management, sediment and debris removal, bank stabilization and channel repair.

Why impact would occur: According to the CNDDB and INaturalist, there are several occurrences of Booth's evening primrose throughout the City of Victorville, the project site is within the elevational range of the species, and *Eremothera boothii* was observed within the project site.

Evidence impact would be significant: All of the plants constituting California Rare Plant Rank 2B meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines §15125 (c) and/or §15380.

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure for Biological Resources:

Mitigation Measure Biological Resources 5 (MM BIO-5):

Pre-construction rare plant clearance survey: Prior to Project implementation, and during the appropriate season, a qualified biologist shall conduct botanical field surveys within the Project area following protocols set forth in the California Department of Fish and Wildlife's (CDFW) 2018 Protocols for Surveying and

Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special-status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. If any special-status plants are identified, the Project Applicant shall avoid the plant(s), with an appropriate buffer (i.e., fencing or flagging).

Mitigation Measure Biological Resources 6 (MM BIO 6):

If complete avoidance of a special status plant is not feasible, the Project Applicant shall mitigate the loss of the plant(s) through off-site compensation including: 1) permanent protection of an existing off-site native population; 2) permanent protection of an off-site introduced population; 3) a combination of 1) and 2); or 4) mitigation banking. The ratio of acquisition to loss must in most cases exceed 1:1 for any species. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats.

COMMENT #3: Western Joshua tree (Yucca brevifolia)

Section #4.4, Page #4.4-10

Issue: The project may have impacts to western Joshua tree (WJT), a California Endangered Species Act, candidate for threatened species. The IS/MND only indicates that Chapter 13.33 of the City of Victorville Municipal Code protects WJT and that written consent from the Director of Parks and Recreation would be required prior to removal or pruning any WJTs on site.

Specific impact: The pruning and or removal of WJT is considered to be take according to the California Endangered Species Act (CESA). Take of WJT is defined as any activity that results in the removal of WJT or any parts thereof and may include impacts to the seedbank surrounding one or more WJT (CDFW 2023).

Why impact would occur: The Project has the potential for take of WJT individuals and associated seedbank through the removal of individuals and roots; clearing vegetation; general operation of vehicles and heavy equipment; grading; staging equipment and stockpiling. Incidental take of WJT individuals in the form of mortality

("kill") may occur as a result of removing mature and emergent individuals; relocating individuals; eliminating and modifying habitat; removing seedbank and crushing and/or burying living seeds in the soil, rendering living seeds inviable and/or causing them to be killed.

Evidence impact would be significant:

WJT is a candidate threatened species under CESA. Under CESA, species classified as a candidate species are afforded the same protection as CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill". Further, at the time of this writing, the California state legislature has enacted the Western Joshua Tree Conservation Act (WJTCA) which aims to provide protection of WJT while removing some of the barriers faced by developers when working on or adjacent to sites where the species is present. For more information on the WJTCA, please visit the CDFW Western Joshua Tree Conservation Efforts and Permitting website.

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure Biological Resources

Mitigation Measure Biological Resources 7 (MM BIO-7):

The western Joshua tree is a candidate threatened species under the California Endangered Species Act. Prior to the initiation of western Joshua tree removal, relocation, replanting, trimming or pruning or any activity that may result in take of WJT on site, the Project Proponent should obtain California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Section 2081 of the CESA, or any other appropriate take authorization under CESA or under the Western Joshua Tree Conservation Act (WJTCA) of Fish and Game Code (§§ 1927-1927.12). California Fish and Game Code section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085 and §§ 1927- 1927.12). To execute a CESA ITP or WJTCA ITP, CDFW requires documentation of CEQA compliance. CDFW requires CEQA documentation to include proof of filing fees and State Clearinghouse circulation, including assignment of a State Clearinghouse number. The Project Applicant will adhere to measures and conditions set forth within the Incidental Take Permit.

COMMENT #4 Sensitive Vegetation Communities:

Section #4.4, Pages #4.4-1 through 4.4 of the IS/MND and Appendix B Biological Resources Analysis

Issue: Specifically, Page 4.4-8, of the IS/MND makes the determination on Question B of the IS Checklist there are several sensitive natural communities present within the project site including, Nevada joint fir, Anderson's boxthorn, spiny hop sage scrub, winter fat scrubland, and arroyo willow thickets cottonwood forest and woodland. Additionally, both the IS/MND and Appendix B Biological Resources Analysis indicate that there are riparian vegetation communities within several flood control facilities within the Project site. CDFW is concerned that the proposed mitigation measure MM BIO-1 which requires focused rare plant surveys be conducted prior to the start of maintenance activities, do not address these impacts, and is inadequate and better suited for impacts to individual plant species. Additionally, surveys to identify presence do not provide any avoidance, minimization or mitigation for the projects impacts.

The types of mitigation for environmental impacts that are listed in CEQA (Section 15370) are:(a) Avoiding the impact altogether by not taking a certain action.(b) Minimizing impacts by limiting the degree or magnitude of the action.(c) Rectifying the impact by repairing, rehabilitating or restoring the impacted environment.(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the project.(e) Compensating for the impact by replacing or providing substitute resources or environments.

Specific impact: Project related impacts to sensitive natural communities including riparian vegetation by routine maintenance can be considered to be a substantial adverse impact. Repeated vegetation removal, by mechanical equipment or by hand can remove and kill the vegetation, damage and kill roots and destroy the seed bank. Riparian habitats are considered to be sensitive and can be occupied by several sensitive species, including southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), yellow warbler (*Setophaga petechia*), yellow breasted chat (*Icteria virens*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

Why impact would occur: The Biological Resources Analysis identifies the presence of several sensitive natural communities including riparian habitat to occur on-site in association with multiple flood control facilities. Additionally, Table 4.4-1 shows there is 80.16 acres of Lake or Streambed/Riparian Vegetation within the project area.

Evidence impact would be significant: CDFW considers State listed communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in the Manual of California Vegetation and California Native Plant Society (cnps.org) (CNPS 2023)

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure Biological Resources

Mitigation Measure Biological Resources 8 (MM BIO 8):

If complete avoidance of a special status vegetation community is not feasible, the Project Applicant shall mitigate the loss of the vegetation community through the purchase of mitigation credits from a CDFW-approved bank and/or land acquisition. The ratio of acquisition to loss must in most cases exceed 1:1 for any vegetation community. The ratio should be higher for rarer communities, particularly for those that occupy irreplaceable habitats.

COMMENT #5 Burrowing Owl (Athene cunicularia)

Section 4.4 and 5 #, Pages #4.4-3 through 4.4-7

Issue: The IS/MND indicates that burrowing owl have a high potential to occur throughout the project site and at many of the individual survey areas. Additionally, the IS/MND determines that with the implementation of Mitigation Measure BIO-3, impacts to burrowing owl would be less than significant. CDFW is concerned with the adequacy of Mitigation Measure BIO-3.

Specific concerns include:

- 1. MM BIO-3 states, "Sites where surveys shall be conducted are listed in Appendix B of the Habitat Assessment; refer to Appendix B, Biological Resources Analysis." However, Appendix B does not identify which facilities would be surveyed for. Additionally, the Habitat Assessment does appear to follow the current guidelines for a burrowing owl habitat assessment or survey (2012 Staff Report on Burrowing Owl Mitigation).
- 2. Mitigation Measure BIO-3 also states, "If an occupied burrow is found within the project site during pre-construction clearance surveys, a BUOW exclusion and mitigation plan shall be prepared and submitted to CDFW for approval prior to initiating project activities." CDFW is concerned regarding the IS/MND deferment of impact analysis and mitigation. As noted above, if sensitive species and/or their habitat may be impacted from the Project, CDFW recommends the inclusion of specific mitigation in the IS/MND. CEQA Guidelines section 15126.4, subdivision (a)(1)(8) states that formulation of feasible mitigation measures should not be deferred until some future date. The Court of Appeal in San Joaquin Raptor Rescue Center v. County of Merced (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete (Sundstrom v. County of Mendocino (1988) 202 Cal. App. 3d. 296; Gentry v. City of Murrieta (1995) 36 Cal. App. 4th 1359; Endangered Habitat League, Inc. v. County of Orange (2005) 131 Cal. App. 4th 777).

Specific impact: Potential take of burrowing owl and loss of burrowing owl habitat.

Why impact would occur: Burrowing owls are well-adapted to open, relatively flat expanses and vacant lots and prefer habitats with generally short sparse vegetation with few shrubs such as those occurring on the sites identified for future development. CDFW is aware of active burrows and burrowing owl observations (CNDDB) occurring within the Project area. Maintenance of ephemeral streambeds would require ground disturbance (e.g., trenching, grading, soil compaction, burrow loss, and earth-moving activities) and vegetation removal. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance.

Evidence impact would be significant: Habitat loss is a threat to burrowing owls (CDFG, 2012). Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows (CDFG, 2012). Burrowing owl are also dependent on adjacent habitat, and forage within 600 meters of nest burrows (Rosenberg and Haley, 2004). Burrowing owl is a CDFW Species of Special Concern – The California Biologist's Handbook (biologistshandbook.com). CEQA provides protection not only for CESA-listed species, but for any species including but not limited to Species of Special Concern (SSC) which can be shown to meet the criteria for State listing. Burrowing owl is a species of special concern that meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill."

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure Biological Resources

Mitigation Measure Biological Resources 9 (MM BIO-9):

Prior to any ground disturbance, a survey for potential burrows followed by four breeding season surveys of areas found to have potential for burrowing owl occupation must be conducted in accordance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012. The surveys shall include 100 percent coverage of the Project site. A report summarizing the breeding season survey including all requirements for survey reports (page 30 of the 2012 Staff Report) shall be submitted to CDFW for review and approval.

If no burrowing owl, active burrowing owl burrows, or sign thereof are found, no further action is necessary.

If burrowing owl, active burrowing owl burrows, or sign thereof are found the qualified biologist shall prepare and implement a plan for avoidance, minimization, and mitigation measures to be review and approved by CDFW prior to commencing Project activities. The plan shall include mitigation for permanent loss of occupied burrow(s) and habitat. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. Permanent protection of mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, development and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls, and funding for the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment. The ratio of acquisition to loss must in most cases exceed 1:1 for any species, particularly burrowing owl. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats.

Mitigation Measure Biological Resources 10 (MM-BIO 10):

To ensure that the Project avoids impacts to burrowing owl, a qualified biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the 2012 Staff Report. Burrowing owls may re-colonize a site after only a few days. Time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.

COMMENT #6: Desert kit fox (Vulpes macrotis)

Section # 3.2.3, Page # 11 of the IS/MND and the Biological Resources Analysis

Issue: The Project occurs within the range of desert kit fox (*Vulpes macrotis*), a protected species pursuant to Title 14 of the California Code of Regulations Section 460, which prohibits the take of the species at any time. CDFW recommends surveys, following CDFW-approved protocols, be conducted over all areas proposed to be directly or indirectly affected by the Project to determine presence/absence.

Specific impact: The staging of construction equipment, vehicles, and foot traffic may result in the collapse of occupied burrows and result in direct mortality and/or injury to desert kit fox. Project construction and activities may result in injury or mortality of desert kit fox.

Why impact would occur: The IS/MND states that the site is suitable for desert kit fox, however, lacks the supporting detail for the habitat assessment. CDFW generally considers field assessments for wildlife to be valid for a one-year period, CDFW is

concerned that the IS/MND does not address desert kit fox, although the site does contain suitable habitat.

Evidence impact would be significant: The desert kit fox is a species of special concern and is protected from take by CDFW Code 14 CCR section 460. CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. Desert kit fox is an SSC that meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380).

Recommended potentially feasible mitigation measure(s) to reduce impacts to less than significant: CDFW recommends that surveys following CDFW protocols be conducted over all areas proposed to be directly or indirectly affected by the Project to determine the presence or absence of this species and the number of desert kit fox that are present.

If desert kit fox is found, or have the potential to occupy the Project site, CDFW recommends the lead agency require species-specific mitigation to offset impacts and avoidance, minimization, and monitoring measures aimed at avoiding direct impacts to desert kit fox be incorporated into the IS/MND. Avoidance and minimization measures should include pre-activity surveys following CDFW-approved survey methods, including procedures used to classify identified dens as inactive dens, active and potentially active dens, and active natal dens, and methods utilized to quantify and locate single or paired animals that would need to be collapsed to prevent reoccupancy. The measures should also include detailed monitoring requirements and methods of exclusion/passive relocation to be conducted, and methods and timing of den excavation.

CDFW recommends the following Mitigation Measure be added to the IS/MND:

Mitigation Measure Biological Resources 11 (MM BIO-11):

No more than fourteen (14) days and no less than three (3) days prior to the beginning of surface disturbance, the Designated Biologist shall conduct a pre-Project 10-meter transect survey (or reduced based on topography and vegetation), to attain 100% visual coverage within the Project area and a minimum 200-meter buffer to determine the presence or absence of desert kit fox individuals, dens, and sign. Permittee shall provide the results of the survey to CDFW prior to start of Project activities.

If potential dens are located, they shall be monitored by the Designated Biologist. Trail cameras may be used to assist with observation but shall not be the sole basis upon which the status is determined. Permittee shall provide a

determination if active dens can be avoided and buffered from Project activities to prevent take and disturbance with the survey results.

Should active dens be present within the Project area that cannot be avoided with an adequate buffer, the Permittee shall reschedule Project activities or submit a monitoring and relocation plan for CDFW's review and approval. No disturbance or relocation of active dens may take place when juveniles may be present and dependent on parental care.

Permittee shall block off inactive dens within the buffer zone with rocks and sticks to discourage use during Project activities and remove them when construction is complete. The Designated Biologist shall periodically check that the inactive burrows remain blocked and are not reoccupied.

Comment #7 Crotch's Bumble Bee (Bombus crotchii)

Issue: The IS/MND indicates that Crotch's bumble bee has the potential to occur throughout the project site, however the document does not provide any avoidance, minimization or mitigation measures to ensure that the project impacts are less than significant. CDFW is concerned the IS/MND's analysis and determination of project related impacts to Crotch's Bumble Bee does not have supporting evidence. According to INaturalist there are several records of Crotch's bumble bee within the vicinity of the project.

Specific impact: Potential take of Crotch's bumble bee and loss of nesting and foraging habitat.

Why this impact would occur: Crotch's bumble bee occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley and adjacent to foothills through most of southwestern California (Williams et. al 2014). Crotch's bumble bee are generalist foragers and have been reported visiting a wide variety of flower plants. The plant families most commonly associated with Crotch's bumble bee observations or collections from California include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, Boraginaceae and Asclepiadaceae.

Maintenance of ephemeral streambeds would require ground disturbance (e.g., trenching, grading, soil compaction, burrow loss, and earth-moving activities) and vegetation removal. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance.

Evidence impact would be significant: Crotch's bumble bee is a candidate species for listing under CESA; therefore, it receives the same legal protection afforded to endangered or threatened species under CESA pursuant to Fish & G. Code §§ 2074.2 & 2085. If found on-site, the Project could result in crushing or killing Crotch's bumble bees, reduction in sufficient food resources such as nectar and pollen, and/or

removal of nesting and overwintering sites. Many bumble bee species, once common in the western United States, have undergone a dramatic decline in both distribution and abundance and are now extirpated from much of their historic ranges (Hatfield et al. 2018). Many bumble bees are threatened with extinction due primarily to reductions in habitat from urbanization, intensive agriculture, and invasive species introductions (ibid). If Crotch's bumble bee occurs at the Project site and Project impacts to Crotch's bumble bee occur, this could result in a substantial reduction in the species' population, which would be a mandatory finding of significance (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure Biological Resources

Mitigation Measure Biological Resources 12 (MM BIO 12)

Crotch's bumble bee is a candidate threatened species under the California Endangered Species Act. Prior to the initiation of project activities, the Project proponent must obtain a qualified biologist to conduct surveys for the candidate bumble bee species. There are a range of potential qualifications including coursework, bumble bee-specific workshops, and focused surveys. It is important to consider the type of training or field work when evaluating whether it provided relevant experience.

The qualified biologist will conduct habitat mapping no less than 120 days prior to initiation of Project activities with the submittal of a complete baseline habitat mapping report encompassing Fish and Game Code 1602 resources. Mapping will identify habitat alliances following Sawyer et al. (2009) and the report will identify species composition for each mapped alliance. If habitat mapping 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, then a qualified biologist approved by CDFW shall prepare a draft survey plan and conduct surveys for Crotch's bumble bee. The survey plan will identify the timing, number, and duration of survey efforts, and procedures to follow in the event that Crotch's bumble bee is detected within the Project area. Survey methodology shall generally follow the U.S. Fish and Wildlife Service protocol for the Rusty Patched bumble bee (USFWS 2019). CDFW also recommends completing multiple surveys, coinciding with the peak bloom periods of the plants listed above. Following the completion of surveys, and no less than 30 days prior to initiation of Project activities, survey results shall be submitted to CDFW for review and comment. If Crotch's bumble bee is detected during surveys, Project activities shall not occur in any occupied habitat areas the qualified biologist shall immediately notify CDFW.

Comment #8 Bat Species

Section #4.4 of the IS/MND and Appendix B Biological Resources Analysis

Issue: The Biological Resources Analysis states "There may be suitable foraging habitat throughout much of the project area, but there is a general lack of roosting habitat around the survey areas other than culverts associated with the work areas", but does not provide any avoidance, minimization or mitigation measures. CDFW is concerned regarding this determination. There are 25 species of bats in California, and 16 use bridges and/or culverts. Because relatively high percentages of the populations of Mexican free-tailed bats (*Tadarida brasiliensis mexicanus*), Yuma bats (*Myotis yumanensis*), and pallid bats (*Antrozous pallidus*) roost in bridges and culverts, these species are the most susceptible to adverse effects by maintenance of ephemeral streambed.

Specific impact: Potential take of bats, bat roosting habitat, and bat maternity colony roosts.

Why impact would occur: The Biological Resources Analysis identifies the potential presence of bats within the project site.

Evidence impact would be significant: California Environmental Quality Act (CEQA), which requires an analysis of a project's effects on the environment, including biological resources such as bats. Bridges and culverts provide roosting habitat for 16 of the 25 bat species that occur in California. These roosting features are analogous to naturally occurring roosts, many of which have been degraded or lost due to disturbance and other anthropogenic influences. In many cases the large mass of these human-made structures replaces some of the lost natural roosting habitat resources for bats and provides them with stable thermal conditions that bats require throughout their lifecycle. Over the past several decades, the importance of bridges and culverts as roosting habitat has become increasingly apparent.

Recommended Potentially Feasible Mitigation Measure to reduce impacts to less than significant: CDFW offers the following Mitigation Measure Biological Resources

Mitigation Measure Biological Resources 13 (MM BIO 13):

Surveys for Daytime, Nighttime, Wintering (Hibernacula), and Maternity Roosting Sites for Bats will occur prior to the initiation of Project activities within suitable bat roosting habitat. The project shall retain a qualified biologist to conduct focused surveys to determine presence of daytime, nighttime, wintering (hibernacula), and maternity roost sites. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by qualified biologists. Surveys shall be conducted no more than 15 days prior to the initiation of work near the base of the dam or near other structures that could support bats. Surveys shall be conducted during favorable weather conditions only. Each survey shall consist of one dusk emergence survey (start one hour

before sunset and last for three hours), followed by one pre-dawn reentry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site. Surveys shall be conducted within one 24-hour period. Visual inspections shall focus on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering). Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence and pre-dawn re-entry surveys.

- Avoidance of Maternity Roosts. Work within potential bat roosting habitat shall avoid the maternity roosting season (March 1 to July 31) to the extent feasible. If work must be conducted within the maternity roosting season, prior to the start of work within or near trees, bridges or other structures within the work area, a qualified bat biologist shall conduct a preconstruction survey to determine if bats are roosting within the Project work area. If bats are not roosting, no further mitigation is required. If bats are roosting, all maternity roosts shall be avoided and an appropriate nodisturbance buffer shall be established at the discretion of a qualified biologist, based on the sensitivity of the bat species. If work within the buffer is deemed necessary, a qualified biologist shall monitor work activities to ensure no disturbance to the roost(s).
- Exclusion Outside of Maternity Roosting Season. If roosts are determined to be present and must be removed, the bats will be excluded from the roosting site before the site is disturbed. A Bat Mitigation and Monitoring Plan addressing compensation and exclusion methods. And roost removal procedures will be developed and submitted to CDFW prior to implementation. Exclusion methods may include the use of one-way doors a roost entrances (bats may leave, but not re-enter, or sealing roost entrances with the site can be confirmed to contain no bats. Exclusion efforts shall not be conducted if the site is confirmed to be a maternity roost. Exclusion in the fall is recommended to avoid impacts to hibernating bats or a maternity roost (typically April through August in southern California) when flightless young are present.
- If roosts cannot be avoided or it is determined that Project activities may cause roost abandonment, such activities may not commence until permanent, elevated bat houses have been installed outside of, but near the Project area. Placement and height will be determined by a qualified wildlife biologist, but the height of the bat house will be at least 15-feet. Bat houses will be multi-chambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found at bat least one bat house will the installed for each pair of bats, (if occurring individually),

or of sufficient number to accommodate each colony of bats to be relocated.

The qualified biologist will implement the relocation plan and new roost sites shall be in place before the commencement of any ground-disturbing activities that will occur within 500 feet of the hibernacula. New roost sites shall be in place prior to the initiation of Project related activities to allow enough time for bats to relocate. Removal of roosts will be guided by accepted exclusion and deterrent techniques. The Project Proponent shall compensate no less than 2:1 for permanent impacts to roosting habitat.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist Lead Agency in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Brandy Wood, Senior Environmental Scientist (Supervisor) at 909-230-2627 or Brandy.Wood@wildlife.ca.gov.

Sincerely,

DocuSigned by:
llisa EllsWorth
84FBB8273E4C480...

Alisa Ellsworth Environmental Program Manager

Attachments:

Mitigation and Monitoring Reporting Program (MMRP) for CDFW-Proposed Mitigation Measures

ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure compliance with mitigation measures during project implementation. Mitigation measures must be implemented within the time periods indicated in the table below.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Implementation Schedule, and Responsible Party. The Mitigation Measure column summarizes the mitigation requirement. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing mitigation measures.

Biological (BIO) Mitigation Measure	Implementation Schedule	Responsible Party
Mitigation Measure Biological Resources 5 (MM BIO-5): Pre-construction rare plant clearance survey: Prior to Project implementation, and during the appropriate season, a qualified biologist shall conduct botanical field surveys within the Project area following protocols set forth in the California Department of Fish and Wildlife's (CDFW) 2018 Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). The surveys shall be conducted by a CDFW approved botanist(s) experienced in conducting floristic botanical field surveys, knowledgeable of plant taxonomy and plant community ecology and classification, familiar with the plants of the area, including special-status and locally significant plants, and familiar with the appropriate state and federal statutes related to plants and plant collecting. The botanical field surveys shall be conducted at the appropriate time of year when plants will both be evident and identifiable (usually, during flowering or fruiting) and, in a manner, which	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent

maximizes the likelihood of locating special- status plants and sensitive natural communities that may be present. Botanical field surveys shall be conducted floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. If any special-status plants are identified, the Project Applicant shall avoid the plant(s), with an appropriate buffer (i.e., fencing or flagging).		
Mitigation Measure Biological Resources 6 (MM BIO 6): If complete avoidance of a special status plant is not feasible, the Project Applicant shall mitigate the loss of the plant(s) through off-site compensation including: 1) permanent protection of an existing off-site native population; 2) permanent protection of an off-site introduced population; 3) a combination of 1) and 2); or 4) mitigation banking. The ratio of acquisition to loss must in most cases exceed 1:1 for any species. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats.	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent
Mitigation Measure Biological Resources 7 (MM BIO-7): The western Joshua tree is a candidate threatened species under the California Endangered Species Act. Prior to the initiation of westernJoshua tree removal, relocation, replanting, trimming or pruning or any activity that may result in take of WJT on site, the Project Proponent should obtain California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Section 2081 of the CESA, or any other appropriate take authorization under CESA or under the Western Joshua Tree Conservation Act (WJTCA) of Fish and Game Code (§§ 1927-1927.12). California Fish and Game Code section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085 and §§ 1927-	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent

1927.12). To execute a CESA ITP or WJTCA ITP, CDFW requires documentation of CEQA compliance. CDFW requires CEQA documentation to include proof of filing fees and State Clearinghouse circulation, including assignment of a State Clearinghouse number. The Project Applicant will adhere to measures and conditions set forth within the Incidental Take Permit.		
Mitigation Measure Biological Resources 8 (MM BIO 8): If complete avoidance of a special status vegetation community is not feasible, the Project Applicant shall mitigate the loss of the vegetation community through the purchase of mitigation credits from a CDFW-approved bank and/or land acquisition. The ratio of acquisition to loss must in most cases exceed 1:1 for any vegetation community. The ratio should be higher for rarer communities, particularly for those that occupy irreplaceable habitats.	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent
Mitigation Measure Biological Resources 9 (MM BIO-9): Prior to any ground disturbance, a survey for potential burrows followed by four breeding season surveys of areas found to have potential for burrowing owl occupation must be conducted in accordance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012. The surveys shall include 100 percent coverage of the Project site. A report summarizing the breeding season survey including all requirements for survey reports (page 30 of the 2012 Staff Report) shall be submitted to CDFW for review and approval. If no burrowing owl, active burrowing owl burrows, or sign thereof are found, no further action is necessary. If burrowing owl, active burrowing owl burrows, or sign thereof are found the qualified biologist shall prepare and	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent

implement a plan for avoidance, minimization, and mitigation measures to be review and approved by CDFW prior to commencing Project activities. The plan shall include mitigation for permanent loss of occupied burrow(s) and habitat. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. Permanent protection of mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission, development and implementation of a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls, and funding for the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment. The ratio of acquisition to loss must in most cases exceed 1:1 for any species, particularly burrowing owl. The ratio should be higher for rarer species, particularly for those that occupy irreplaceable habitats.		
Mitigation Measure Biological Resources 10 (MM-BIO 10): To ensure that the Project avoids impacts to burrowing owl, a qualified biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbance activities using the recommended methods described in the 2012 Staff Report. Burrowing owls may recolonize a site after only a few days. Time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance.	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent
Mitigation Measure Biological Resources 11 (MM BIO-11): No more than fourteen (14) days and no less than three (3) days prior to the beginning of surface disturbance, the Designated Biologist shall conduct a pre-	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent

Project 10-meter transect survey (or reduced based on topography and vegetation), to attain 100% visual coverage within the Project area and a minimum 200-meter buffer to determine the presence or absence of desert kit fox individuals, dens, and sign. Permittee shall provide the results of the survey to CDFW prior to start of Project activities.		
If potential dens are located, they shall be monitored by the Designated Biologist. Trail cameras may be used to assist with observation but shall not be the sole basis upon which the status is determined. Permittee shall provide a determination if active dens can be avoided and buffered from Project activities to prevent take and disturbance with the survey results.		
Should active dens be present within the Project area that cannot be avoided with an adequate buffer, the Permittee shall reschedule Project activities or submit a monitoring and relocation plan for CDFW's review and approval. No disturbance or relocation of active dens may take place when juveniles may be present and dependent on parental care.		
Permittee shall block off inactive dens within the buffer zone with rocks and sticks to discourage use during Project activities and remove them when construction is complete. The Designated Biologist shall periodically check that the inactive burrows remain blocked and are not reoccupied.		
Mitigation Measure Biological Resources 12 (MM BIO 12): Crotch's bumble bee is a candidate threatened species under the California Endangered Species Act. Prior to the initiation of project activities, the Project proponent must obtain a qualified biologist to conduct surveys for the candidate bumble bee species. There are a range of potential	Prior to commencing ground- or vegetation-disturbing activities	Project Proponent

qualifications including coursework, bumble bee-specific workshops, and focused surveys. It is important to consider the type of training or field work when evaluating whether it provided relevant experience.

The qualified biologist will conduct habitat mapping no less than 120 days prior to initiation of Project activities with the submittal of a complete baseline habitat mapping report encompassing Fish and Game Code 1602 resources. Mapping will identify habitat alliances following Sawyer et al. (2009) and the report will identify species composition for each mapped alliance. If habitat mapping 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, then a qualified biologist approved by CDFW shall prepare a draft survey plan and conduct surveys for Crotch's bumble bee. The survey plan will identify the timing, number, and duration of survey efforts, and procedures to follow in the event that Crotch's bumble bee is detected within the Project area. Survey methodology shall generally follow the U.S. Fish and Wildlife Service protocol for the Rusty Patched bumble bee (USFWS 2019). CDFW also recommends completing multiple surveys, coinciding with the peak bloom periods of the plants listed above. Following the completion of surveys, and no less than 30 days prior to initiation of Project activities. survey results shall be submitted to CDFW for review and comment. If Crotch's bumble bee are detected during surveys, Project activities shall not occur in any occupied habitat areas the qualified biologist shall immediately notify CDFW.

Mitigation Measure Biological Resources 13 (MM BIO 13): Surveys for Daytime, Nighttime, Wintering (Hibernacula), and Maternity Roosting Sites for Bats will occur prior to the initiation of Project activities within suitable bat roosting habitat. The project shall retain a qualified biologist to conduct focused surveys to determine presence of daytime, nighttime, wintering (hibernacula), and maternity roost sites. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by qualified biologists. Surveys shall be conducted no more than 15 days prior to the initiation of work near the base of the dam or near other structures that could support bats. Surveys shall be conducted during favorable weather conditions only. Each survey shall consist of one dusk emergence survey (start one hour before sunset and last for three hours), followed by one pre-dawn reentry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat on the Project site. Surveys shall be conducted within one 24-hour period. Visual inspections shall focus on the identification of bat sign (i.e., individuals, guano, urine staining, corpses, feeding remains, scratch marks and bats squeaking and chattering). Bat detectors, bat call analysis, and visual observation shall be used during all dusk emergence and predawn re-entry surveys.

within potential bat roosting habitat shall be conducted within the maternity roosting season, prior to the start of work within or near trees, bridges or other structures within the work area, a qualified bat biologist shall conduct a preconstruction survey to determine if bats are roosting within the further mitigation is required. If bats are

Prior to commencing ground- or vegetation-disturbing activities

Project Proponent

Avoidance of Maternity Roosts. Work avoid the maternity roosting season (March 1 to July 31) to the extent feasible. If work must Project work area. If bats are not roosting, no

roosting, all maternity roosts shall be avoided and an appropriate no-disturbance buffer shall be established at the discretion of a qualified biologist, based on the sensitivity of the bat species. If work within the buffer is deemed necessary, a qualified biologist shall monitor work activities to ensure no disturbance to the roost(s).

- **Exclusion Outside of Maternity** Roosting Season. If roosts are determined to be present and must be removed, the bats will be excluded from the roosting site before the site is disturbed. A Bat Mitigation and Monitoring Plan addressing compensation and exclusion methods. And roost removal procedures will be developed and submitted to CDFW prior to implementation. Exclusion methods may include the use of one-way doors a roost entrances (bats may leave, but not re-enter, or sealing roost entrances with the site can be confirmed to contain no bats. Exclusion efforts shall not be conducted if the site is confirmed to be a maternity roost. Exclusion in the fall is recommended to avoid impacts to hibernating bats or a maternity roost (typically April through August in southern California) when flightless young are present.
- If roosts cannot be avoided or it is determined that Project activities may cause roost abandonment, such activities may not commence until permanent, elevated bat houses have been installed outside of, but near the Project area. Placement and height will be determined by a qualified wildlife biologist, but the height of the bat house will be at least 15-feet. Bat houses will be multichambered and be purchased or constructed in accordance with CDFW standards. The number of bat houses required will be dependent upon the size and number of colonies found at bat least one bat house will the installed for each pair of bats, (if occurring individually), or of sufficient number to

The qualified biologist will implement the relocation plan and new roost sites shall be in place before the commencement of any ground-disturbing activities that will occur within 500 feet of the hibernacula. New roost sites shall be in place prior to the initiation of Project related activities to allow enough time for bats to relocate. Removal of roosts will be guided by accepted exclusion and deterrent techniques. The Project Proponent shall compensate no less than 2:1 for permanent
impacts to roosting habitat.