CALIFORNIA PERMIMENTOR WILDLIFE State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE South Coast Region 3883 Ruffin Road San Diego, CA 92123 (858) 467-4201 www.wildlife.ca.gov GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



Governor's Office of Planning & Research

Jun 28 2022

STATE CLEARINGHOUSE

Jason Wilkinson Senior Environmental Planner California Department of Transportation 50 South Higuera Street San Luis Obispo, CA 93401 Jason.Wilkinson@dot.ca.gov

Subject: Zaca Station to Orcutt Drainage Rehabilitation (Project), Mitigated Negative Declaration (MND), SCH #2022050218

Dear Mr. Wilkinson:

June 28, 2022

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

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.

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PROJECT DESCRIPTION SUMMARY

Objective: Caltrans proposes to modify 13 drainage culverts, 16 lighting elements, and five Transportation Management System elements at various locations in on U.S Route 101. The culvert modifications will protect the roadways from potential failure. Deficiencies in the culverts include corroded or worn pipe inverts, perforated pipe sections, joint offsets, and significant ditch, channel, and slope erosion, which lead to lower water conveyance capacities and costly emergency repairs. Modifications to the lighting elements includes replacing elements that have reached the end of their service life and installing additional lighting at the Los Alamos interchange and the Cat Canyon intersection. Modifications to the Traffic Management System includes replacing elements that are unreliable and adding elements to improve the collection of traffic data and notification of traffic conditions.

Location: This project is located on U.S. 101 in Santa Barbara County, from Zaca Station Road near Los Alamitos (34.710701, -120.178032) to 0.2 mile south of the Santa Maria Way Undercrossing in Orcutt (34.888057, -120.415549).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans in adequately identifying and/or mitigating the project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the project's avoidance of significant impacts on biological resources with implementation of mitigation measures, CDFW concludes that a Mitigated Negative Declaration is appropriate for the project.

Comment #1: Impacts to Streams

Issue: The project may impact several tributaries within the Santa Maria River and San Antonio Creek watersheds.

Specific impact: The project may impact the water quality, natural flow, bed, bank, and channel of each water course resulting in impacts to fish, wildlife, and riparian habitat.

Why impact would occur: The project proposes to modify 13 culverts as described in Table 1.1 on page 5 of the MND. The culverts convey water across State Route 101 from tributaries within the San Antonio creek and Santa Maria River watersheds. Of the 13 culverts proposed for modification as part of this project, only three of them are identified as being subject to Fish and Game code section 1602. CDFW is concerned that there are several other culverts as part of the project that are also subject to Fish and Game Code section 1602.

Evidence impact would be significant: The project could result in reasonably foreseeable impacts on streams. Therefore, the project may have a significant impact on streams. CDFW requires a Lake and Streambed Alteration (LSA) Notification when a project activity may substantially adversely affect fish and wildlife resources.

Recommended potentially feasible mitigation measure(s):

Mitigation Measure #1: The project applicant must provide written notification to CDFW pursuant to section 1600 *et seq.* of the Fish and Game Code. Based on this notification and other information, CDFW shall determine whether a Lake and Streambed Alteration (LSA) Agreement is

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required prior to conducting the proposed activities. Please visit CDFW's <u>Lake and Streambed</u> <u>Alteration Program</u> webpage for information about LSA Notification and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2022b).

CDFW's issuance of an LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the Lead Agency for the project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to streams or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Mitigation Measure #2: If impacts to streams are unavoidable, Caltrans should provide compensatory mitigation for impacts on streams and associated plant communities. Any off-site mitigation should occur where a stream supports the same plant communities impacted by the project and preferably within the same watershed.

Recommendation: CDFW recommends fully avoiding permanent impacts to waters and riparian/wetland vegetation communities. If feasible, CDFW recommends redesigning the project to avoid permanent impacts to the existing drainages. CDFW also recommends Caltrans consider project alternatives that protects as much natural hydrologic processes as possible. CDFW recommends taking an inter-disciplinary approach to involve landscape architects, engineers, and wildlife biologists, and hydrologists to develop design alternatives that could fully avoid or lessen impacts to waters and riparian/wetland vegetation communities.

Comment #2: Wildlife Connectivity

Issue: The project may impact wildlife connectivity.

Specific impact: project activities have the potential to significantly impact wildlife movement of native resident species such as California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), coast horned lizard (*Phrynosoma blainvillii*); northern California legless lizard (*Anniella pulchra*); American badger (*Taxidea taxus*); and Western spadefoot (*Spea hammondii*).

Why impacts would occur: It is unclear whether wildlife connectivity was analyzed and taken into consideration when considering the proposed culvert strategies in Table 1.1. Roadways and associated culverts may increase population fragmentation, reduce survival by impeding movement to refugia habitat (i.e., disperse to adjacent habitat, locate food sources) or reproductive habitat (i.e., breeding habitat), and impede recolonization of potential habitat (Haddad et al., 2015).

The table states that the culvert diameters at location 9 and 11 will be reduced and the culvert length at location 1 will be increased. Reduced diameters and increased lengths deter wildlife usage of various species.

Evidence impact would be significant: The ecological footprint of roads extends beyond its physical footprint due to road mortality, habitat fragmentation, and indirect impacts (Spencer et al, 2010).

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Limiting movement and passage of species can lead to the reduction of genetic fitness in populations making them more vulnerable to changing or extreme conditions, the inability for populations to recolonize habitat after disturbance events (e.g. fires, floods, droughts), the loss of resident wildlife populations by altered community structure (e.g. species composition, distribution), and/or partial or complete loss of populations of migrant species due to blocked access to critical habitats (CDFW, 2009; Haddad et al., 2015; Nicholson et al., 2006). Studies indicate that due to climate change, connectivity to thermal refugia is increasingly becoming more important for conserving populations as well as genetic diversity (Morelli et al., 2017; Chen et al., 2011). Therefore, reducing culvert size, increasing culvert length, and preserving current culvert size, location, and invert without wildlife movement analyses may preserve existing barriers where an opportunity is present to design structures that allow for improved movement conditions.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #3: Integrate appropriate fencing to facilitate wildlife movement toward safe road crossings.

Recommendation: CDFW recommends Caltrans review and incorporate guidance from "*Highway Crossings for Herptiles (Reptiles and Amphibians)*" (CTC & Associates LLC., 2012), "*California Amphibian and Reptile Crossing Preliminary Investigation*" (Levine, 2013), and CDFW's "*Salmonid Stream Habitat Restoration Manual*" (CDFW, 2009). Consult "An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California" to assess potential impacts to amphibians and reptiles within the project area (Brehme et al., 2018).

Comment #3: Artificial Lighting Impacts on Wildlife

Issue: The project could impact native wildlife with artificial lighting.

Specific impacts: The project proposes to install 16 permanent lighting elements and conduct night work. Artificial lighting, whether permanent or temporary, has direct impacts on nocturnal wildlife behavior.

The lighting elements are proposed at the Cat Canyon intersection and the Los Alamos interchange, both of which have adjacent stream crossings that could be impacted by artificial lighting. Additionally, the project proposes to modify 13 culverts along state route 101 which may require night work to avoid traffic delays in the daytime hours. Work in the night requires temporary artificial lighting which disrupts natural rhythms of wildlife.

Why impacts would occur: Artificial light pollution has the potential to significantly and adversely affect biological resources and the habitat that supports them. Artificial light spillage beyond the prism of the roadway into natural areas may result in a potentially significant impacts through substantial degradation of the quality of the environment.

The project proposes to install 16 permanent lighting elements at the Los Alamos intersection and the Cat Canyon intersection. Unlike the natural brightness created by the monthly cycle of the moon, the permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can have significant impacts on fish and wildlife populations. The Los Alamos and the Cat Canyon intersections also are adjacent to stream channels. Stream channels are used as feeding corridors for bats and other sensitive wildlife species. Increased light has been known to disrupt feeding patterns of California bats. Stream channels are also used as nocturnal migratory pathways, which may be deterred by the increase in light pollution.

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Road work often involves night work to reduce impacts on traffic flow. Page 63 of the MND suggests that night work is a possibility. Nightwork lighting and noise disrupts natural patterns of wildlife movement and foraging patterns. CDFW is concerned that night work wasn't adequately evaluated within the MND.

Evidence impact would be significant: Artificial lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). Migration of salmonids can be slowed or halted by the presence of artificial lighting (Tabor et al. 2004, Nightingale et al. 2006). Phototaxis, a phenomenon which results in attraction and movement towards light, can disorient, entrap, and temporarily blind wildlife species that experience it (Longcore and Rich 2004). Artificial lighting can disrupt the production of melatonin in California tiger salamanders if they are exposed to it, altering metabolic rates and reducing tolerance to high temperatures (Perry et al. 2008). Additionally, salamanders could miss the cue to migrate if there is artificial light, which could affect breeding.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #4: Light Output Analysis. The lead agency should submit as part of the draft MND, Isolux Diagrams that note current light levels present during pre-project conditions and the predicted project light levels that will be created upon completion of the project. If an increase in light output from current levels to the projected future levels is evident, additional avoidance, minimization or mitigation shall be developed in coordination with the natural resource agencies to offset indirect impacts to State listed species such as California tiger salamander. Within 60 days of project completion the lead agency shall conduct a ground survey that compares projected future light levels with actual light levels achieved upon completion of the project through comparison of Isolux diagrams. If an increase from the projected levels to the actual levels is discovered additional avoidance, minimization or mitigation measures may also be required in coordination with the natural resource agencies. This analysis should be conducted across all potential alternatives and compared in table and map format.

Mitigation Measure #5: Light Output Limits. All LED's or bulbs installed as a result of the project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

Mitigation Measure #6: Vehicle Light Barriers. Solid barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.

Mitigation Measure #7: Reflective Signs and Road Striping. Retroreflectivity of signs and road stripping should be implemented throughout the project to reduce the need for electrical lighting.

Mitigation Measure #8: Light Pole Modifications and Shielding. All light poles or sources of illumination that shall be new or replacement installations of existing light sources should be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat with the project corridor in coordination with CDFW. In addition, the light pole arm length and mast heights should be modified to site specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the project corridor. In areas with sensitive

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natural landscapes or aquatic habitat the lead agency should also analyze and determine if placing the light poles at non-standard intervals has the potential to further reduce the potential for excessive light pollution caused by decreasing the number of light output sources in sensitive areas.

Comment #4: Impacts to Oak Trees

Issue: The project could impact oak trees and oak woodlands

Specific impact: The project may result in loss of individual oak trees (*Quercus* genus) as well as acres of oak shrublands and woodlands.

Why impacts would occur: The MND states there is a potential for removal of oak trees at locations 1, 2, and 9. According to page 46 of the MND, there is a potential for four oak trees to be removed as a result of the project. Coast live oak (*Quercus agrifolia*) has a CNPS rarity ranking of S4.

Coast live oak and old-growth oak trees (native oak tree that is greater than 15 inches in diameter) are of importance due to increased biological values and increased temporal loss. Due to the historic and on-going loss of this ecologically important vegetation community, oak trees and woodlands are protected by local and State ordinances. CDFW considers oak woodlands a sensitive vegetation community. Oak trees provide roosting habitat for bats as described in the MND on page 42. Oak trees also provide nesting and perching habitat for approximately 170 species of birds (Griffin and Muick 1990).

Evidence impacts would be significant: CDFW considers oak woodlands to be a sensitive plant community. Oak trees and woodlands are protected by the Oak Woodlands Conservation Act (pursuant under Fish and Game Code sections 1360-1372) and Public Resources Code section 21083.4 due to the historic and on-going loss of these resources. Moreover, <u>CDFW's Areas of Conservation Emphasis - Significant Habitats</u> dataset includes oak woodlands as a Terrestrial Significant Habitat based on its priority for conservation and acquisition planning for some counties, local jurisdictions, and the Wildlife Conservation Board (CDFW 2019).

Impacts to a Sensitive Natural Community should be considered significant under CEQA unless impacts are clearly mitigated below a level of significance. Without appropriate mitigation, the project may result in significant impacts on a Sensitive Natural Community if development facilitated by the project would remove, encroach into, or disturb (e.g., fuel modification) such resources.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #9: In order to ensure no net loss of oak trees/oak woodlands, CDFW recommends the following replacement ratios: (1) trees less than 5 inches diameter at breast height (DBH) should be replaced at 2:1; (2) trees between 5 and 12 inches DBH should be replaced at 3:1; (3) trees between 12 and 24 inches DBH should be replaced at 5:1; (4) trees greater than 24 inches DBH should be replaced at 10:1. Oak trees should be used to recreate functioning oak woodland of similar composition, density, structure, and function to the selected oak woodland that was impacted.

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Comment #5: Impacts to Bats

Issue: The project may have impacts to bats

Specific impacts: The project may result in direct and indirect impacts to bats. Direct impacts include removal of trees, vegetation, and culverts that provide roosting habitat and therefore has the potential for the direct loss of bats. Indirect impacts to bats and roosts could result from increased noise disturbances, human activity, additional artificial light, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, excavation, grading), and vibrations caused by heavy equipment.

Why impacts would occur: Bats use trees and man-made structures for daytime and nighttime roosts (Avila-Flores and Fenton 2005; Oprea et al. 2009; Remington and Cooper 2014). The project site contains habitat for bats to forage and roost and the project proposes to modify existing culverts, add lighting elements, and remove several trees.

Townsend's big-eared bats, a Species of Special Concern (SSC), were observed roosting in the box culvert at location 9. The project proposes to retrofit the 5 x 7-foot concrete box culvert with a 60-inch round culvert which will permanently impact the bat roosting habitat. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston et al. 2004). Even minor disturbance can lead to the abandonment of roosts (Johnston et al. 2004).

Also, CDFW is concerned that the lighting increase is not adequately addressed in the MND as it pertains to the impact on foraging bats. Without a comprehensive analysis on the impacts the additional lighting elements will have on foraging and roosting, bats may be adversely impacted by project activities.

Evidence impact would be significant: Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & Game Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered SSC and meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15065). Take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065).

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #10: CDFW recommends a qualified bat specialist conduct bat surveys to determine baseline conditions within the project site and within a 500-foot buffer to identify trees and/or structures (i.e., tunnels, maintenance buildings, food concession stands, comfort stations) that could provide daytime and/or nighttime roost sites. CDFW recommends using acoustic recognition technology to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. In most parts of California, night roost use will only occur from spring through fall while day roosts are typically utilized during the spring, summer, and fall in California (Johnston et al. 2004).

Mitigation Measure #11: Survey methodology and results, including negative findings, should be included in final environmental documents. Depending on survey results, please discuss potentially significant effects of the proposed project on the bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125).

Mitigation Measure #12: If maternity roosts are found, CDFW recommends, the following three mitigation measures.

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- a) If maternity roosts are found, to the extent feasible, work shall be scheduled 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 (March 1 to September 30).
- b) If maternity roosts are found and if trees and/or structures must be removed/demolished during the maternity season, a qualified bat specialist shall conduct a pre-construction survey to identify those trees and/or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology will be used to maximize detection of bats. Each tree and/or structure identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than 7 days prior to tree and/or structure disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees and/or structures determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of or directly under or adjacent to an active roost and work shall not occur between 30 minutes before sunset and 30 minutes after sunrise.
- c) If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, trees will be pushed down using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts shall not be bucked or mulched immediately. A period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape. Bats shall be allowed to escape prior to demolition of buildings. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the building.

Mitigation Measure #13: CDFW recommends shielding bat habitat used for roosting or foraging from permanent and temporary artificial light sources.

Comment #6: Impacts on California Species of Special Concern

Issue: The project may impact California Species of Special Concern.

Specific impacts: The project could result in loss of Townsend's big-eared bat (*Corynorhinus townsendii*); California red-legged frog (*Rana draytonii*), coast horned lizard (*Phrynosoma blainvillii*); northern California legless lizard (*Anniella pulchra*); American badger (*Taxidea taxus*); and Western spadefoot (*Spea hammondii*).

Why impacts would occur: According to Table 7 in the NES, the project site has the potential to support the above listed SSC. The project would require ground-disturbance and vegetation removal, both using heavy equipment. These activities create elevated levels of noise, human activity, dust, ground vibrations, and vegetation disturbance. Wildlife may be trapped or crushed under structures. Large equipment, equipment and material staging, and vehicle and foot traffic could trample or bury wildlife. project construction and activities, directly or through habitat modification, may result in injury or mortality, reduced reproductive capacity, population declines, or local extirpation of a SSC. Also, loss of foraging, breeding, or nursery habitat for a SSC may occur as a result of the project.

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Evidence impacts would be significant: A <u>California Species of Special Concern</u> is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role;
- is listed as Endangered Species Act, but not CESA, threatened, or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and/or,
- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for CESA threatened or endangered status (CDFW 2022a).

CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). Impacts to any sensitive or special status species should be considered significant under CEQA unless they are clearly mitigated, through appropriate disclosure of the proposed mitigation measures, below a level of significance.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #14: Wildlife Relocation and Avoidance Plan. The project Applicant should retain a qualified biologist to prepare a Wildlife Relocation and Avoidance Plan. The Wildlife Relocation and Avoidance Plan should describe all SSC that could occur within the project site and proper avoidance, handling, and relocation protocols. The Wildlife Relocation Plan should include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the project site.

Mitigation Measure #15: To avoid direct injury and mortality of SSC, the project Applicant should have a qualified biologist on site to move out of harm's way wildlife that would be injured or killed. Wildlife should be allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the project site. In areas where a SSC is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, the qualified biologist should advise workers to proceed with caution. A qualified biologist should be on site daily during initial ground and habitat disturbing activities as well as vegetation removal. Then, the qualified biologist should be on site weekly or bi-weekly (once every two weeks) for the remainder of the project phase until the cessation of all ground and habitat disturbing activities, as well as vegetation removal, to ensure that no wildlife is harmed.

Mitigation Measure #16: The project Applicant should retain a qualified biologist with appropriate handling permits, or should obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with project construction and activities. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals;

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birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003).

Mitigation Measure #17: If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area should stop immediately, the qualified biologist should be notified, and dead or injured wildlife documented immediately. A formal report should be sent to CDFW within three calendar days of the incident or finding. The report should include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

ENVIRONMENTAL DATA

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

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. CDFW requests an opportunity to review and comment on any response that Caltrans has to our comments. Questions regarding this letter or further coordination should be directed to Erika Cleugh Senior Environmental Scientist (Specialist) at (949) 619-5228 or Erika.Cleugh@wildlife.ca.gov.

Sincerely,

-DocuSigned by: \bigcirc R

Erinn Wilson-Olgin Environmental Program Manager I South Coast Region

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ec: CDFW

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REFERENCES

- Avila-Flores, R., and B.M. Fenton. 2005. Use of Spatial features by Foraging Insectivorous Bats in a Large Urban Landscape. Journal of Mammalogy 86(6):1193-1204.
- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of Bufo americanus, in relation to light and temperature. Ecology 58:98–108.
- Block, W.M., Morrison, M.M., Verner, J. 1990. Wildlife and oak-woodland interdependency. Fremontia 18(3):72-76.
- Brehme, C.S., et al., 2018. An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California. Landscape Ecology, 33 (2018), pp. 911-935.
- [CalPIF] California Partners in Flight. 2002. Version 2.0. The oak woodland bird conservation plan: a strategy for protecting and managing oak woodland habitats and associated birds in California (S. Zack, lead author). Point Reyes Bird Observatory, Stinson Beach, CA. Available from: <u>http://www.prbo.org/calpif/plans.html</u>
- Caltrans, 2009. *Wildlife Crossings Guidance Manual.* Prepared by Robert J. Meese, Fraser M. Shilling, and James F. Quinn.
- CDFW, 2009. Salmonid Stream Habitat Restoration Manual (Volume 2, 4th Edition), Part XII: Fish Passage Design and Implementation. California Department of Fish and Wildlife. July 2009. http://www.dfg.ca.gov/fish/Resources/HabitatManual.asp
- [CDFW] California Department of Fish and Wildlife. 2019. Areas of Conservation Emphasis (ACE), Significant Habitats. Available from: <u>https://wildlife.ca.gov/Data/Analysis/Ace#523731771-</u> <u>significant-habitats</u>
- [CDFW 2022a] California Department of Fish and Wildlife. 2020. Scientific Collection Permits. Available from: <u>https://wildlife.ca.gov/Licensing/Scientific-Collecting#53949678</u>
- [CDFW 2022b] California Department of Fish and Wildlife. 2020. California Natural Community List. Available from: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline</u>Griffin and Muick 1990.
- Chen, I. C., Hill, J. K., Ohlemuller, R., Roy, D. B., & Thomas, C. D. (2011). Rapid range shifts of species associated with high levels of climate warming. Science, 333, 1024–1026. https://doi.org/10.1126/science1206432
- CTC & Associates LLC, 2012. *Preliminary Investigation: Highway Crossings for Herptiles* (Reptiles and Amphibians). Prepared for the California Department of Transportation Division of Environmental Planning and Engineering.
- Haddad, N. M., Brudvig, L. A., Clobert, J., Davies, K. F., Gonzalez, A., Holt, R. D., & Lovejoy, T. E. (2015). Habitat fragmentation and its lasting impact on Earth's ecosystems. Science Advances, 1, e1500052. <u>https://doi.org/10.1126/sciadv.1500052</u>
- Johnston, D., Tatarian, G., Pierson, E. 2004. California Bat Mitigation Techniques, Solutions, and Effectiveness. [Internet]. [cited 2020 June 16]. Available from: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10334</u>
- Longcore, T., and C. Rich. 2004. Ecological light pollution Review. Frontiers in Ecology and the Environment 2:191–198.
- Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. The Condor 108:130–139.
- Morelli et al., 2017. Climate Change Responses.

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- Nicholson, E., Westphal, M. I., Frank, K., Rochester, W. A., Pressey, R. L., Lindenmayer, D. B., & Possingham, H. P. (2006). A new method for conservation planning for the persistence of multiple species. Ecology Letters, 9, 1049–1060. <u>https://doi.org/10.1111/j.1461-0248.2006.00956</u>
- Nightingale, B., T. Longcore, and C. A. Simenstad. 2006. Artificial night lighting and fishes. Pages 257–276 in C. Rich and T. Longcore, editors. Ecological consequences of artificial light at night. Island Press, Washington, D.C., USA.
- Oprea, M., Mendes, P., Vieira, T.B., Ditchfield, A.D. 2009. Do Wooded Streets Provide Connectivity for Bats in an Urban Landscape? Biodiversity Conservation 18:2361-2371.
- Perry, G., B. W. Buchanan, M. Salmon, and S. E. Wise. 2008. Effects of night lighting on urban reptiles and amphibians in urban environments. Pages 239–256 in J. C. Mitchell, R. E. Jung Brown, and B. Bartholomew, editors. Urban Herpetology. Society for the Study of Amphibians and Reptiles, Salt Lake City, UT, USA.
- Sawyer, J.O., Keeler Wolf, T., and J.M. Evens. 2009. A manual of California Vegetation, 2nd ed. ISBN 978 0 943460 49 9.
- Spencer, W.D., et. al., 2010. *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration.
- Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. Current Biology 19:1123–1127. Elsevier Ltd.
- Tabor, R. A., G. S. Brown, and V. T. Luiting. 2004. The effect of light intensity on sockeye salmon fry migratory behavior and predation by cottids in the Cedar River, Washington. North American Journal of Fisheries Management 24:128–145.