



STATE OF CALIFORNIA
DEPARTMENT OF FISH AND WILDLIFE

GAVIN NEWSOM, Governor
MEGHAN HERTEL, Director

Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
wildlife.ca.gov

May 11, 2026
Sent via email

Malisa Lieng
Branch Office Chief, Environmental Planning
California Department of Transportation, District 8
464 West 4th Street, MS 823
San Bernardino, CA 92401
Malisa.Lieng@dot.ca.gov

SR-138 CULVERTS REPAIR PROJECT (PROJECT)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2026040484

Dear Malisa Lieng:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the California Department of Transportation, District 8 (Caltrans) 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. 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 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

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.

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: California Department of Transportation, District 8 (Caltrans)

Objective: The objective of the Project is to repair or replace 39 culverts along State Route 138 (SR-138). This includes repairing 10 corrugated steel pipe (CSP) culverts with pipe lining and invert paving, replacing 29 CSP culverts in sizes ranging from 12-inch to 54-inch diameters using open trenching and jack-and-bore methods, constructing access roads and staging areas, installing rock slope protection at culvert inlet and outlet locations, and removing vegetation and trees.

Location: The Project is located along SR-138 from Post Mile (PM) 19.8 (0.34 mile west of Summit Post Office Road) to PM 36.6 (0.13 mile west of Lake Drive) in San Bernardino County, California. The Project is partially located in Hesperia, along and adjacent to the Silverwood Lake State Recreation Area, and within Crestline.

Timeframe: Construction is anticipated to occur between March 2029 and January 2031.

COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (i.e., biological resources). CDFW offers the comments and recommendations below to assist Caltrans in adequately identifying and mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources. The MND has not adequately identified and disclosed the Project's direct, indirect, and cumulative impacts on biological resources or whether those impacts are reduced to less than significant.

CDFW's comments and recommendations on the MND are explained in greater detail below and summarized here. Because the MND refers to a Natural Environment Study (NES) for this Project, dated February 2026, CDFW reviewed the NES for details not given in the MND. In this letter, CDFW recommends revisions to the MND if both the MND and NES lack sufficient information to facilitate a meaningful review by CDFW. CDFW is concerned that the MND does not adequately identify or mitigate the Project's significant, or potentially significant, impacts to biological resources. CDFW requests that additional avoidance, minimization, and mitigation measures be added to a revised MND, to avoid or reduce impacts to less than significant.

Mitigation Measures

CEQA requires that an MND include mitigation measures to avoid or reduce significant impacts. CDFW is concerned that the mitigation measures proposed in the MND are not adequate to avoid or reduce impacts to biological resources to below a level of significance. To support Caltrans in ensuring that Project impacts to biological resources are reduced to less than significant, CDFW recommends revising or adding mitigation measures regarding plant surveys, clearance sweeps, southern rubber boa surveys, nesting bird surveys, burrowing owl surveys, bat avoidance, desert tortoise, desert bighorn sheep, Crotch's bumble bee, and CDFW's Lake and Streambed Alteration Program.

Pursuant to the CEQA Guidelines, section 15097(f), CDFW has prepared a draft mitigation monitoring and reporting program (MMRP) in Attachment 1 for revised and proposed measures.

Comment 1: Special-Status Plant Surveys

CDFW is concerned that the proposed plant survey measure in the MND is not sufficient in timing and scope to detect special-status plant species that may occur on the Project site. Page 14 of the NES indicates that plant surveys were not performed for this Project due to fires in the area in 2025. Page 33 of the NES indicates that the Project area includes habitat for Mojave tarplant (*Deinandra mohavensis*), Greta's aster (*Symphotrichum greatae*), southern mountains skullcap (*Scutellaria bolanderi* ssp. *austromontana*), Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*), San Bernardino Mountains owl's-clover (*Castilleja lasiorhyncha*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), and white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*).

Mojave tarplant is listed as endangered under the California Endangered Species Act. Parry's spineflower has a California Rare Plant Rank of 2B.1, which indicates plants that are seriously threatened in California. Impacts to these species must be analyzed during preparation of environmental documents relating to CEQA because they meet the definition of rare or endangered under CEQA Guidelines §15125 (c) and/or §15380.

CDFW is concerned that the field assessment was not conducted at the appropriate time of year to detect special-status plants. Floristic assessments typically involve multiple visits to the project site at various times of year to detect plants in various blooming seasons. If the presence of special-status plant species is not determined through floristic based surveys, unauthorized take or disturbance of special-status plant species could occur. CDFW recommends a thorough, floristic-based assessment of special-status plants at the appropriate time of year, usually involving multiple visits to the Project area.

CDFW considers the mitigation measure for rare plants in the MND to be inadequate in scope and timing to avoid or reduce impacts to special-status plants to a level less than significant. To support Caltrans in avoiding or reducing impacts to special-status plants to a level of less than significant, CDFW recommends Mitigation Measure AMM BIO-3 is revised as follows, with additions in **bold italics** and removals in ~~strike through~~:

AMM BIO-3 Special-status Plant Surveys (**Revised**)

A rare plant and rare insect host plant habitat suitability assessment and protocol survey should be conducted **by a CDFW-approved qualified biologist** within the BSA, during the floristic period. All surveys would follow guidelines from USFWS and CDFW. Where suitable habitat is identified, protocol-level surveys for the special-status plant and rare insect host plant species would be conducted. Results would be documented in a comprehensive Rare Plant and Rare Insect Host Plant Habitat Assessment and Survey Report. **Surveys shall be conducted prior to any ground-disturbance and shall follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (see <https://www.wildlife.ca.gov/Conservation/Plants>). Should any state-listed plant species be present in the Project area, the Project proponent shall obtain appropriate CESA authorization for those species prior to the start of Project activities. Should other special-status plants or natural communities be present in the Project area, on-site or off-site habitat restoration (whichever is applicable) and/or enhancement and preservation shall be conducted and discussed in detail in a Habitat Mitigation and**

Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species. Where habitat preservation is not available on-site, off-site land acquisition, management, and preservation shall be completed to offset the losses.

Comment 2: Clearance Sweeps

CDFW is concerned that the clearance sweeps measure proposed in the MND does not address all the work areas of the Project. The MND proposes doing sweeps only for culverts 1-3 and 21-39. The other culverts, however, are surrounded by habitat suitable for various wildlife species.

To support Caltrans in avoiding or reducing wildlife impacts to a level of less than significant, CDFW recommends Mitigation Measure AMM BIO-11 is revised as follows, with additions in **bold italics** and removals in ~~strike through~~:

AMM BIO-11 Clearance Sweeps **(Revised)**

Daily clearance sweeps within 2 hours prior to construction and daily (full-time) monitoring is required for all construction activities occurring within the ~~BSA of Culverts 1 through 3 and 21 to 39.~~

Comment 3: Southern Rubber Boa Surveys

CDFW is concerned that the measure proposed for avoidance of southern rubber boa in the MND is insufficient to avoid impacts to the species. Southern rubber boa is a threatened species pursuant to the California Endangered Species Act (Fish & G. Code, §§ 2050 et seq.). Southern rubber boa is primarily fossorial and therefore difficult to detect and fully avoid. Southern rubber boa may be injured, killed, and its habitat impacted by any intensity of vegetation management; foot, vehicle, and equipment traffic; deposition of chips deeper than 2 inches; covering of rocks, boulders, and outcrops; and other activities.

Page 65 of the NES reports that “southern rubber boa has a high potential to occur due to both historical records and the presence of habitat at Culverts 21 through 39.” Board-check field surveys were negative in August and September 2025. However, these surveys were not conducted during the active period (April to June) for this species. To maximize the potential for detection, surveys should be conducted at the appropriate time of year and under appropriate conditions (southern rubber boa is most active at night).

To support Caltrans in avoiding or reducing wildlife impacts to a level of less than significant, CDFW recommends Mitigation Measure AMM BIO-13 is revised as follows, with additions in **bold italics** and removals in ~~strike through~~:

AMM BIO-13 Southern Rubber Boa ~~Preconstruction~~ **Focused Surveys and Daily Inspections (Revised)**

A CDFW-approved qualified biologist that is knowledgeable about the species' natural history, habitat requirements, seasonal movements, and range shall perform ~~One diurnal preconstruction survey~~ ***surveys*** ~~should be conducted~~ at each culvert location, including visible inspections and rock and log turning searches. These ~~preconstruction~~ ***surveys shall*** ~~would be~~ conducted ~~within 3 days of construction, and ideally between April and June, when the species is active and not in hibernation,~~ ***and under the appropriate conditions (nighttime). Prior to the start of Project activities, the qualified biologist shall identify and flag for avoidance habitat features***

utilized by southern rubber boa. Features include, and are not limited to, rocky outcrops, artificial cover (boards, carpet, metal sheeting, etc.), boulders, rocks, downed logs, thick duff, and burrows. During Project activities, the qualified biologist shall perform daily clearance inspections throughout the Project area, including travel ways prior to use to avoid southern rubber boa. No chip or slash deposition should occur on habitat features flagged by the qualified biologist. Chip deposition should be limited to 2 inches or less within southern rubber boa range. Off-road vehicle and heavy equipment use should be avoided to decrease the risk of crushing southern rubber boa. Where vehicles and heavy equipment must be used off-road, those travel ways should be carefully raked to remove the duff layer, increasing the visibility of boa that may be present and the duff carefully raked back into place when operations are complete. If impacts to southern rubber boa cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081).

Comment 4: Nesting Bird Surveys

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: Section 3503 states that it is 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) or 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 rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

The MND includes Mitigation Measure BIO-14 Nesting Bird Surveys, which calls for surveys to be “ongoing through the project duration during the nesting bird season (February 1 to September 30),” which suggests that surveys are not required outside of this season. It also calls for a buffer around nests, but does not stipulate details of the buffer markings, duration, or biologist authority to halt work. CDFW considers the mitigation measure for nesting birds in the MND to be inadequate in scope and timing to avoid or reduce impacts to nesting birds to a level less than significant.

CDFW recommends that Project construction activities are conducted outside of the peak nesting bird season. CDFW also recommends the completion of nesting bird surveys regardless of the time of year to ensure that impacts to nesting birds and their nests and eggs are avoided. The timing of the nesting season varies greatly depending on several factors, such as bird species, weather conditions in any given year, and long-term climate changes (e.g., drought, warming, etc.). In response to warming, birds have been reported to breed earlier, thereby reducing temperatures that nests are exposed to during breeding and tracking shifts in availability of resources. CDFW staff have observed that climate change conditions may result in the nesting bird season occurring earlier and later in the year than historical nesting season dates. CDFW recommends that disturbance of occupied nests of migratory birds and raptors within the Project site and surrounding area be avoided any time birds are nesting on site. CDFW therefore recommends the completion of nesting bird surveys regardless of the time of year to ensure compliance with all applicable laws pertaining to nesting and migratory birds.

The MND includes Mitigation Measure BIO-15 Nest Monitoring, which calls for daily monitoring of active nests in the Biological Study Area (BSA). The BSA includes either a 500 foot buffer around the active work areas, or extends to the Right-of-Way (ROW) line if the ROW is less than 500 feet from the work area. CDFW is concerned that nesting birds outside these boundaries could be disrupted by Project activities. For instance, the ROW line could be just 200 feet from the work area, and a raptor nest 250 feet away could be excluded from monitoring under the current measure. To reduce impacts to a level less than significant, CDFW recommends that the measure be revised to account for minimum avoidance buffers of 300 feet for passerines and 500 feet for raptors.

To support Caltrans in avoiding or reducing impacts to nesting birds to a level of less than significant, CDFW recommends Mitigation Measures BIO-14 and BIO-15 are revised as follows, with additions in **bold italics** and removals in ~~strike through~~:

AMM BIO-14 Nesting Bird Surveys (**Revised**)

Preconstruction surveys for Nesting Birds and Raptors should be conducted no more than 3 days prior to vegetation removal or ground-disturbing activities. **Regardless of the time of year**, Nesting Bird Surveys should be **conducted by a CDFW-approved qualified biologist** ~~ongoing through the project duration during the nesting bird season (February 1 to September 30)~~ to ensure no disturbances to protected nesting activities. **Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground.** If nests are identified, a protective buffer (~~typically at least~~ **at least** 300 feet for songbirds and **at least** 500 feet for raptors) shall be established. **Construction activities may not occur inside the established buffers, which shall remain on-site until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.**

AMM BIO-15 Nest Monitoring (**Revised**)

All active nests ~~in the BSA should~~ **with the potential to be disturbed by Project activities shall** be monitored daily **by the CDFW-approved qualified biologist** to ensure protective buffers are maintained and to minimize nest disturbances. **Nest buffers are species specific and shall be at least 300 feet for passerines and 500 feet for raptors. Once the buffer is established, the CDFW-approved qualified 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. Following documentation of baseline conditions, buffer sizes and survey areas may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. If the qualified biologist determines that Project activities may be causing an adverse reaction, the qualified biologist shall increase the buffer accordingly.**

Comment 5: Burrowing Owl Surveys

On October 10, 2024, the Fish and Game Commission determined that western burrowing owl warrants protection as a candidate species under the California Endangered Species Act (Fish & G. Code, § 2050 et seq.). During the candidacy period, western burrowing owl will be afforded the same protection as threatened and endangered species under CESA. If Project activities, including relocation, could result in take, appropriate CESA authorization (i.e., Incidental Take Permit under Fish and Game Code section 2081) should be obtained prior to commencement of Project activities.

Take of individual burrowing owls and their nests or eggs 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.” Fish and Game Code sections 3503, 3503.5, and 3513 afford protective measures as follows: section 3503 states that it is 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) or 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 rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. § 703 et seq.).

The MND and NES do not mention burrowing owls. Burrowing owl habitat, however, is identified in the Burrowing Owl Range (CWHR B269, ds907) and Burrowing Owl Predicted Habitat (CHWR B269, ds2184) layers in the Biogeographic Information and Observation System (BIOS). These layers suggest that burrowing owls may be located on the northern end of the Project area, especially near culverts 1, 2, and 3.

Because the MND lacks the findings of recent focused surveys for burrowing owl following the guidelines in the *Staff Report on Burrowing Owl Mitigation*,² or other protocol agreed upon by CDFW, the number and locations of suitable and occupied burrows within the Project site are unknown. Given the lack of results from focused surveys for burrowing owl following recommended or approved protocols and the lack of survey reports, CDFW is limited in its ability to provide biological expertise to support Caltrans in reducing impacts to burrowing owl to a level less than significant. CDFW recommends that the MND is revised to include the results of four focused surveys for burrowing owl within the all appropriate habitat areas, including survey reports,³ following the guidelines outlined in Appendix D of the *Staff Report on Burrowing Owl Mitigation* and to incorporate appropriate avoidance, minimization, and mitigation measures for burrowing owl. Focused surveys are needed to inform appropriate avoidance, minimization, and mitigation measures and support Caltrans in avoiding or reducing impacts to burrowing owl to a level less than significant. CDFW requests that if burrowing owls are detected during focused surveys, survey results are submitted to CDFW, and

² California Department of Fish and Game (CDFG). 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Available for download at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>

³ Survey reports should include details on survey methods and results, including, but not limited to, the names and qualifications of surveyor(s); a description of survey methods; a description of the conditions of the project site and recent photos; map(s) showing the locations of all suitable burrows, occupied burrows, burrowing owls, and burrowing owl sign; descriptions of burrowing owl behavior observed; California Natural Diversity Database (CNDDDB) field survey forms, etc. For more information, see Appendix D, Survey Reports, of the CDFW 2012 Staff Report on Burrowing Owl Mitigation.

that Caltrans initiate consultation with CDFW to identify a path forward regarding the protection of burrowing owls.

To support Caltrans in avoiding or reducing impacts to burrowing owl to a level less than significant, CDFW recommends that the following measure is included:

AMM BIO-[A]: Focused and Pre-Construction Burrowing Owl Surveys (New)

No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall be conducted by a CDFW-approved qualified biologist. CDFW strongly recommends that the habitat assessment is conducted according to the specifications of the Staff Report on Burrowing Owl Mitigation (2012 or most recent version).

If the habitat assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a CDFW-approved qualified biologist prior to vegetation removal or ground-disturbing activities. CDFW strongly recommends that focused surveys are conducted in accordance with the Staff Report on Burrowing Owl Mitigation (2012 or most recent version)⁴. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent shall begin coordination with CDFW immediately, and shall submit the results of focused surveys to CDFW as soon results become available and before commencement of any Project activities, including any vegetation- or ground-disturbing activities. CDFW recommends that the information included in the survey results be consistent with Appendix D of the Staff Report on Burrowing Owl Mitigation, including a detailed map showing locations of all burrowing owls, burrowing owl sign, potential burrows, and occupied burrows (occupied means at least one burrowing owl or its sign has been observed within the last three years; may be indicated by owl sign including feathers, pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site); a description of the behavior of burrowing owls during surveys; a description of survey methods; and other items listed in Appendix D of the Staff Report on Burrowing Owl Mitigation under "Survey Reports." Consultation with CDFW and USFWS must be completed prior to commencement of any Project activities, including vegetation- or ground-disturbing activities. If impacts to occupied burrowing owl habitat or burrow(s) or burrowing owl individuals, nests, or eggs cannot be avoided, appropriate CESA authorization (i.e., Incidental Take Permit under Fish and Game Code section 2081(b)) should be obtained from CDFW prior to commencement of Project activities, including vegetation- or ground-disturbing activities.

Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance. Preconstruction surveys should be repeated when there is a pause in construction of more than 30 days. Preconstruction surveys should be performed by a CDFW-approved qualified biologist, and CDFW strongly recommends that preconstruction surveys follow the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation (2012 or most recent version). If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted and the qualified biologist shall coordinate with CDFW and USFWS. Project activities shall not recommence until consultation with CDFW and USFWS is completed.

⁴ California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency. Available for download at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>.

Comment 6: Bat Avoidance

Project activities include culvert work and vegetation and tree removal. Bats can use culverts and trees as roosting sites, and CDFW is concerned that the MND and NES do not address the potential for bat roosting within the Project's work areas. Page 12 of the NES states that "Caltrans determined that a focused survey was not required at this time." CDFW recommends that bat surveys be completed in all areas of suitable habitat, including culverts, trees, and nearby rock outcrops.

To support Caltrans in avoiding or reducing impacts to bats to a level less than significant, CDFW recommends that the following measure is included:

AMM BIO-[B]: Bat Surveys (New)

Prior to work activities, surveys of Project areas (including culverts, trees, rock outcrops, and structures) shall be conducted for the presence of daytime, nighttime, wintering (hibernacula), and maternity bat roosts by a CDFW-approved qualified bat biologist. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by a qualified biologist. 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 re-entry 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.

If active maternity roosts are identified in the work area or 500 feet extending from the work area, Project construction will only occur between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost. Maternity roosts shall not be evicted, excluded, removed, or disturbed. If active hibernacula are identified in the work area or 500 feet extending from the work area, a minimum 500-foot no-work buffer shall be provided around hibernacula. Buffers shall be left in place until the end of Project construction and activities or until a CDFW-approved qualified bat biologist determines that the hibernacula are no longer active. Project-related construction and activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise. Hibernacula roosts shall not be evicted, excluded, removed, or disturbed. I

Comment 7: Desert Tortoise

Consistent with CEQA Guidelines, Section 15380, the status of the desert tortoise as a threatened species pursuant to the federal Endangered Species Act (16 U.S.C. § 1531 et seq.) and an endangered species under the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. Desert tortoise populations have declined significantly in recent decades as a result of human activities in their native habitat including land development, off-road vehicle use, overgrazing, agricultural development, military activities, predation, and the spread of invasive plant

species.⁵ The desert tortoise population in the western Mojave Desert has declined by 90% since the 1980s. Desert tortoises can take up to 20 years to reach sexual maturity, which limits their ability to recover from even small losses in population numbers.

The MND and NES do not mention desert tortoise. Desert tortoise habitat, however, is identified in the Desert Tortoise Range (CWHR R005, ds905) and Desert Tortoise Predicted Habitat (CHWR R005, ds2387) layers in the Biogeographic Information and Observation System (BIOS). These layers suggest that desert tortoise may be located on the northern end of the Project area, especially near culverts 1, 2, and 3.

CDFW considers the MND to be inadequate to avoid or reduce impacts to desert tortoise to a level less than significant. To support Caltrans in avoiding or reducing impacts to a level of less than significant, CDFW recommends that the following measure is included:

AMM BIO-[C]: Focused and Pre-construction Desert Tortoise Surveys (New)

Prior to commencing Project activities, focused surveys for desert tortoise must be conducted by a CDFW-approved qualified biologist within and the Project area any staging areas according to protocols in Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise (USFWS 2019; <https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise%20Pre-project%20Survey%20Protocol%202019.pdf>), during the species' most active periods (April through May or September through October). CDFW recommends working with USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocol-level surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys. If desert tortoise is found to be present, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures. If impacts to desert tortoise cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081).

No more than 14 calendar days prior to start of Project activities and after any pause in Project activities lasting 30 days or more, a CDFW-approved qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS 2019 desert tortoise survey methodology (Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise; <https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise%20Pre-project%20Survey%20Protocol%202019.pdf>). Pre-construction surveys shall be completed using perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign within the Project area and 50-foot buffer zone. Pre-activity surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Results of the surveys shall be submitted to CDFW prior to construction start. If the pre-construction surveys confirm desert tortoise absence, the qualified biologist shall ensure desert tortoise do not enter the Project area. Should

⁵ U.S. Fish and Wildlife Service (USFWS). (2011). Revised recovery plan for the Mojave population of the desert tortoise (*Gopherus agassizii*). <https://www.fws.gov/sites/default/files/documents/USFWS.2011.RRP%20for%20the%20Mojave%20Desert%20Tortoise.pdf>.

desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.

Comment 8: Desert Bighorn Sheep

Desert bighorn sheep is a Fully Protected species (Fish & G. Code § 4700), which qualifies it as an endangered, rare, or threatened species under CEQA. Lambing season is highly variable, depending on patterns of precipitation, and could be from December 1 through June 30 in this area. Impacts from disease are a major threat to bighorn sheep in this area, and disease prevention is of the utmost importance. CDFW is also concerned that activities that could impede desert bighorn sheep access to water sources are avoided.

Desert bighorn sheep are unable to survive long periods of hot, arid conditions without water (Campbell and Remington, 1981). Research on desert bighorn sheep populations suggests that bighorn sheep will modify their water-use activity patterns in response to disturbance from construction activities (Campbell and Remington, 1981; Leslie and Douglas 1980). Sheep were observed changing their water visits to the short period between dawn and the start of the workday, or postponing water use until the end of the workday (Campbell and Remington, 1981). Additionally, sheep shifted from frequent opportunistic water use to brief, infrequent use of water amidst construction activities (Campbell and Remington, 1981). Bighorn sheep have also been observed to change water-sourcing locations due to construction activity when multiple water sources are available. These behavior changes may cause resulting changes in energy expenditure, which could be especially impactful during lambing and amid any other population stressors.

The MND and NES do not mention desert bighorn sheep. Desert bighorn sheep habitat, however, is identified in the Bighorn Sheep Range (CWHR M183, ds913) layer in the Biogeographic Information and Observation System (BIOS). This layer suggests that desert bighorn sheep may be located within the Project area.

CDFW considers the MND to be inadequate to avoid or reduce impacts to desert bighorn sheep to a level less than significant. To support Caltrans in avoiding or reducing impacts to a level of less than significant, CDFW recommends that the following measure is included, with additions in ***bold italics***:

AMM BIO-[D]: Preconstruction Desert Bighorn Sheep Surveys (New)

Desert bighorn sheep is a fully protected species (Fish & G. Code, § 4700). CDFW will determine desert bighorn sheep habitat within the Project area based on data gathered by CDFW Wildlife Biologists. Caltrans, in conjunction with a CDFW-approved qualified biologist, will coordinate with CDFW to obtain information on desert bighorn sheep habitat, including lambing habitat and water sources, within the Project area in advance of Project activities, and Caltrans will implement appropriate avoidance measures to avoid impacts to desert bighorn sheep in these areas. Avoidance measures shall be in place prior to the start of construction and any ground-disturbing activities.

Limited Operating Period. Activities within desert bighorn sheep habitat will be avoided during the peak lambing period (December 1 through June 30). Furthermore, no sudden, loud noises (e.g., chainsaws, heavy machinery, low-elevation helicopter flights, blasting, pile driving, etc.) shall occur within 1 km of lambing habitat, and no low-elevation helicopter flights shall occur within 1 km of lambing habitat. Sound pressure levels shall not exceed 85 dB measured at 50 ft from the noise.

Pre-construction Surveys and Ongoing Monitoring. When work is being implemented in or within 1-km of desert bighorn sheep habitat, a CDFW-approved qualified biologist will assess presence of bighorn sheep in the vicinity of work areas. The qualified biologist will coordinate directly with CDFW Wildlife Biologists for guidance with specific questions as situations arise. If bighorn sheep are present within 1 km of the work area, work will be suspended in that area. The 1-km buffer may be reduced in coordination with CDFW if it is determined that bighorn sheep are not at risk. Factors such as distance of the activities from the sheep, nature of construction activities, duration of activities, topography, work area located in trees or other natural features that attenuate the sound, etc. should be taken into consideration. The qualified biologist will be present at the work site to monitor for bighorn sheep during all activities in bighorn sheep habitat. The qualified biologist will work with project personnel to cease or defer activities when bighorn sheep are close enough to be disturbed by the activities.

Disease Prevention. A boot disinfection station will be set up at the staging area. If workers have any potential contact with grounds occupied by sheep or goats (for example, at home, visiting a farm, attending a County fair, going to a petting zoo, etc.), they shall disinfect their boots before going to the work site. Workers will also ensure that their vehicles/equipment are washed at either a project wash station or a commercial wash if there is a chance that the tires or interior may be contaminated. Alternatively, personnel can be required to change their footwear so that contaminated footwear is not used in work vehicles or on the Project site.

Water Sources. In the event that bighorn sheep abandon the use of one or more water sources as a result of disturbance associated with the Project, Caltrans shall create additional water sources after consulting with appropriate agency personnel (CDFW and USFWS) to select locations and provide assistance in establishing additional water sources.

Comment 9: Crotch's Bumble Bee

CDFW is concerned that the proposed survey for Crotch's bumble bee in the MND does not identify a sufficient lead time to reliably detect the species in the Project area. Crotch's bumble bee primarily nests in late February through late October underground in abandoned small mammal burrows, and may also nest under perennial bunch grasses or thatched annual grasses, under-brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2018). Overwintering sites utilized by Crotch's bumble bee mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Despite the presence of suitable Crotch's bumble bee habitat on site, the MND does not provide information as to what criteria would be used to conclude that the species is not present. Without adequate presence/absence surveys, ground disturbance and vegetation removal associated with Project implementation during the breeding season could result in the incidental loss of breeding success or otherwise lead to nest abandonment in areas adjacent to the Project site. Project activities may result in temporal or permanent loss of colonies, and suitable nesting and foraging habitat.

To support Caltrans in avoiding or reducing impacts to Crotch's bumble bee to a level of less than significant, CDFW recommends that Mitigation Measure AMM BIO-20 is revised as follows, with additions in ***bold italics*** and removals in ~~strike through~~:

AMM BIO-20 **Focused and** Pre-construction Invertebrate Species Surveys
(Revised)

Focused surveys for Crotch's bumble bee shall be performed by a CDFW-approved qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyors track lines to document that the entire site was covered during field surveys. b) Field survey conditions that should include names of qualified entomologists and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. c) Maps showing the location of nests/colonies. d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).

Prior to any ground disturbance, a **CDFW-approved** qualified biologist shall survey for potential habitat suitability and presence of Crotch's bumble bee (*Bombus crotchii*). The habitat assessment for Crotch's bumble bee shall be performed according to the 2023 CDFW Survey Considerations for Candidate Bumble Bee (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150>).

conduct a The preconstruction Crotch's bumblebee survey must be conducted by a contractor-supplied biologist no more than 1 week prior to Project activities within the Biological Study Area. The surveys shall **follow the survey guidelines outlined in CDFW's Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (2023) and** include 100 percent visual coverage and include a minimum 50-foot buffer in adjacent habitat. If a Crotch's bumble bee or bumble bee nest is located, the Resident Engineer and Caltrans **shall halt Project activities and notify CDFW immediately. If impacts to Crotch's bumble bee cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081).** biologist must be contacted and additional measures and/or agency coordination would be required.

Comment 10: CDFW's Lake and Streambed Alteration Program

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit debris, waste or other materials that could pass into any river, stream or lake. Note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and water courses with a subsurface flow. It may also apply to work undertaken within the

flood plain of a body of water.

Page 58 of the MND indicates that CDFW jurisdictional waters may be impacted by the Project. Given the presence of streams on-site that will be impacted by the Project, CDFW recommends the Project proponent notify CDFW's Lake and Streambed Alteration Program.

To support Caltrans in avoiding or reducing impacts to streams to a level less than significant, CDFW recommends the revised MND include the following mitigation measure:

AMM BIO-[E]: CDFW's Lake and Streambed Alteration Program (New)

Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, OR the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.

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 (CNDDDB). The CNDDDB field survey form can be filled out and submitted online at the following link:

<https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The types of information reported to CNDDDB can be found at the following link:

<https://www.wildlife.ca.gov/Data/CNDDDB/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 Caltrans in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Chris Briggs, Senior Environmental Scientist (Specialist), at 909-758-6774 or Christopher.Briggs@wildlife.ca.gov.

Sincerely,

DocuSigned by:

84F92FFEEFD24C8...

Kim Freeburn
Environmental Program Manager

Attachment 1: MMRP for CDFW-Proposed Mitigation Measures

ec: Heather Brashear, CDFW
Heather.Brashear@Wildlife.ca.gov

Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@lci.ca.gov

ATTACHMENT 1: MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

Mitigation Measures	Timing, Methods	Responsible Parties
<p>AMM BIO-3 Special-status Plant Surveys (Revised)</p> <p>A rare plant and rare insect host plant habitat suitability assessment and protocol survey should be conducted by a CDFW-approved qualified biologist within the BSA, during the floristic period. All surveys would follow guidelines from USFWS and CDFW. Where suitable habitat is identified, protocol-level surveys for the special-status plant and rare insect host plant species would be conducted. Results would be documented in a comprehensive Rare Plant and Rare Insect Host Plant Habitat Assessment and Survey Report. Surveys shall be conducted prior to any ground-disturbance and shall follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (see https://www.wildlife.ca.gov/Conservation/Plants). Should any state-listed plant species be present in the Project area, the Project proponent shall obtain appropriate CESA authorization for those species prior to the start of Project activities. Should other special-status plants or natural communities be present in the Project area, on-site or off-site habitat restoration (whichever is applicable) and/or enhancement and preservation shall be conducted and discussed in detail in a <i>Habitat Mitigation and Monitoring Plan (HMMP) for California Sensitive Natural Communities and Special Status Plant Species</i>. Where habitat preservation is not available on-site, off-site land acquisition, management, and preservation shall be completed to offset the losses.</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>AMM BIO-11 Clearance Sweeps (Revised)</p> <p>Daily clearance sweeps within 2 hours prior to construction and daily (full-time) monitoring is required for all construction activities occurring within the BSA.</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>
<p>AMM BIO-13 Southern Rubber Boa Focused Surveys and Daily Inspections (Revised)</p> <p>A CDFW-approved qualified biologist that is knowledgeable about the species' natural history, habitat requirements, seasonal movements, and range shall perform surveys at each culvert location, including visible inspections and rock and log turning searches. These surveys shall be conducted between April and June, when the species is active and not in hibernation, and under the appropriate conditions (nighttime). Prior to the start of Project activities, the qualified biologist shall identify and flag for avoidance habitat features utilized by southern rubber boa. Features include, and are not limited to, rocky outcrops, artificial cover (boards, carpet, metal sheeting, etc.), boulders, rocks, downed logs, thick duff, and burrows. During Project activities, the qualified biologist shall perform daily clearance inspections throughout the Project area, including travel ways prior to use to avoid southern rubber boa. No chip or slash deposition should occur on habitat features flagged by the qualified biologist. Chip deposition should be limited to 2 inches or less within southern rubber boa range. Off-road vehicle and heavy equipment use should be avoided to decrease the risk of crushing southern rubber boa. Where vehicles and heavy equipment must be used off-road, those travel ways should be carefully raked to remove the duff layer, increasing the visibility of boa that may be present and the duff carefully raked back into place when operations are complete. If impacts to southern rubber boa cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081).</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>
<p>AMM BIO-14 Nesting Bird Surveys (Revised)</p> <p>Preconstruction surveys for Nesting Birds and Raptors should be conducted no more than 3 days prior to vegetation removal or ground-disturbing activities. Regardless of</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>the time of year, Nesting Bird Surveys should be conducted by a CDFW-approved qualified biologist to ensure no disturbances to protected nesting activities. Pre-construction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the pre-construction nesting bird surveys, a qualified biologist shall establish an appropriate nest buffer to be marked on the ground. If nests are identified, a protective buffer (at least 300 feet for songbirds and at least 500 feet for raptors) shall be established. Construction activities may not occur inside the established buffers, which shall remain on-site until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.</p>		
<p>AMM BIO-15 Nest Monitoring (Revised)</p> <p>All active nests with the potential to be disturbed by Project activities shall be monitored daily by the CDFW-approved qualified biologist to ensure protective buffers are maintained and to minimize nest disturbances. Nest buffers are species specific and shall be at least 300 feet for passerines and 500 feet for raptors. Once the buffer is established, the CDFW-approved qualified 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. Following documentation of baseline conditions, buffer sizes and survey areas may be determined by the qualified biologist familiar with the nesting phenology of the nesting species and based on nest and buffer monitoring results. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>fledged or the Project has been completed. If the qualified biologist determines that Project activities may be causing an adverse reaction, the qualified biologist shall increase the buffer accordingly.</p>		
<p>AMM BIO-[A]: Focused and Pre-Construction Burrowing Owl Surveys (New)</p> <p>No less than 60 days prior to the start of Project-related activities, a burrowing owl habitat assessment shall be conducted by a CDFW-approved qualified biologist. CDFW strongly recommends that the habitat assessment is conducted according to the specifications of the Staff Report on Burrowing Owl Mitigation (2012 or most recent version).</p> <p>If the habitat assessment demonstrates suitable burrowing owl habitat, then focused burrowing owl surveys shall be conducted by a CDFW-approved qualified biologist prior to vegetation removal or ground-disturbing activities. CDFW strongly recommends that focused surveys are conducted in accordance with the Staff Report on Burrowing Owl Mitigation (2012 or most recent version)⁶. If burrowing owls are detected during the focused surveys, the qualified biologist and Project proponent shall begin coordination with CDFW immediately, and shall submit the results of focused surveys to CDFW as soon results become available and before commencement of any Project activities, including any vegetation- or ground-disturbing activities. CDFW recommends that the information included in the survey results be consistent with Appendix D of the Staff Report on Burrowing Owl Mitigation, including a detailed map showing locations of all burrowing owls, burrowing owl sign, potential burrows, and occupied burrows (occupied means at least one burrowing owl or its sign has been observed within the last three years; may be indicated by owl sign including feathers, pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance or perch site); a description of the behavior of burrowing owls during surveys; a description of survey methods; and other items listed in Appendix</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

⁶ California Department of Fish and Wildlife (CDFW). 2012. Staff Report on Burrowing Owl Mitigation. State of California, Natural Resources Agency. Available for download at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>.

Mitigation Measures	Timing, Methods	Responsible Parties
<p>D of the Staff Report on Burrowing Owl Mitigation under “Survey Reports.” Consultation with CDFW and USFWS must be completed prior to commencement of any Project activities, including vegetation- or ground-disturbing activities. If impacts to occupied burrowing owl habitat or burrow(s) or burrowing owl individuals, nests, or eggs cannot be avoided, appropriate CESA authorization (i.e., Incidental Take Permit under Fish and Game Code section 2081(b)) should be obtained from CDFW prior to commencement of Project activities, including vegetation- or ground-disturbing activities.</p> <p>Preconstruction burrowing owl surveys shall be conducted no less than 14 days prior to the start of Project-related activities and within 24 hours prior to ground disturbance. Preconstruction surveys should be repeated when there is a pause in construction of more than 30 days. Preconstruction surveys should be performed by a CDFW-approved qualified biologist, and CDFW strongly recommends that preconstruction surveys follow the recommendations and guidelines provided in the Staff Report on Burrowing Owl Mitigation (2012 or most recent version). If the preconstruction surveys confirm occupied burrowing owl habitat, Project activities shall be immediately halted and the qualified biologist shall coordinate with CDFW and USFWS. Project activities shall not recommence until consultation with CDFW and USFWS is completed.</p>		
<p>AMM BIO-[B]: Bat Surveys (New)</p> <p>Prior to work activities, surveys of Project areas (including culverts, trees, rock outcrops, and structures) shall be conducted for the presence of daytime, nighttime, wintering (hibernacula), and maternity bat roosts by a CDFW-approved qualified bat biologist. Two spring surveys (April through June) and two winter surveys (November through January) shall be performed by a qualified biologist. 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 re-entry survey (start one hour before sunrise and last for two hours), and one daytime visual inspection of all potential roosting habitat</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>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.</p> <p>If active maternity roosts are identified in the work area or 500 feet extending from the work area, Project construction will only occur between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost. Maternity roosts shall not be evicted, excluded, removed, or disturbed. If active hibernacula are identified in the work area or 500 feet extending from the work area, a minimum 500-foot no-work buffer shall be provided around hibernacula. Buffers shall be left in place until the end of Project construction and activities or until a CDFW-approved qualified bat biologist determines that the hibernacula are no longer active. Project-related construction and activities shall not occur between 30 minutes before sunset and 30 minutes after sunrise. Hibernacula roosts shall not be evicted, excluded, removed, or disturbed.</p>		
<p>AMM BIO-[C]: Focused and Pre-construction Desert Tortoise Surveys (New)</p> <p>Prior to commencing Project activities, focused surveys for desert tortoise must be conducted by a CDFW-approved qualified biologist within the Project area and any staging areas according to protocols in Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise (USFWS 2019; https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2019.pdf), during the species' most active periods (April through May or September through October). CDFW recommends working with USFWS and CDFW concurrently to ensure a consistent and adequate approach to planning survey work and that biologists retained to complete desert tortoise protocol-level surveys submit their qualifications to CDFW and USFWS prior to initiation of surveys. If desert tortoise is found</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>to be present, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures. If impacts to desert tortoise cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081).</p> <p>No more than 14 calendar days prior to start of Project activities and after any pause in Project activities lasting 30 days or more, a CDFW-approved qualified biologist shall conduct pre-construction surveys for desert tortoise as described in the USFWS 2019 desert tortoise survey methodology (Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise; https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2019.pdf).</p> <p>Pre-construction surveys shall be completed using perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign within the Project area and 50-foot buffer zone. Pre-activity surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Results of the surveys shall be submitted to CDFW prior to construction start. If the pre-construction surveys confirm desert tortoise absence, the qualified biologist shall ensure desert tortoise do not enter the Project area. Should desert tortoise presence be confirmed during the survey, the qualified biologist shall immediately notify CDFW and USFWS to determine appropriate avoidance, minimization, and mitigation measures.</p>		
<p>AMM BIO-[D]: Preconstruction Desert Bighorn Sheep Surveys (New)</p> <p>Desert bighorn sheep is a fully protected species (Fish & G. Code, § 4700). CDFW will determine desert bighorn sheep habitat within the Project area based on data gathered by CDFW Wildlife Biologists. Caltrans, in conjunction with a CDFW-approved qualified biologist, will coordinate with CDFW to obtain information on desert bighorn sheep</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>habitat, including lambing habitat and water sources, within the Project area in advance of Project activities, and Caltrans will implement appropriate avoidance measures to avoid impacts to desert bighorn sheep in these areas. Avoidance measures shall be in place prior to the start of construction and any ground-disturbing activities.</p> <p><u>Limited Operating Period.</u> Activities within desert bighorn sheep habitat will be avoided during the peak lambing period (December 1 through June 30). Furthermore, no sudden, loud noises (e.g., chainsaws, heavy machinery, low-elevation helicopter flights, blasting, pile driving, etc.) shall occur within 1 km of lambing habitat, and no low-elevation helicopter flights shall occur within 1 km of lambing habitat. Sound pressure levels shall not exceed 85 dB measured at 50 ft from the noise</p> <p><u>Pre-construction Surveys and Ongoing Monitoring.</u> When work is being implemented in or within 1-km of desert bighorn sheep habitat, a CDFW-approved qualified biologist will assess presence of bighorn sheep in the vicinity of work areas. The qualified biologist will coordinate directly with CDFW Wildlife Biologists for guidance with specific questions as situations arise. If bighorn sheep are present within 1 km of the work area, work will be suspended in that area. The 1-km buffer may be reduced in coordination with CDFW if it is determined that bighorn sheep are not at risk. Factors such as distance of the activities from the sheep, nature of construction activities, duration of activities, topography, work area located in trees or other natural features that attenuate the sound, etc. should be taken into consideration. The qualified biologist will be present at the work site to monitor for bighorn sheep during all activities in bighorn sheep habitat. The qualified biologist will work with project personnel to cease or defer activities when bighorn sheep are close enough to be disturbed by the activities.</p>		

Mitigation Measures	Timing, Methods	Responsible Parties
<p><u>Disease Prevention.</u> A boot disinfection station will be set up at the staging area. If workers have any potential contact with grounds occupied by sheep or goats (for example, at home, visiting a farm, attending a County fair, going to a petting zoo, etc.), they shall disinfect their boots before going to the work site. Workers will also ensure that their vehicles/equipment are washed at either a project wash station or a commercial wash if there is a chance that the tires or interior may be contaminated. Alternatively, personnel can be required to change their footwear so that contaminated footwear is not used in work vehicles or on the Project site.</p> <p><u>Water Sources.</u> In the event that bighorn sheep abandon the use of one or more water sources as a result of disturbance associated with the Project, Caltrans shall create additional water sources after consulting with appropriate agency personnel (CDFW and USFWS) to select locations and provide assistance in establishing additional water sources.</p>		
<p>AMM BIO-20 Focused and Pre-construction Invertebrate Species Surveys (Revised)</p> <p>Focused surveys for Crotch's bumble bee shall be performed by a CDFW-approved qualified entomologist familiar with the species behavior and life history to determine the presence/absence of Crotch's bumble bee within one year prior to vegetation removal and/or grading. Surveys should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). Survey results, including negative findings, should be submitted to CDFW prior to implementing Project-related ground-disturbing activities. At minimum, a survey report should provide the following: a) A description and map of the survey area, focusing on areas that could provide suitable habitat for Crotch's bumble bee. CDFW recommends the map show surveyors track lines to document that the entire site was covered during field surveys.</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>

Mitigation Measures	Timing, Methods	Responsible Parties
<p>b) Field survey conditions that should include names of qualified entomologists and brief qualifications; date and time of survey; survey duration; general weather conditions; survey goals, and species searched. c) Maps showing the location of nests/colonies. d) A description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found. A sufficient description of biological conditions, primarily impacted habitat, should include native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species).</p> <p>Prior to any ground disturbance, a CDFW-approved qualified biologist shall conduct a preconstruction Crotch's bumblebee survey no more than 1 week prior to Project activities within the Biological Study Area. The survey shall follow the survey guidelines outlined in CDFW's Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (2023) and include 100 percent visual coverage and include a minimum 50-foot buffer in adjacent habitat. If a Crotch's bumble bee or bumble bee nest is located, Caltrans shall halt Project activities and notify CDFW immediately. If impacts to Crotch's bumble bee cannot be avoided, the Project shall be postponed until appropriate CESA authorization is obtained. This may include an incidental take permit (Fish and Game Code, § 2081)..</p>		
<p>AMM BIO-[E]: CDFW's Lake and Streambed Alteration Program (New)</p> <p>Prior to construction and issuance of any grading permit, the Project Sponsor shall obtain written correspondence from the California Department of Fish and Wildlife (CDFW) stating that notification under section 1602 of the Fish and Game Code is not required for the Project, OR the Project Sponsor should obtain a CDFW-executed Lake and Streambed Alteration Agreement, authorizing impacts to Fish and Game Code section 1602 resources associated with the Project.</p>	<p>See Mitigation Measure</p>	<p>Caltrans</p>