



DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



October 15, 2024

Dianna Beck, Environmental Branch Chief
California Department of Transportation (District 5)
50 Higuera Street
San Luis Obispo, California 93401
dianna.beck@dot.ca.gov

**Subject: Morro Bay Pavement Project (Project)
Notice of Preparation (NOP)
SCH No.: 2024090012**

Dear Dianna Beck:

The California Department of Fish and Wildlife (CDFW) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the California Department of Transportation (Caltrans) District 5 for the above-listed Project, pursuant to 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 impact California fish and wildlife. Likewise, CDFW appreciates 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 California Fish and Game Code (Fish & G. 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)). In its trustee capacity, CDFW 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.

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.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 2

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.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession, or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

Federally Listed Species: CDFW recommends consulting with the United States Fish and Wildlife Service (USFWS) and/or National Marine Fisheries Service (NMFS) on potential impacts to Federally listed species. Take under the Federal Endangered Species Act (ESA) is more broadly defined than CESA; take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS to comply with ESA is advised well in advance of any ground disturbing activities.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened on any State or Federal list to be considered Endangered, Rare, or Threatened under CEQA. If a species can be shown to meet the criteria for Endangered, Rare, or Threatened, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans District 5

Objective: The purpose of this Project is to preserve and extend the service life of the existing pavement and upgrading outdated assets within the Project limits to improve pedestrian and bicyclist facilities. The proposed Project includes and is not limited to, paving State Route 1, placing shoulder backing, grading the Morro Bay Dog Beach parking lot, replacing and installing new curb ramps, updating sidewalks, minor roadway widening and relocation of traffic signals at three signalized intersections, installation of

Dianna Beck, Environmental Branch Chief
 Caltrans District 5
 October 15, 2024
 Page 3

bike parking facilities, replacement of light poles, replacement of roadway sign panels and posts, replacement of guardrail and thrie-beam median barrier, conversion of thrie-beam median barrier with median concrete barrier, installation of concrete barrier transitions where guardrail end at bridge rails, replacement of existing dikes and overside drains, and replacement of right-of-way fencing.

Location: The Project is in San Luis Obispo County, from just northwest of the intersection of State Route 1 and San Luisito Creek Road (post mile 25.7) to just south of the intersection of State Route 1 and Cass Avenue (post mile 34.4), on State Route 1 in and around Morro Bay and Cayucos.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Caltrans District 5 in adequately identifying and/or mitigating the Project’s significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the DEIR prepared for this Project. The Project area is bordered by open space, residences, and coastal dune scrub and open beach habitat.

Based on a review of the Project description, California Natural Diversity Database (CNDDDB) records and CDFW’s experience with the resources in the Project Area, CDFW is concerned about potential Project impacts to the following special status species (CDFW 2024, CNPS 2024):

| Common Name | Scientific Name | Listing* | | |
|------------------------------------|-----------------------------------|----------|---------|-----------|
| | | State | Federal | CDFW/CRPR |
| Animals | | | | |
| Invertebrates | | | | |
| Crotch’s bumble bee | <i>Bombus crotchii</i> | CE | -- | |
| monarch | <i>Danaus plexippus plexippus</i> | -- | C | SA |
| Amphibians | | | | |
| California red-legged frog | <i>Rana draytonii</i> | -- | T | SSC |
| Reptiles | | | | |
| Northern California legless lizard | <i>Anniella pulchra</i> | -- | -- | SSC |
| Southwestern pond turtle | <i>Actinemys pallida</i> | -- | PT | SSC |
| Birds | | | | |
| Western snowy plover | <i>Charadrius nivosus nivosus</i> | -- | E | SSC |
| Mammals | | | | |
| American badger | <i>Taxidea taxus</i> | -- | -- | SSC |
| Monterey big-eared woodrat | <i>Neotoma macrotis luciana</i> | -- | -- | SSC |

Dianna Beck, Environmental Branch Chief
 Caltrans District 5
 October 15, 2024
 Page 4

| Common Name | Scientific Name | Listing* | | |
|------------------------------|---|----------|---------|-----------|
| | | State | Federal | CDFW/CRPR |
| pallid bat | <i>Antrozous pallidus</i> | -- | -- | SSC |
| Townsend's big-eared bat | <i>Corynorhinus townsendii</i> | -- | -- | SSC |
| Western mastiff bat | <i>Eumops perotis californicus</i> | -- | -- | SSC |
| Plants | | | | |
| Miles' milk-vetch | <i>Astragalus didymocarpus</i> var. <i>milesianus</i> | -- | -- | 1B.2 |
| Cambria morning glory | <i>Calystegia subcaulis</i> ssp. <i>episcopalis</i> | -- | -- | 4.2 |
| San Luis Obispo owl's-clover | <i>Castilleja densiflora</i> var. <i>obispoensis</i> | -- | -- | 1B.2 |
| dune larkspur | <i>Delphinium parryi</i> ssp. <i>blochmaniae</i> | -- | -- | 1B.2 |
| Eastwood's larkspur | <i>Delphinium parryi</i> ssp. <i>eastwoodiae</i> | -- | -- | 1B.2 |
| Betty's dudleya | <i>Dudleya abramsii</i> ssp. <i>bettinae</i> | -- | -- | 1B.2 |
| mouse-gray dudleya | <i>Dudleya abramsii</i> ssp. <i>murina</i> | -- | -- | 1B.1 |
| Blochman's dudleya | <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> | -- | -- | 1B.1 |
| San Joaquin spearscale | <i>Extriplex joaquinana</i> | -- | -- | 1B.2 |
| Kellogg's horkelia | <i>Horkelia cuneata</i> var. <i>sericea</i> | -- | -- | 1B.2 |
| Jones' layia | <i>Layia jonesii</i> | -- | -- | 1B.2 |
| adobe sanicle | <i>Sanicula maritima</i> | R | -- | 1B.1 |
| California seablite | <i>Suaeda californica</i> | -- | E | 1B.1 |

*Status: C = candidate, CE = candidate endangered, E = endangered, R = rare, DL = delisted, PT = petitioned threatened, SSC = species of special concern, CRPR = California Rare Plant Rank.

I. ENVIRONMENTAL SETTING AND RELATED IMPACTS

Crotch's Bumble Bee (CCB)

The Project area is within the range of Crotch's bumble bee (CBB) and historical occurrences have been documented within the Project vicinity. CBB are known to inhabit a variety of habitats, including grasslands, scrublands, openings in woodlands, areas with bare ground including vacant lots, dirt roads, and levees (CDFW 2019).

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 5

These habitat elements appear to be present within the Project area. As a result, the Project has the potential to impact CCB nesting habitat, overwintering queen refugia, and direct mortality of individuals.

Crotch's bumble bee is particularly affected by habitat modification, pesticides, and herbicides (CDFW 2019). Without appropriate avoidance and minimization measures for CCB, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of bumble bee nests, and direct mortality of individuals. As such, CDFW recommends the following:

Recommended Mitigation Measure 1: CBB Habitat Assessment.

CDFW recommends a qualified biologist conduct a habitat assessment to determine if the Project area and the immediate surrounding vicinity contain habitat suitable to support CBB. Potential nesting sites include small mammal burrows, perennial bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, and hollow logs would need to be documented as part of the assessment (CDFW 2019). CBB has also been found recently nesting in dirt roads and levees (CDFW 2024).

Recommended Mitigation Measure 2: CBB Surveys.

If potentially suitable habitat is identified, CDFW recommends that a qualified biologist with the appropriate Fish and Game Code Section 2081(a) take authorization conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023).

Recommended Mitigation Measure 3: CBB Avoidance.

If CBB is detected, then CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Recommended Mitigation Measure 4: CBB Take Authorization.

If take cannot be avoided, CDFW recommends acquiring an ITP pursuant to Fish and Game Code Section 2081(b), prior to initiating ground-disturbing activities.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 6

Monarch

Project-related activities have the potential to impact the monarch and its overwintering habitat. Monarchs are an ESA candidate species. Monarchs can be found overwintering along the California coast in groves of trees primarily dominated by non-native eucalyptus (*Eucalyptus spp.*), with additional native species including Monterey pine (*Pinus radiata*) and Monterey cypress (*Hesperocyparis macrocarpa*) (Griffiths and Villablanca 2015, Pelton et al. 2016). Overwintering groves have specific microclimatic conditions that support monarch populations (Fisher et al. 2018). Overwintering monarchs are known to occur within and adjacent Project area (CDFW 2024).

During the last three decades, the western migratory monarch population that overwinters along the California coast has declined by more than 99% (USFWS 2023). Habitat loss and fragmentation, including grove senescence, are among the primary threats to the population (Thogmartin et al. 2017, USFWS 2020). Monarch overwintering sites have specific microclimate conditions that are influenced by the configuration of trees and other foliage near the site (Griffiths and Villablanca 2015). Alteration of the Project area and surrounding areas could impact microclimate conditions, thereby reducing the suitability of the site for monarchs (Weiss et al. 1991). Without appropriate avoidance and minimization measures for monarchs, potentially significant impacts associated with the Project's activities include removal of winter roosting habitat and direct mortality of individuals.

Recommended Mitigation Measure 5: Monarch Habitat Assessment.

CDFW recommends a qualified biologist conduct a habitat assessment for monarchs as part of the biological technical studies conducted in support of the CEQA document. CDFW recommends the qualified biologist assess habitat following the Xerces Management Guidelines for Monarch Butterfly Overwintering Habitat (Pelton et al. 2017) or other protocols.

Recommended Mitigation Measure 6: Monarch Habitat Avoidance.

If suitable habitat for monarch butterflies is present, CDFW advises determining the primary roosting trees and other structural components and identifying the flora integral to maintaining microclimate conditions. These areas should then be marked and avoided during Project activities. If monarchs are detected within the Project Area, CDFW advises that the monarch overwintering habitat be avoided by delineating and observing a no-disturbance buffer of at least ½ mile from the outer edge of the habitat (USFWS 2023).

California Red-Legged Frog (CRLF)

CRLF have been documented to occur within and adjacent to the Project area (CDFW 2024). CRLF inhabit ponds and other waterways including marshes, streams, and

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 7

lagoons. The species will also breed in ephemeral waters (Thomson et al. 2016). Review of aerial imagery indicates the presence of several ephemerally ponded wetland features and drainages within the vicinity of the Project area that may be suitable to support CRLF. In addition, CRLF have been documented to occur in within the coastal drainages long State Route 1, including but not limited to Chorro Creek, the ponds on Chorro Creek Ecological Reserve, San Bernardo, Torro Creek, and Old Creek (CDFW 2024), directly adjacent to the Project area. As a result, the Project has the potential to impact CRLF.

CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated (Thomson et al. 2016). Habitat loss from growth of cities and suburbs, invasion of non-native plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to CRLF (USFWS 2017, Thomson et al. 2016). Without appropriate avoidance and minimization measures for CRLF, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

Recommended Mitigation Measure 7: CRLF Habitat Assessment.

CDFW recommends that a qualified biologist conduct a habitat assessment in support of the CEQA document, to determine if the Project area or its immediate vicinity contain suitable breeding or upland habitat for CRLF.

Recommended Mitigation Measure 8: CRLF Surveys.

If suitable habitat is present, CDFW recommends that a qualified wildlife biologist conduct surveys for CRLF prior to commencing work in accordance with the USFWS "Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog" (USFWS 2005) to determine if CRLF are within or adjacent to the Project area.

Recommended Mitigation Measure 9: CRLF Avoidance.

If any CRLF are found during preconstruction surveys or at any time during construction, CDFW recommends that construction cease and that CDFW be contacted to discuss a relocation plan for CRLF with relocation conducted by a qualified biologist, holding a Scientific Collecting Permit for the species. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 and March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends a qualified biologist monitor construction activity daily for CRLF.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 8

Southwestern Pond Turtle (SWPT)

SWPT occur in the Project Area (CDFW 2024) and a review of aerial imagery shows habitats that SWPT utilize for nesting, overwintering, dispersal, and basking, including streams, ponded areas, irrigation canals, and riparian and upland habitats. SWPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meters have also been reported (Thomson et al. 2016). Noise, vegetation removal, movement of workers, construction and ground disturbance as a result of Project activities have the potential to significantly impact SWPT populations. Without appropriate avoidance and minimization measures for SWPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

Recommended Mitigation Measure 10: SWPT Surveys.

CDFW recommends that a qualified biologist conduct focused surveys for SWPT in support of the CEQA document to search for potential breeding and nesting habitat during the breeding season of March through August. If suitable habitat is present, CDFW recommends that a qualified wildlife biologist conduct surveys for SWPT prior to commencing work.

Recommended Mitigation Measure 11: SWPT Avoidance and Minimization.

CDFW recommends that any SWPT nests that are discovered remain undisturbed with a no-disturbance buffer maintained around the nest until the eggs have hatched and neonates are no longer in the nest or within the Project area. If SWPT individuals are discovered at the Project area during surveys or Project activities, CDFW recommends that they be allowed to move out of the area of their own volition without disturbance.

Northern Legless Lizard (NLL)

NLL (previously known as silvery legless lizard) are found primarily in areas with sandy or loose organic soils or where there is plenty of leaf litter (Zeiner et al. 1990, Morey 2000). Habitat loss is a primary threat to legless lizard (Zeiner et al. 1990, Morey 2000). Legless lizards may also be directly impacted by Project construction activities. Without appropriate avoidance and minimization measures for NLL, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of young, and direct mortality of individuals.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 9

Recommended Mitigation Measure 12: NLL Habitat Assessment.

CDFW recommends that a qualified biologist conduct a habitat assessment in support of the CEQA document, to determine if the Project area or its immediate vicinity contain suitable habitat for NLL.

Recommended Mitigation Measure 13: NLL Surveys.

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for NLL and their requisite habitat features to evaluate potential impacts resulting from ground-disturbance.

Recommended Mitigation Measure 14: NLL Avoidance.

Avoidance whenever possible is encouraged via delineation. However, a qualified biologist with the appropriate permit may relocate NLL out of the Project area into a nearby area with suitable habitat.

Western Snowy Plover (WSP)

WSP have been documented to occur within and adjacent to the Project area (CDFW 2024). The Pacific coast population of the WSP breeds primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Less common nesting habitats include bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars. In winter, WSP is found on many of the beaches used for nesting as well as on beaches where they do not nest, in man-made salt ponds, and on estuarine sand and mud flats. (USFWS 2007). In addition, WSP have been documented to occur along the beach habitat adjacent to the Project area (CDFW 2024), directly adjacent to the Project area. As a result, the Project has the potential to impact WSP.

Habitat degradation caused by human disturbance, urban development, introduced beachgrass (*Ammophila* spp.), and expanding predator populations have resulted in a decline in active nesting areas and in the size of the breeding and wintering populations (USFWS 2007). Without appropriate avoidance and minimization measures for WSP, potentially significant impacts associated with the Project's activities include reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

Recommended Mitigation Measure 15: WSP Habitat Assessment.

CDFW recommends that a qualified biologist conduct a habitat assessment in support of the CEQA document, to determine if the Project area or its immediate vicinity contain suitable breeding and wintering habitat for WSP.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 10

Recommended Mitigation Measure 16: WSP Surveys.

If suitable habitat is present, CDFW recommends that a qualified wildlife biologist conduct surveys for WSP prior to commencing work to determine if WSP are within or adjacent to the Project area.

Recommended Mitigation Measure 17: WSP Avoidance and Minimization.

If any WSP are found during preconstruction surveys or at any time during construction, WSP recommends that construction cease and that CDFW and USFWS be contacted. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when WSP are most likely to be nesting adjacent to the Project area (March 1 and September 30). When ground-disturbing activities must take place between March 1 and September 30 adjacent to WSP habitat, CDFW recommends a qualified biologist monitor construction activity daily for WSP.

Special Status Bat Species

Special status bat species including, but not limited to, the pallid bat, Townsend's big-eared bat, and Western mastiff bat are known to occur in the Project area. Specifically, the buildings on Chorro Creek Ecological Reserve are known to house a maternity roost of Townsend's big-eared bat. Known roosting habitats include mines, caves, rocky outcrops, bridges, trees, and buildings that provide the required localized climatic conditions and surrounding foraging opportunities needed. Multiple bat species can co-occur in roosts, and they may have similar life histories, although it is important to note that in many instances bat species do not have the same habitat requirements and life histories. Migratory patterns and winter roosts can vary significantly from species to species. Without appropriate avoidance and minimization measures for roosting bats potentially significant impacts associated with the Project's activities could include roost abandonment which may result in reduced health or vigor of adults or pups and/or direct mortality.

Recommended Mitigation Measure 18: Roosting Bat Habitat Assessment.

To minimize potential Project-related impacts to special status bat species, CDFW recommends that if any of the above listed roosting habitat elements are located within 100 feet of the Project impact area that a reconnaissance survey be conducted by a qualified wildlife biologist to determine if bats are currently or could utilize the potential roosting habitat onsite.

Recommended Mitigation Measure 19: Roosting Bat Surveys

If a potential roosting site is confirmed to support bat species within .100 feet of Project activities, CDFW recommends the Project proponent conduct focused surveys to establish species usage and seasonal usage. Focused survey methodology is advised to include visual surveys of bats (observation of

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 11

presence of bats during foraging period), inspection for suitable habitat or bat sign (guano), and use of ultrasonic detectors (Anabat, Sonobat, etc.) during all dusk emergence and pre-dawn re-entry. To maximize detectability, each survey needs to be conducted within one 24-hour period.

Recommended Mitigation Measure 20: Roosting Bat Avoidance and Minimization.

If bats are found to occupy a Project area, CDFW recommends the Project proponent implement general bat avoidance, minimization and mitigation measures, including but are not limited to, establishing a 100-foot no-disturbance buffer around roost sites and installing new roost sites to be in place prior to the initiation of Project related activities to allow enough time for bats to relocate.

Special-Status Plants

The Project area is within the known geographic range of several special status plant species and several species have been documented within the adjacent Chorro Creek Ecological Reserve, the Caltrans right-of-way, and open space areas along the Project extent (CDFW 2024, CNPS 2024). The vegetated boundaries of the parking lot along Morro Bay dog beach and grassy slopes along State Route 1 may harbor coast special status plant species. Special-status plant species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (California Native Plant Society 2018), all of which may be unintended impacts of the Project.

Recommended Mitigation Measure 21: Special Status Plant Habitat Assessment.

CDFW recommends that a habitat assessment to determine whether there is suitable habitat for special status plants be completed within the Project area.

Recommended Mitigation Measure 22: Special Status Plant Surveys.

If there is suitable habitat, CDFW recommends the Project area be surveyed for special status plants by a qualified botanist following the “Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities” (CDFW 2018) as part of the biological technical studies conducted in support of the DEIR. This protocol, which is intended to maximize detectability, includes the identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. If surveys indicate the presence or potential presence of special status plants, consultation with CDFW is recommended for guidance on mitigation measures such as avoidance, minimization, and mitigation.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 12

Recommended Mitigation Measure 23: Special Status Plant Avoidance and Minimization.

If State-listed plant species are identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take of that species. If take cannot be avoided, take authorization would need to occur through issuance of a State ITP to comply with CESA and/or Fish and Game Code section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b).

Habitat Connectivity and Wildlife Passage

The proposed Project activities could result in short-term or long-term impacts to wildlife connectivity. Species vary in their mobility and ability to pass over and under various types of infrastructure, so species-specific data are necessary to implement designs that will not impact those species. The proposed Project includes components such as replacement of guardrail and three-beam median barrier, conversion of three-beam median barrier with median concrete barrier, installation of concrete barrier transitions where guardrail end at bridge rails and replacement of right-of-way fencing. Implementation of these components of the proposed Project could prevent, decrease, or otherwise alter use of existing wildlife movement corridors for a variety of semi-aquatic and terrestrial species within the Project area. The Project could result in direct mortality, reduced reproductive success, reduced frequency of care for young resulting in reduced health or vigor of young, reduced movement between habitats needed for various life stages (e.g. aquatic and uplands) and reduced genetic exchange affecting intra-species diversity.

California wildlife are losing the ability to move and migrate as habitat conversion and built infrastructure fragment species habitat and cut off migration corridors. Senate Bill (SB) 790 and Assembly Bill 2344 both address wildlife connectivity in California and assert authority and responsibility to CDFW and/or local and state transportation agencies to implement wildlife connectivity actions by identifying where they are needed, coordinate and implement those actions, and establish compensatory mitigation credits for actions taken. SB 790 allows for the creation of Wildlife Connectivity Actions that enhance wildlife movement across any linear barriers, including, but not limited to, roads, rail lines, and canals. The Project area contains habitat that could support connectivity actions across the Project area.

Recommended Mitigation Measure 24: Habitat Connectivity.

CDFW recommends that the DEIR assess effects of changes to median barriers and fencing on habitat connectivity in the Project area, providing information on specific locations where wildlife connectivity could be impacted. CDFW also

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 13

recommends that Caltrans explore opportunities for enhancement of existing corridors or creation of new corridors where they may currently be lacking.

Artificial Lighting

Installation of outdoor artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication, determining when to begin foraging, thermoregulation behavior, and migration (Longcore and Rich 2004, Miller 2006, Nightingale et al. 2006, Perry et al. 2008, Stone et al. 2009). 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). Project activities could result in disruption of wildlife behavior, inadvertent injury, or mortality.

Recommended Mitigation Measure 25: Artificial Lighting.

CDFW recommends that the DEIR for the Project include an analysis of the impacts of artificial lighting on biological resources and incorporate mitigation measures to decrease the impacts of artificial outdoor lighting on wildlife species, as applicable. Potentially feasible mitigation measures include motion sensitive lighting; mounting light fixtures as low as possible to minimize light trespass; use of light fittings that direct and confine the spread of light downward; and use of long-wavelength light sources. In addition, CDFW recommends that lighting not be installed in ecologically sensitive areas (e.g., streams, wetlands, and habitat used by special status species, such as nesting/roosting sites and riparian corridors) and the use of the white/blue wavelengths of the light spectrum be avoided.

II. EDITORIAL COMMENTS AND/OR SUGGESTIONS

CDFW requests that the DEIR fully identify potential impacts to biological resources, including the above-mentioned species. To adequately assess any potential impacts to biological resources, focused biological surveys should be conducted by qualified wildlife biologists/botanists during the appropriate survey period(s) for each species to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol level surveys, and to identify any Project-related impacts under CESA and other species of concern. CDFW recommends the DEIR address potential impacts to these species and provide measurable mitigation measures that, as needed, will reduce impacts to less than significant levels. Information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/SurveyProtocols>).

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 14

Nesting Birds: CDFW encourages Project implementation occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February 1 through September 15), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife biologist counsel and support any variance from these buffers and notify CDFW in advance of implementing a variance.

Federally Listed Species: CDFW recommends consulting with USFWS and/or NMFS regarding potential impacts to federally listed species including, but not limited to, California seablite, CRLF, monarch, and SWPT. The ESA is more broadly defined than CESA; take under the ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS and NMFS to comply with the ESA is advised well in advance of any Project activities.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 15

California Natural Diversity Database: Please note that the CNDDDB is populated by voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat and features capable of supporting species. A lack of an occurrence record, or lack of recent occurrence records, in the CNDDDB does not mean that a species is not present. To adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) and using the appropriate protocol survey methodology are warranted to determine if any special status species are present.

Lake and Stream Alteration: Project activities may be subject to CDFW's regulatory authority pursuant to Fish and Game Code section 1600 et seq. Several creeks and drainages bisect and parallel State Route 1 within the Project limits. These drainages include and are not limited to San Luisito Creek, San Bernardo Creek, four additional unnamed tributaries to Chorro Creek, Little Morro Creek, Alva Paul Creek, Torro Creek, Willow Creek, Old Creek, and two unnamed drainages.

Fish and Game Code section 1602 requires entities to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake; or (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial in nature. For additional information on notification requirements, please contact our staff in the Caltrans Liaison Unit at RRR.R4@wildlife.ca.gov. CDFW therefore recommends that the DEIR for this Plan include information related to these requirements of Fish and Game Code and determine if activities in streams may require notification as required by Fish and Game Code.

Project Alternatives Analysis: CDFW recommends that the information and results obtained from the biological technical surveys, studies, and analysis conducted in support of the Project's DEIR be used to develop and modify the Project's alternatives to avoid and minimize impacts to biological resources to the maximum extent possible. When efforts to avoid and minimize have been exhausted, CDFW advises that remaining impacts to sensitive biological resources be mitigated to reduce impacts to a less than significant level, if feasible.

Cumulative Impacts: CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). Cumulative

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 16

impacts are recommended to be analyzed using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area should also be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW recommends closely evaluating the need for a cumulative impacts analysis for the following species as part of the DEIR due to these species being in poor or declining health or at risk: Crotch's bumble bee, monarch, California red-legged frog, Northern California legless lizard, Southwestern pond turtle, American badger, Monterey big-eared woodrat, pallid bat, Townsend's big-eared bat, Western mastiff bat, Miles' milk-vetch, Cambria morning glory, San Luis Obispo owl's-clover, dune larkspur, Eastwood's larkspur, Betty's dudleya, mouse-gray dudleya, Blochman's dudleya, San Joaquin spearscale, Kellogg's horkelia, Jones' layia, adobe sanicle, California seablite, and any impacted migratory or non-migratory nesting bird species. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

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, section 21003, subd. (e)). Accordingly, please report any special status species and natural communities detected during Project surveys to the 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>.

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, section 753.5; Fish & G. Code, section 711.4; Pub. Resources Code, section 21089).


CONCLUSION

CDFW appreciates the opportunity to comment on the NOP to assist the Caltrans District 5 in identifying and mitigating Project impacts on biological resources. More information on survey and monitoring protocols for sensitive species can be found at

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 17

CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table which corresponds with recommended mitigation measures in this comment letter. Questions regarding this letter or further coordination should be directed to Michaela Robbins, Senior Environmental Scientist (Specialist), at (559) 977-0110 or by email at michaela.robbins@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 18

REFERENCES

- California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife. Sacramento, California, USA.
- _____. 2019. Evaluation of the Petition from the Xerces Society, Defenders of Wildlife, and the Center for Food Safety to List Four Species of Bumblebees as Endangered Under the California Endangered Species Act. State of California, Natural Resources Agency, Department of Fish and Wildlife, Sacramento, California, USA.
- . 2023. Survey considerations for California Endangered Species Act Candidate Bumble Bee Species. California Department of Fish and Wildlife, Sacramento, California, USA.
- . 2024. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed 18 September 2024.
- California Native Plant Society (CNPS). Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (Online Edition, v8-03 0.39). <http://www.rareplants.cnps.org>. Accessed 18 September 2024.
- Fisher, A., K. Saniee, C. Van der Heide, J. Griffiths, D. Meade, and F.X. Villablanca, 2018. Climatic Niche Model for Overwintering Monarch Butterflies in a Topographically Complex Region of California. *Insects*, 9(4). <https://doi.org/10.3390/insects9040167>
- Griffiths, J., and Villablanca, F. 2015. Managing Monarch Butterfly Overwintering Groves: Making Room Among the Eucalyptus. *California Fish and Game*, 101(1): 40–50.
- Longcore, T. and C. Rich. 2004. Ecological Light Pollution - Review. *Frontiers in Ecology and the Environment*, 2:191–198.
- Miller, M. 2006. Apparent Effects of Light pollution on Singing Behavior of American Robins. *The Condor*, 108:130–139.
- Morey, S. 2000. Life History Account for California Legless Lizard. California Wildlife Habitat Relationships System. California Department of Fish and Wildlife, Sacramento, California.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 19

Nightingale, B., T. Longcore, and C. 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.

Pelton, E., Black, S. H., Fallon, C., Jepson, S., and Voight, C. 2017. Protecting California's Butterfly Groves: Management Guidelines for Monarch Butterfly Overwintering Habitat. The Xerces Society. Portland, Oregon.

Perry, G., B. Buchanan, R. Fisher, M. Salmon, and S. Wise. 2008. Effects of Night Lighting on Urban Reptiles And Amphibians. Chapter 16 in: Urban Herpetology: Ecology, Conservation and Management of Amphibians and Reptiles in Urban and Suburban Environments. J. C. Mitchell, R. E. Jung Brown and B. Bartholomew (ed.). Herpetological Conservation, 3:211-228.

Stone, E., G. Jones, and S. Harris. 2009. Street Lighting Disturbs Commuting Bats. Current Biology, 19:1123–1127.

Thogmartin, W. E., Altizer, S., Diffendorfer, J. E., Drum, R. G., Erickson, R., Libby, K., Lopez-Hoffman, L., Oberhauser, K., Pleasants, J., Semmens, B., Semmens, D., Taylor, O. R., and Wiederholt, R. 2017. Monarch butterfly population decline in North America: Identifying the threatening processes. Royal Society Open Science, 4(9). <<https://doi.org/10.1098/rsos.170760>>.

Thomson, R. C., A. N. Wright, and H. B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. Oakland, California, USA.

United States Fish and Wildlife Services (USFWS). 2005. Revised Guidance on Site Assessment and Field Surveys for the California Red-Legged Frog. Sacramento, California, USA.

----- . 2017. Species Account for California Red-legged Frog. Sacramento, California, USA.

----- . 2020. Monarch (*Danaus plexippus*) Species Status Assessment Report. V2.1 96 pp + appendices.

----- . 2023. Western Monarch Butterfly Conservation Recommendations.

Weiss, S. B., P.M. Rich, D.D. Murphy, W.H. Calvert, P.R. Ehrlich. 1991. Forest Canopy Structure at Overwintering Monarch Butterfly Sites: Measurements with Hemispherical Photography. Conservation Biology, 5(2): 165–175. <https://doi.org/10.1111/j.1523-1739.1991.tb00121.x>.

Dianna Beck, Environmental Branch Chief
Caltrans District 5
October 15, 2024
Page 20

Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1988–1990. Northern California legless lizard In Life History Accounts for Species in the California Wildlife Habitat Relationships System. California's Wildlife. Vol I-III. California Department of Fish and Game, Sacramento, California.

Dianna Beck, Environmental Branch Chief
 Caltrans District 5
 October 15, 2024
 Page 21

Attachment 1
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)
PROJECT: Morro Bay Pavement Project
SCH No.: 2024090012

| RECOMMENDED MITIGATION MEASURE | STATUS/DATE/INITIALS |
|--|----------------------|
| <i>Before Disturbing Soil or Vegetation</i> | |
| Crotch's bumble bee (CBB) Habitat Assessment | |
| CBB Surveys | |
| CBB Avoidance | |
| CBB Take Authorization | |
| Monarch Habitat Assessment | |
| Monarch Habitat Avoidance | |
| California Red-legged Frog (CRLF) Habitat Assessment | |
| CRLF Surveys | |
| CRLF Avoidance | |
| Southwestern Pond Turtle (SWPT) Surveys | |
| SWPT Avoidance and Minimization | |
| Northern Legless Lizard (NLL) Habitat Assessment | |
| NLL Surveys | |
| NLL Avoidance | |
| Western Snowy Plover (WSP) Habitat Assessment | |
| WSP Surveys | |
| WSP Avoidance and Minimization | |
| Roosting Bat Habitat Assessment | |
| Roosting Bat Surveys | |
| Roosting Bat Avoidance and Minimization | |
| Special Status Plant Habitat Assessment | |
| Special Status Plant Surveys. | |
| Special Status Plant Avoidance and Minimization | |
| Habitat Connectivity | |
| Artificial Lighting | |