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June 21, 2024

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California Department of Transportation, District 8
464 West Fourth Street, 6th Floor, MS 823
San Bernardino, CA 92401

Subject: Initial Study/Mitigated Negative Declaration, SBD-18 Baldwin Lake Pavement Rehabilitation (Project), State Clearinghouse No. 2024051063, County of San Bernardino

Dear Ms. Lieng:

The California Department of Fish and Wildlife (CDFW) received an Initial Study/Mitigated Negative Declaration (IS/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 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: Caltrans District 8

Objective: The objective of the Project is to preserve and extend the life of the pavement, improve ride quality, and enhance safety for motorist on State Route 18 (SR-18) in San Bernardino County from Postmile (PM) 56.2 to PM 66.9. Primary Project activities include:

- Conducting 0.25' of cold plane and overlay with Hot Mix Asphalt-Type A (HMA-A)

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.

- Constructing 8-foot (ft) outside shoulders with tapered edges and shoulder backing at PM 60.5 to PM 62.4 and PM 64.9 to PM 66.8 on both sides of the highway using a pavement structural section of 0.5' HMA-A over 0.5' Class 2 Aggregate Base
- Performing localized digouts of 0.4- 0.5 ft depth where needed
- Installing median rumble strips and bicyclist-friendly shoulder rumble strips
- Replacing sign panels at PM 59.96 and PM 66.99
- Replacing existing Metal Beam Guardrail (MBGR) with Midwest Guardrail System (MGS)
- Replacing end treatments
- Removing existing rock slope protection (RSP) and constructing channel lining under Cushenbury Creek Bridge
- Upsizing 3 culverts at PM 60.91, PM 62.04, and PM 63.75
- Repairing 9 Culverts
- Installing delineators at edge of pavement

Location: The Project occurs on SR-18 near Big Bear, Holcomb Valley, and Lucerne Valley, and includes the Cushenbury area in Lucerne Valley. The Project begins at PM 56.2, 2.0 miles south of Holcomb Valley and extends to Camp Rock Road near PM 66.9 in Lucerne Valley.

Timeframe: Anticipated start and end dates are not provided in the IS/MND, but Project delivery is expected in 2026. The Project is estimated to take 205 working days to complete.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans District 8 in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

I. Mitigation Measure or Alternative and Related Impact Shortcoming

COMMENT #1: Special-status and Sensitive Plants, and Sensitive Natural Communities

Section #2.1.4, Page #13-14

Issue: The Project has the potential to result in impacts to rare pebble plain habitat in Big Bear and critical habitat for rare carbonate plants in Cushenbury. The Project has the potential to result in impacts to the following special-status plants (not an all-inclusive list): southern mountain buckwheat (*Eriogonum kennedyi* var. *austromontanum*) (California Rare Plant Ranking (CRPR) 1B.2), Cushenbury milk vetch (*Astragalus albens*) (CRPR 1B.1), San Bernardino milk vetch (*Astragalus bernardinus*) (CRPR 1B.2), alkali mariposa lily (*Calochortus striatus*) (CRPR 1B.2), Heckard's paintbrush (*Castilleja montigena*) (CRPR 4.3), Cushenbury buckwheat (*Eriogonum ovalifolium* var. *vineum*) (CRPR 1B.1), Cushenbury oxytheca (*Acanthiscyphus parishii*) (CRPR 1B.1), Parish's daisy (*Erigeron parishii*) (CRPR 1B.1), and San Bernardino bluegrass (*Poa atropurpurea*) (CRPR 1B.2). Carbonate plants include Cushenbury buckwheat, Cushenbury milk-vetch, Cushenbury oxytheca, and Parish's daisy. Southern mountain buckwheat is found on pebble plain habitat and is associated with Bear Valley sandwort (*Arenaria ursina*) and ash-gray (Indian) paintbrush (*Castilleja cinerea*).

Specific impact: Based on the California Natural Biodiversity Database (CNDDDB), southern mountain buckwheat, Cushenbury milk vetch, San Bernardino milk vetch, alkali mariposa lily, Cushenbury buckwheat, and San Bernardino bluegrass have been observed within the Project area. The Project will widen the road to include 8-foot shoulders and remove RSP. Through these activities, the Project has the potential to impact special-status plants through mortality, modification of hydrology, compaction of soil, and introduction of invasive species. CDFW is particularly concerned with potential

impacts to rare plants within pebble plain habitat in Big Bear and carbonate plants in Cushenbury.

Why impact would occur: The IS/MND and supporting documents are inconsistent as to whether sensitive, rare, or special status plants will be impacted by the Project, because while the IS/MND indicates that surveys conducted for federal and state listed plant species in 2022 and 2023 resulted in negative findings for special status plants within the Project Impact Area (PIA), the IS/MND's Natural Environmental Study, Minimal Impacts (NESMI) document recognizes that Project activities would result in direct impacts to approximately 21 Heckard's paintbrush and southern mountain buckwheat. CDFW suggests that prior to adoption the MND be revised to provide clarity on the project's impacts to sensitive plants.

CDFW is concerned with potential impacts to pebble plain habitat that occurs adjacent to the Project along the roadway in Big Bear that may be impacted through shoulder expansion. The NESMI anticipates 0.184 acres of impacts to pebble plain, while the IS/MND anticipates work within critical habitat for carbonate plants. CDFW has provided recommended revisions to Bio-5-Pebble-1, and provided an additional measure, to address these concerns.

Evidence impact would be significant: Special-status plants with a CNPS CRPR ranking of series 3 and 4 warrant the consideration of impacts and mitigation thereof under CEQA on the basis that these species are declining in abundance, hold limited taxonomic information, and/or hold other factors which require that they be tracked by CDFW through CNDDDB. Furthermore, Special-status plants with a CNPS CRPR ranking of series 1B and 2B meet the definition for CESA listing as rare, threatened, and/or endangered. Many of the CNPS CRPR listed plants have not been reassessed from the time of their listing and said listing ranks may not currently reflect their status in a manner that is up to date with stochastic weather events, extreme heat, and anthropogenic impacts. The Project may result in direct take of special-status plants with a CNPS CRPR ranking of 4 or 1B and in the loss of the habitats to these rare species.

Recommended Potentially Feasible Mitigation Measure(s): CDFW appreciates the incorporation of BIO-11-Plant-1 and BIO 12-Plant-2 aimed to avoid and minimize impacts to special-status plants, and BIO-5-Pebble-1 aimed to avoid impacts to pebble plain habitat. CDFW recommends the below revisions to BIO-5-Pebble-1 (edits in ~~strike through~~ and **bold**), and the adoption of **BIO-Plant 4** in the final MND.

BIO-5-Pebble-1: Avoid Impacts to Pebble Plain Species on SR 18:

To protect plant species occurring in pebble plain soil types when working on SR 18 at ~~PM 57.5 to 58.6~~, all work ~~shall would~~ occur within the pavement or on the opposite side of the roadway **away** from occurrences of all pebble plain species.

BIO-Plant 4: Compensatory Mitigation for Non-CESA listed Special-status Plants and Sensitive Natural Communities (New):

Permanent impacts (i.e., areas slated for paving or areas that will not return to their baseline ecological state and form within one calendar-year of impacts occurring) (hereafter referred to as 'permanent impacts') to non CESA-listed rare, sensitive, special-status plants, shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts (i.e., areas that will return to their baseline ecological state and form within one-calendar year of impacts occurring) (hereafter as, 'temporary impacts') to non CESA listed rare, sensitive, special-status plants and their habitats, and Sensitive Natural Communities, shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. Compensatory mitigation for impacts to non CESA-listed rare, sensitive, special-status plant species and Sensitive Natural Communities by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-

ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, or a combination of both, in coordination with CDFW. If CESA-listed plants are present and impacts cannot be fully avoided, a CESA ITP shall be obtained.

Comment #2: Southern Rubber Boa (*Charina bottae umbratica*)

Section #2.1.4, Page #15

Issue: The Project has the potential to result in permanent and temporary loss, degradation and impacts to southern rubber boa habitat. Direct take of southern rubber boa may also occur as a result of Project activities.

Specific impacts: The Project includes the potential for direct take of southern rubber boa through crushing or vehicle and equipment strike, and indirect take associated with Project activities such as reduction of habitat and habitat quality associated with road and shoulder expansion.

Why would impacts occur: The NESMI mentions that there is suitable habitat for southern rubber boa within 5 miles of the Project site (Biological Study Area [BSA], but the IS/MND does not consider the potential presence of southern rubber boa within the immediate Project area due to their elusive nature and lack of suitable habitat. However, through CNDDDB, CDFW identified three occurrences for southern rubber boa adjacent to the SR 18 within the Project area in Big Bear.

Evidence impacts would be significant: Southern rubber boa is a state listed threatened species. The primary threat to southern rubber boa is habitat loss and disturbance. The Project partly occurs in Big Bear, one of two geographic areas where Southern rubber boa is known to occur.

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the adoption of BIO-Reptile 1 to help avoid and minimize impacts to southern rubber boa.

BIO-Reptile 1: Southern Rubber Boa Pre-construction surveys (New):

Caltrans shall ensure that impacts to southern rubber boa (SRB) are fully avoided absent take authorization. Within suitable habitat, Caltrans shall not disturb rock outcrops from November through April. At other times of year, Permittee shall have a Designated Biologist with appropriate authorizations check for SRB in suitable habitat under logs, rocks, and vegetation in the Project areas and adjacent to Project areas immediately prior to commencing the Project each day. If SRB is detected, it shall be allowed to move out of the Project area of its own volition. If SRB is observed and/or fails to move out of harm's way, Permittee shall notify CDFW immediately.

Comment #3: Desert Tortoise (*Gopherus agassizii*)

Section #2.1.4, Page #15, 19, and elsewhere

Issue: The Project has the potential to result in permanent and temporary loss, degradation, and impacts to desert tortoise habitat. Direct take of desert tortoise may occur during the course of Project activities and for the life of the Project, such as, through crushing from equipment or vehicles.

Specific impact: The Project includes the potential for direct take of desert tortoise associated with vehicle and equipment strike, indirect take associated with Project activities, and reduction of habitat associated with road infrastructure expansion.

Why impacts would occur: A portion of the Project occurs within the Mojave Desert and is within the home range for desert tortoise. The IS/MND states that there are no

recent records for desert tortoise found within the PIA, but the NESMI identifies suitable habitat for desert tortoise present within and adjacent to the BSA. Although CNDDDB public records do not contain observations for desert tortoise within the BSA, CNDDDB's unprocessed data layer has observations of desert tortoise within 1-2 miles from the northern extent of the Project in Lucerne Valley.

Evidence impact would be significant: Desert tortoise was recently uplisted from threatened to endangered under CESA through a unanimous vote by the Fish and Game Commission in April 2024, highlighting the importance and necessity to avoid impacts to desert tortoise, its habitat, and connectivity thereof.

The IS/MND does not provide any information regarding desert tortoise, including survey data, and only mentions that "Although desert tortoise is not likely to occur within the project limits, a full time qualified biological monitor would be present daily during construction activities." As previously mentioned, a portion of the Project is within the home range for desert tortoise and desert tortoise is well known to occur in Lucerne Valley.

Lastly, the IS/MND, under "Permits and Approvals", considers obtaining take authorization for desert tortoise with the U.S. Fish and Wildlife Service through the approved Programmatic Biological Opinion, but does not consider take authorization from CDFW.

Recommendations Potentially Feasible Mitigation Measure(s): CDFW appreciates the incorporation of BIO-19: BIO-Reptile-4 and BIO-20: Bio-DT-1. CDFW recommends the below revisions (edits are ~~strikethrough~~ and **bold**) and the adoption of **BIO-DT-2, BIO-DT-3, and BIO-DT-5** in the final MND.

BIO-19: BIO-Reptile-4: Authorized Biologist Clearance Surveys

Clearance desert tortoise surveys must be conducted by a Qualified USFWS-authorized Desert Tortoise Biologist **and CDFW approved biologist** ~~3 days~~ **immediately** prior to project activities within suitable and critical desert tortoise habitat. If a desert tortoise is located (**dead or alive**), the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination **with CDFW and USFWS** ~~may is~~ **be** required. Desert tortoise removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent USFWS and CDFW guidelines **if authorized and in accordance with a CDFW Incidental Take Permit (ITP)**. If a desert tortoise must be handled, then a CDFW 2081 permit must be acquired.

BIO-DT-2: Pre-construction Survey (New)

Desert tortoise pre-construction surveys shall be conducted within suitable habitat in accordance with the U.S. Fish and Wildlife Service's 2019 desert tortoise survey methodology (see: <https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise%20Pre-project%20Survey%20Protocol%202019.pdf>). The survey shall utilize perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign. Results of the survey shall be submitted to CDFW prior to the start of Project activities. If the survey confirms desert tortoise absence, the CDFW-approved biologist shall ensure desert tortoise does not enter the Project area. A CDFW-approved biologist shall be present to monitor construction at all times when and where desert tortoise has the potential to enter an active construction area of the Project. If the survey confirms presence of desert tortoise, or if a desert tortoise is observed at any time, Caltrans shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, CDFW recommends that Project activities be postponed until appropriate

authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.

BIO-DT-3: Compensatory Mitigation (New)

Permanent impacts to desert tortoise habitats shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts to desert tortoise habitats shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. If impacts occur and habitat does not recover to pre-Project conditions within 5 years, additional compensatory mitigation (minimum 3:1) shall be provided to offset temporal losses. Compensatory mitigation for desert tortoise habitat impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.

BIO-DT-5: Animal Entrapment (New)

To prevent inadvertent entrapment of desert tortoise during Project activities, all excavated steep-walled holes or trenches more than six inches must be covered at the close of each working day by plywood (or similar material) or equipped with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required. Desert tortoise may be removed from work areas and out of harm's way to the nearest suitable habitat or translocated, following the most recent CDFW and USFWS guidelines, if authorized, and in accordance with a CDFW ITP. A CDFW ITP will be required and shall be obtained prior to any desert tortoise being handled.

Comment #4: Bats

Section #2.1.4, Page #14, 22, 23, and elsewhere

Issue: The Project has the potential to impact bat species, including but not limited to, Townsend's big-eared bat (*Corynorhinus townsendii*) (CDFW Species of Special Concern [SSC]) and pallid bat (*Antrozous pallidus*) (CDFW SSC).

Specific impact: The Project site contain suitable habitat for bats, including bridge structures (i.e., Cushenbury Creek Bridge), culverts, and under road crossings. Project activities and construction, such as repairing/upgrading culverts, removing RSP and concrete lining Cushenbury Creek, cold plane and overlay, shoulder backing activities occurring near or under bridges and crossings, and noise and vibrations may impact and disrupt the behaviors of bats and result in abandonment of a roost (e.g., maternity roost).

Why impacts would occur: CNDDDB contains records for Townsend's big eared bat occurring within the BSA and PIA. This species is known to use manmade structures such as culverts and bridges, like those found within the Project, for roosting habitat. Furthermore, according to CNDDDB, a large portion of the Project area is considered core breeding habitat for pallid bats, and therefore essential to maintain or restore connectivity for pallid bats.

Evidence impact would be significant: Bat populations are declining throughout southern California due to loss of roosting habitat and low reproductive turnover. Townsend's big-eared bats are easily disturbed and very sensitive to disturbances at

roosting sites. The protection of bat roosting habitat, particularly habitat identified as maternity or nursery sites, is vitally important to prevent adverse effects to and further loss of remaining bat populations. Impacts to bat maternity colonies could be considered potentially significant.

Recommended Potentially Feasible Mitigation Measure(s): CDFW appreciates the incorporation of BIO-21: BIO-Bat-PSM-2, BIO-22: BIO-Bat-PSM-3, BIO-23: BIO-Bat-PSM-4, BIO-24: BIO-Bat-PSM-5, BIO-25: BIO-Bat-PSM-6. CDFW recommends the below revisions (edits are ~~strikethrough~~ and **bold**):

BIO-21: BIO-Bat-PSM-2: Bat Preconstruction Surveys

Prior to work activities, a pre-construction survey within suitable areas and an appropriate survey buffer shall be **conducted** ~~surveyed~~ for the presence of bat roosts by a qualified bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work ~~on, under, or adjacent to bridges, ideally~~ during the maternity season (typically March 1 to August 31), to allow time to prepare **avoidance and minimization measures for maternity roosts**, ~~and/or exclusion plans if needed in accordance with CDFW guidelines.~~ **Impacts to maternity roosts shall be fully avoided. Additional nighttime and daytime surveys shall be conducted within suitable areas 14 days prior to initiation of Project activities during appropriate weather conditions and appropriate time of year for the species. If bats are found roosting within and adjacent to the Project Impact Area, a qualified biologist shall conduct emergence surveys and perform exit counts to approximate the number of bats. Acoustic monitoring shall also be used during these surveys to identify the bat species present, surveys shall also identify roost type and roost status.** If the ~~pre-construction surveys~~ determines that no active roosts are present, then work activities shall commence ~~within two weeks following the preconstruction survey.~~ **If bats are found present additional measures and coordination with CDFW shall be required as per Measure BIO-23: Bio-Bat-PSM-4.**

BIO-22: BIO-Bat-PSM-3: Work Restriction Hours

Work activities should be restricted to daylight hours. **To avoid unnecessary impacts to nocturnal and crepuscular wildlife, the Project shall adhere to either of the following: (1): All Project activities shall be terminated 30 minutes before sunset and shall not resume until 30 minutes after sunrise. Permittee shall use the sunrise and sunset times established by the Astronomical Application Department found at: <https://aa.usno.navy.mil/data/index> or (2) Caltrans shall provide to CDFW for review and approval a plan with measures aimed to protect wildlife from impacts from Project activities that occur beyond 30 minutes before sunset and before 30 minutes after sunrise.** This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of the BSA. Should work activities be required at night, night lighting should be **fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>)** ~~focused on the direct area of work.~~ Mature trees were identified in the vicinity of the BSA, and these may provide suitable roosting habitat for foliage-roosting bats. Tree removal is not an anticipated activity for the project, but if this changes, each affected tree would need to be assessed individually **for presence of bats and additional measures may be required.** **If any tree trimming or removal is necessary, prior to tree trimming or removal, trees and snags shall be examined by a qualified bat biologist to ensure that no roosting bats are present. The qualified bat biologist shall supervise the following two-step process of tree removal that shall occur over a 2-day period outside of the maternity season (April 1 – August 31) to avoid direct mortality of foliage-roosting species: (1) On Day 1, branches and limbs that do not contain crevices or cavities shall be removed using hand tools or chainsaws. The goal is to create a disturbance sufficient to cause any bats roosting in the tree to leave that night and not return, but not at a level of intensity that will cause bats to fly**

out of the tree during the disturbance itself (i.e., during the daytime, when leaving the roost will likely result in predation) and (2) On Day 2, the remainder of the tree may be removed.

BIO-23: Bio-Bat-PSM-4: Bat Species and Roost Determination

If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats ~~are a maternity colony~~ ~~are not a special status species and the roost is not being used as a maternity roost~~, then the **Project shall avoid impacts to the maternity colony, the bat biologist would shall** determine appropriate measures to minimize and avoid potential impacts to **all bats in a Bat Avoidance and Monitoring Plan. The Bat Avoidance and Monitoring Plan shall be submitted to CDFW at least seven days prior to the start of Project activities for review and written approval. Project activities may not start until CDFW's written approval of the Bat Avoidance and Monitoring Plan has been provided. The Bat Avoidance and Monitoring Plan shall include: (1) an assessment of all Project impacts to bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect bats; (3) compensatory mitigation for permanent impacts to roosts if impacted (no impacts shall occur to maternity roosts), such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels).** Appropriate measures may include evicting bats from the roost **(except for maternity roosts)** by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.

Bio-24: Bio-Bat-PSM 5: Active Roost Buffer

~~For If special-status bat species that will not be evicted and maternity roosts of any bat species is present, but no direct removal of active roosts would occur,~~ a qualified bat biologist shall determine appropriate avoidance measures **through a Bat Avoidance and Monitoring Plan (see BIO-23: Bio-Bat-PSM-4),** which may include implementation of a construction-free buffer around the active roost. **The biologist shall have the authority to halt construction to reduce noise and/or disturbance at the nests and adjust/increase the avoidance buffer as appropriate.**

Bio-25: Bio-Bat-PSM-6: Bat Mitigation and Exclusion Plan

Impacts to maternity roosts shall be fully avoided. ~~If special-status bat species or a maternity-roost of any bat species is present and the roost is not a maternity roost and direct removal of habitat (roost location) would occur,~~ then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by CDFW and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed. **Caltrans shall replace bat roosts lost due to the Project with alternate roosting habitat/structures (as approved by CDFW) and shall be placed by Caltrans several weeks before eviction. Monitoring of the new roosting habitat/structures shall occur for a period of no less than 3 years.**

Section: None, Desert Bighorn Sheep is not addressed in the IS/MND.

Issue: The Project may impact desert bighorn sheep, a fully protected species. Unless otherwise authorized pursuant to Fish and Game Code section 2081.15, fully protected species may not be taken or possessed at any time.

Specific impact: Project activities and construction, such as cold plane and overlay and shoulder backing activities can directly impact or indirectly impact desert bighorn sheep by disturbing the behavior or modifying habitat used by the species.

Why impacts would occur: While the NESMI recognizes the potential for desert bighorn sheep to occur within the BSA and notes the presence of foraging habitat for the species, the IS/MND does not consider impacts to desert bighorn sheep and as a result, no avoidance, minimization, or mitigation measures are proposed. This is of concern to CDFW, especially considering that a known population of desert bighorn sheep occurs in Cushenbury in Lucerne Valley. According to Anderson et al. (2022), the desert bighorn sheep population is known as the Cushenbury population and contains less than 25 sheep, residing on the northern slopes of the San Bernardino mountains. Road construction and use thereof could result in bighorn sheep mortality and can cause shifts in home ranges and movement (Trombulak and Frissell, 2000).

Evidence impact would be significant: Fully protected species, such as desert bighorn sheep, may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research,
- Efforts to recover a fully protected, endangered, or threatened species,
- Live capture and relocation of a bird species for the protection of livestock, or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an incidental take permit for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code §2081.15). Project proponents should consult with CDFW early in the project planning process.

Recommended Potentially Feasible Mitigation Measure(s): CDFW recommends the adoption of BIO-Desert Bighorn Sheep-1, 2 and 3 as follows:

BIO-Desert Bighorn Sheep-1: Vehicle Washing

The contractor shall wash equipment, trailers, project gear, project tools, and vehicles prior to entering the Project site at Cushenbury. The biologist shall coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation of work to verify that they have been washed. All equipment shall be free of materials including noxious and nuisance weeds, aquatic invasive species, oil, grease, hydraulic fluid, soil, and other debris. The following shall be adhered to:

- **Equipment Certification:** All equipment shall be certified as decontaminated and require re-certification upon entry to the Project once equipment leaves the Project footprint.
- **Decontamination of Project Equipment:** All tools, waders and boots, vehicles, trailers, and other equipment shall be decontaminated. Project gear and equipment shall be decontaminated utilizing one of four methods: (1) drying, (2) using a hot water soak, (3) hot-water pressure washing, or (4) freezing, as appropriate to the type of gear or equipment. For all four methods, the decontamination process shall begin by thoroughly scrubbing equipment,

paying close attention to hard-to-reach areas, and cleaning areas with a stiff-bristled brush to remove all plant, seeds, soil, and other organisms. To decontaminate by drying, equipment shall be allowed to dry thoroughly (i.e., until there is a complete absence of water and all plant, seeds, and soil), preferably in the sun, for a minimum of 48 hours. To decontaminate using hot water, equipment shall either be immersed in 140°F water (or hotter) and be allowed to soak for a minimum of 5 minutes or shall be pressure washed with hot water that is at a minimum 140°F at the point of contact or 155°F at the nozzle. To decontaminate by freezing, equipment shall be placed in a freezer that is 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used in contact with water or wet soil within a different watershed, and returned to the Project site.

- **Decontamination Sites:** Decontamination of vehicles and other Project gear and equipment shall be performed in a designated location where runoff can be contained and not allowed to pass into any river, lake, or stream and associated riparian areas and other sensitive habitat areas. Cleaning of equipment may occur at a location that contains and recycles resulting wastewater

BIO-Desert Bighorn Sheep-2: Decontamination of Pathogens (New)

To prevent potential transmission of disease from domestic animals to wild desert bighorn sheep, Project proponent shall require all workers to decontaminate work boots prior to entering Project areas. Decontamination shall involve scrubbing of the soles of work boots with a 10% bleach solution to remove all organic matter and kill pathogens. Alternatively, footwear may be changed to ensure that potentially contaminated footwear does not enter Project areas. Heavy equipment previously used in livestock operations, including, but not limited to, sheep and goat livestock operations, or where roadside clearing has occurred through grazing shall not be utilized for Project activities.

BIO-Desert Bighorn Sheep-3: Species Avoidance (New)

If desert bighorn sheep are observed at any point during the course of Project activities within or adjacent to Project areas, Permittee shall cease all work in the vicinity of the observation and contact CDFW for further guidance prior to recommencing work to ensure compliance with the fully protected status of desert bighorn sheep under Fish and Game Code.

Comment #6: Lake and Streambed Alteration (LSA)

Section #2.1.4, Page #15, 19, and elsewhere

Issue: The IS/MND does not consider all areas within the Project that may be subject to Fish and Game Code section 1602.

Specific impact: The Project as described includes substantial diversion or obstruction of natural flow of a stream; substantial change in the bed, bank, and channel of a stream; and the potential for deposition of debris or other materials containing ground pavement into a stream.

Why impact would occur: The Project includes repairs to 9 culverts, upsizing of 3 culverts, and removal of RSP and installation of concrete channel lining under the Cushenbury Creek Bridge. However, the IS/MND contemplates consulting with CDFW regarding notification under Fish and Game Code 1602 for the culvert work only. The IS/MND does not consider that a portion of the Project will occur adjacent to Baldwin Lake, where a meadow is present and Project activities have the potential for deposition of debris or other materials containing ground pavement to enter the meadow.

Evidence impact would occur: 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. Please 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 watercourses with subsurface flow, and the hyporheic zones thereof. The Project, as described in the IS/MND will be subject to Notification under Fish and Game Code section 1602. CDFW considers substantial adverse impacts and the deposition of materials where they may pass into streams as a significant impact, unless mitigated to a level of less than significant.

Recommended Potentially Feasible Mitigation Measures(s): To address the above issues and help avoid impacting Fish and Game Code section 1602 resources, CDFW requests Caltrans add the following mitigation measure in the final IS/MND.

BIO-LSA 1 (New): Caltrans shall notify CDFW under Fish and Game Code section 1600 et seq. for all portions of the Project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Shoulder backing and expansion of roadway that is planned to be placed in or near areas that are subject to Fish and Game Code section 1600 notification shall not consist of asphalt, bitumen, or any other substance or material that is deleterious to fish, plant life, mammals, or birdlife in accordance with Fish and Game Code 5650 et seq.

BIO-LSA 2 (New): Permanent impacts to 1602 resources shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area, or other ratio deemed appropriate and included in a Lake and Streambed Alteration Agreement. Compensatory mitigation for impacts to 1600 resource areas shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.

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 IS/MND to assist Caltrans in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Steven Recinos, Environmental Scientist, at (909) 731-5954 or Steven.Recinos@wildlife.ca.gov.

Sincerely,

DocuSigned by:

84F92FFEEFD24C8...

Kim Freeburn
Environmental Program Manager

cc: Office of Planning and Research, State Clearinghouse, Sacramento

REFERENCES

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Attachment A: Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into the final MND for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM)		Timing	Responsible Party
BIO-5-Pebble-1	To protect plant species occurring in pebble plain soil types when working on SR 18, all work shall occur within the pavement or on the opposite side of the roadway away from occurrences of all pebble plain species.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-Plant 4 (New)	Permanent impacts (i.e., areas slated for paving or areas that will not return to their baseline ecological state and form within one calendar-year of impacts occurring) (hereafter referred to as ‘permanent impacts’) to non CESA-listed rare, sensitive, special-status plants, shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts (i.e., areas that will return to their baseline ecological state and form within one-calendar year of impacts occurring) (hereafter as, ‘temporary impacts’) to non CESA listed rare, sensitive, special-status plants and their habitats, and Sensitive Natural Communities, shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. Compensatory mitigation for impacts to non CESA-listed rare, sensitive, special-status plant species and Sensitive Natural Communities by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

	ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, or a combination of both, in coordination with CDFW. If CESA-listed plants are present and impacts cannot be fully avoided, a CESA ITP shall be obtained.		
BIO-Reptile 1 (New)	Caltrans shall ensure that impacts to southern rubber boa (SRB) are fully avoided absent take authorization. Within suitable habitat, Caltrans shall not disturb rock outcrops from November through April. At other times of year, Permittee shall have a Designated Biologist with appropriate authorizations check for SRB in suitable habitat under logs, rocks, and vegetation in the Project areas and adjacent to Project areas immediately prior to commencing the Project each day. If SRB is detected, it shall be allowed to move out of the Project area of its own volition. If SRB is observed and/or fails to move out of harm's way, Permittee shall notify CDFW immediately.	Prior to commencing ground- or vegetation disturbing activities and/or during Project activities	Project Proponent
BIO-19: BIO-Reptile-4	Clearance desert tortoise surveys must be conducted by a Qualified USFWS-authorized Desert Tortoise Biologist and CDFW approved biologist immediately prior to project activities within suitable and critical desert tortoise habitat. If a desert tortoise is located (dead or alive), the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination with CDFW and USFWS is required. Desert tortoise removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent USFWS and CDFW guidelines if authorized and in accordance with a CDFW Incidental Take Permit (ITP). If a desert tortoise must be handled, then a CDFW 2081 permit must be acquired.	Prior to commencing ground- or vegetation disturbing activities	Project Proponent
BIO-DT-2 (New)	Desert tortoise pre-construction surveys shall be conducted within suitable habitat in accordance with the U.S. Fish and Wildlife Service's 2019 desert tortoise survey methodology (see: https://www.fws.gov/sites/default/files/documents/Mojave%20Desert%20Tortoise_Preproject%20Survey%20Protocol_2019.pdf). The survey shall utilize perpendicular survey routes and 100-percent visual coverage for desert tortoise and their sign. Results of the survey shall be submitted to	Prior to commencing ground- or vegetation disturbing activities	Project Proponent

	<p>CDFW prior to the start of Project activities. If the survey confirms desert tortoise absence, the CDFW-approved biologist shall ensure desert tortoise does not enter the Project area. A CDFW-approved biologist shall be present to monitor construction at all times when and where desert tortoise has the potential to enter an active construction area of the Project. If the survey confirms presence of desert tortoise, or if a desert tortoise is observed at any time, Caltrans shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, CDFW recommends that Project activities be postponed until appropriate authorization (i.e., a finalized CESA ITP under Fish and Game Code section 2081) is obtained.</p>		
<p>BIO-DT-3 (New)</p>	<p>Permanent impacts to desert tortoise habitats shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area. Temporary impacts to desert tortoise habitats shall be restored onsite at a 1:1 (mitigated to impacted) ratio by acreage area. If impacts occur and habitat does not recover to pre-Project conditions within 5 years, additional compensatory mitigation (minimum 3:1) shall be provided to offset temporal losses. Compensatory mitigation for desert tortoise habitat impacts by total area (i.e., the combined total acreage of permanent and temporary impacts calculated post-ratios) shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>
<p>BIO-DT-5 (New)</p>	<p>To prevent inadvertent entrapment of desert tortoise during Project activities, all excavated steep-walled holes or trenches more than six inches must be covered at the close of each working day by plywood (or similar material) or equipped with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals.</p>	<p>Prior to commencing ground- or vegetation disturbing activities and/or during Project activities</p>	<p>Project Proponent</p>

	<p>If a desert tortoise (dead or alive) is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and agency coordination are required. Desert tortoise may be removed from work areas and out of harm's way to the nearest suitable habitat or translocated, following the most recent CDFW and USFWS guidelines, if authorized, and in accordance with a CDFW ITP. A CDFW ITP will be required and shall be obtained prior to any desert tortoise being handled.</p>		
<p>BIO-21: BIO-Bat- PSM-2</p>	<p>Prior to work activities, a pre-construction survey within suitable areas and an appropriate survey buffer shall be conducted for the presence of bat roosts by a qualified bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work during the maternity season (typically March 1 to August 31), to allow time to prepare avoidance and minimization measures for maternity roosts. Impacts to maternity roosts shall be fully avoided. Additional nighttime and daytime surveys shall be conducted within suitable areas 14 days prior to initiation of Project activities during appropriate weather conditions and appropriate time of year for the species. If bats are found roosting within and adjacent to the Project Impact Area, a qualified biologist shall conduct emergence surveys and perform exit counts to approximate the number of bats. Acoustic monitoring shall also be used during these surveys to identify the bat species present, surveys shall also identify roost type and roost status. If the surveys determine that no active roosts are present, then work activities shall commence. If bats are found present additional measures and coordination with CDFW shall be required as per Measure BIO-23: Bio-Bat-PSM-4.</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>
<p>BIO-22: BIO-Bat- PSM-3</p>	<p>Work activities should be restricted to daylight hours. To avoid unnecessary impacts to nocturnal and crepuscular wildlife, the Project shall adhere to either of the following: (1): All Project activities shall be terminated 30 minutes before sunset and shall not resume until 30 minutes after sunrise. Permittee shall use the sunrise and sunset times established by the Astronomical Application Department found at: https://aa.usno.navy.mil/data/index or (2) Caltrans shall provide to CDFW for review and approval a plan with measures aimed</p>	<p>Prior to commencing ground- or vegetation disturbing activities and/or during Project activities</p>	<p>Project Proponent</p>

	<p>to protect wildlife from impacts from Project activities that occur beyond 30 minutes before sunset and before 30 minutes after sunrise. This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of the BSA. Should work activities be required at night, night lighting should be fully shielded, cast downward and directed away from surrounding open-space, reduced in intensity to the greatest extent possible, and not result in lighting trespass including glare into surrounding areas or upward into the night sky (see the International Dark-Sky Association standards at http://darksky.org/). Mature trees were identified in the vicinity of the BSA, and these may provide suitable roosting habitat for foliage-roosting bats. Tree removal is not an anticipated activity for the project, but if this changes, each affected tree would need to be assessed individually for presence of bats. If any tree trimming or removal is necessary, prior to tree trimming or removal, trees and snags shall be examined by a qualified bat biologist to ensure that no roosting bats are present. The qualified bat biologist shall supervise the following two-step process of tree removal that shall occur over a 2-day period outside of the maternity season (April 1 – August 31) to avoid direct mortality of foliage-roosting species: (1) On Day 1, branches and limbs that do not contain crevices or cavities shall be removed using hand tools or chainsaws. The goal is to create a disturbance sufficient to cause any bats roosting in the tree to leave that night and not return, but not at a level of intensity that will cause bats to fly out of the tree during the disturbance itself (i.e., during the daytime, when leaving the roost will likely result in predation) and (2) On Day 2, the remainder of the tree may be removed.</p>		
<p>BIO-23: Bio-Bat- PSM-4</p>	<p>If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are a maternity colony then the Project shall avoid impacts to the maternity colony, the bat biologist shall determine appropriate measures to minimize and avoid potential impacts to all bats in a Bat Avoidance and Monitoring Plan. The Bat Avoidance and Monitoring Plan shall be submitted to CDFW at least seven days prior to the start of Project</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>

	<p>activities for review and written approval. Project activities may not start until CDFW's written approval of the Bat Avoidance and Monitoring Plan has been provided. The Bat Avoidance and Monitoring Plan shall include: (1) an assessment of all Project impacts to bats, including noise disturbance during construction; (2) effective avoidance and minimization measures to protect bats; (3) compensatory mitigation for permanent impacts to roosts if impacted (no impacts shall occur to maternity roosts), such as, but not limited to, constructing artificial bat roosting habitats (e.g., bat boxes or panels). Appropriate measures may include evicting bats from the roost (except for maternity roosts) by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.</p>		
BIO-24: Bio-Bat-PSM 5	<p>For bat species that will not be evicted and maternity roosts of any bat species, a qualified bat biologist shall determine appropriate avoidance measures through a Bat Avoidance and Monitoring Plan (see BIO-23: Bio-Bat-PSM-4), which may include implementation of a construction-free buffer around the active roost. The biologist shall have the authority to halt construction to reduce noise and/or disturbance at the nests and adjust/increase the avoidance buffer as appropriate.</p>	<p>Prior to commencing ground- or vegetation disturbing activities and/or during Project activities</p>	<p>Project Proponent</p>
BIO-25:Bio-Bat-PSM-6	<p>Impacts to maternity roosts shall be fully avoided. If roost of any bat species is present and the roost is not a maternity roost, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by CDFW and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>

	<p>details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed. Caltrans shall replace bat roosts lost due to the Project with alternate roosting habitat/structures (as approved by CDFW) and shall be placed by Caltrans several weeks before eviction. Monitoring of the new roosting habitat/structures shall occur for a period of no less than 3 years.</p>		
<p>BIO-Desert Bighorn Sheep-1 (New)</p>	<p>The contractor shall wash equipment, trailers, project gear, project tools, and vehicles prior to entering the Project site at Cushenbury. The biologist shall coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation of work to verify that they have been washed. All equipment shall be free of materials including noxious and nuisance weeds, aquatic invasive species, oil, grease, hydraulic fluid, soil, and other debris. The following shall be adhered to:</p> <ul style="list-style-type: none"> • Equipment Certification: All equipment shall be certified as decontaminated and require re-certification upon entry to the Project once equipment leaves the Project footprint. • Decontamination of Project Equipment: All tools, waders and boots, vehicles, trailers, and other equipment shall be decontaminated. Project gear and equipment shall be decontaminated utilizing one of four methods: (1) drying, (2) using a hot water soak, (3) hot-water pressure washing, or (4) freezing, as appropriate to the type of gear or equipment. For all four methods, the decontamination process shall begin by thoroughly scrubbing equipment, paying close attention to hard-to-reach areas, and cleaning areas with a stiff-bristled brush to remove all plant, seeds, soil, and other organisms. To decontaminate by drying, equipment shall be allowed to dry thoroughly (i.e., until there is a complete absence of water and all plant, seeds, and soil), preferably in the sun, for a minimum of 48 hours. To decontaminate using hot water, equipment shall either be immersed in 	<p>Prior to commencing ground- or vegetation disturbing activities and/or during Project activities</p>	<p>Project Proponent</p>

	<p>140°F water (or hotter) and be allowed to soak for a minimum of 5 minutes or shall be pressure washed with hot water that is at a minimum 140°F at the point of contact or 155°F at the nozzle. To decontaminate by freezing, equipment shall be placed in a freezer that is 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used in contact with water or wet soil within a different watershed, and returned to the Project site.</p> <ul style="list-style-type: none"> Decontamination Sites: Decontamination of vehicles and other Project gear and equipment shall be performed in a designated location where runoff can be contained and not allowed to pass into any river, lake, or stream and associated riparian areas and other sensitive habitat areas. Cleaning of equipment may occur at a location that contains and recycles resulting wastewater, 		
BIO-Desert Bighorn Sheep-2 (New)	To prevent potential transmission of disease from domestic animals to wild desert bighorn sheep, Project proponent shall require all workers to decontaminate work boots prior to entering Project areas. Decontamination shall involve scrubbing of the soles of work boots with a 10% bleach solution to remove all organic matter and kill pathogens. Alternatively, footwear may be changed to ensure that potentially contaminated footwear does not enter Project areas. Heavy equipment previously used in livestock operations, including, but not limited to, sheep and goat livestock operations, or where roadside clearing has occurred through grazing shall not be utilized for Project activities.	Prior to commencing ground- or vegetation disturbing activities and/or during Project activities	Project Proponent
BIO-Desert Bighorn Sheep-3 (New)	If desert bighorn sheep are observed at any point during the course of Project activities within or adjacent to Project areas, Permittee shall cease all work in the vicinity of the observation and contact CDFW for further guidance prior to recommencing work to ensure compliance with the fully protected status of desert bighorn sheep under Fish and Game Code.	Prior to commencing ground- or vegetation disturbing activities and/or during Project activities	Project Proponent
BIO-LSA 1 (New)	Caltrans shall notify CDFW under Fish and Game Code section 1600 et seq. for all portions of the Project that will	Prior to commencing	Project Proponent

	<p>substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Shoulder backing and expansion of roadway that is planned to be placed in or near areas that are subject to Fish and Game Code section 1600 notification shall not consist of asphalt, bitumen, or any other substance or material that is deleterious to fish, plant life, mammals, or birdlife in accordance with Fish and Game Code 5650 et seq.</p>	<p>ground- or vegetation disturbing activities</p>	
<p>BIO-LSA 2 (New)</p>	<p>Permanent impacts to 1602 resources shall be mitigated at a minimum 3:1 (mitigated to impacted) ratio by acreage area, or other ratio deemed appropriate and included in a Lake and Streambed Alteration Agreement. Compensatory mitigation for impacts to 1600 resource areas shall be conducted either on-site through restoration activities, or through purchase of mitigation credits from a CDFW-approved bank and/or land acquisition, conservation, and management, or a combination of both, in coordination with CDFW.</p>	<p>Prior to commencing ground- or vegetation disturbing activities</p>	<p>Project Proponent</p>