

State of California
Department of Fish and Wildlife



Memorandum

Date: November 8, 2022

To: Maxwell Lammert
California Department of Transportation
District 4
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Maxwell.Lammert@dot.ca.gov



DocuSigned by:

Erin Chappell

From: Erin Chappell, Regional Manager

California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: State Route 12 Major Pavement Rehabilitation (2R) Project, Draft Initial Study with Mitigated Negative Declaration, SCH No. 2022100135, Solano County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Completion (NOC) for the draft Initial Study with Mitigated Negative Declaration (IS/MND) for the State Route 12 Pavement Rehabilitation (2R) Project (Project), pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ CDFW is submitting comments on the draft IS/MND as a means to inform the California Department of Transportation (Caltrans) as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

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 (LSA) 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

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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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. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

PROJECT LOCATION AND DESCRIPTION

Caltrans proposes the Project at Post Mile (PM) 7.7 to PM 14.1 in Solano County, California. The Project will rehabilitate the existing mainline travel lane and shoulder roadway pavement on SR-12 from 0.5 mile east of Walter Road/Lawler Ranch Parkway (westernmost end) to 0.5 mile east of Shiloh/Lambie Road. The Project will replace asphalt concrete surfacing and overlay, replace the temporary barriers located in the median with permanent concrete barriers type 60M, replace shoulder and centerline rumble strips. The Project will also replace metal beam guardrail with Midwest guardrail system, upgrade crash cushions to current standards, upgrade drainage systems, widen shoulders, remove and replace the existing asphalt concrete dikes, and provide erosion control where necessary. In addition, the Project will also upgrade the bridge railings at the Union Creek bridge and Denverton Creek bridge to be consistent with current Caltrans design standards.

REGULATORY AUTHORITY

Lake and Streambed Alteration Agreement Notification

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for or any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank (including associated riparian or wetland resources); or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements.

Fully Protected Species

Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for collecting these species for necessary scientific research and relocation of a fully protected bird species for the protection of livestock. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a Natural Communities Conservation Plan (NCCP), 2081.7 or a Memorandum of Understanding for scientific research, including efforts to recover fully protected, threatened or endangered species. "Scientific Research" does not include an action taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

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California Endangered Species Act

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in “take” of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA Permit. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency’s FOC does not eliminate the Project proponent’s obligation to comply with Fish and Game Code, section 2080. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

COMMENTS AND RECOMMENDATIONS

COMMENT 1: Terrestrial Wildlife Connectivity

Issue: The Project has the potential to significantly impact terrestrial wildlife connectivity over the 6.4-mile linear stretch of highway within Solano County. The surrounding habitat supports threatened, endangered, special-status and native species including but not limited to California tiger salamander, California red-legged frog and western burrowing owl. The Project has the potential to further fragment thousands of acres of surrounding habitat and may result in potentially immitigable significant impacts to wildlife movement if not designed properly. The Union Creek Bridge and the corresponding creek corridor represents a core linkage between two core reserve habitat areas (BIOS; DS-2693). The proposed Project may represent a change in surrounding land use and reduce connectivity because Caltrans is proposing to convert the existing two-lane highway that is currently semi-porous to terrestrial movement to a segment of highway with Type 60M concrete barriers (4.3 feet in height). An alternative design for the median barriers and any proposed barrier walls should utilize the Midwest style guardrail design to maintain porous connectivity or design the barrier wall system in consultation with the natural resource agencies to maintain terrestrial connectivity.

Evidence the impact would be significant: California wildlife is losing the ability to move and migrate as habitat conversion and built infrastructure disrupt species habitat and cut off migration corridors (Senate Bill 790; SB-790). The current baseline condition of the area proposed for the expansion of the existing state highway system represents a semi-permeable barrier to wildlife connectivity. Larger wildlife species may cross at their own risk of injury or mortality but smaller species such as herpetofauna would most likely not cross the highway successfully without incurring injury or mortality. The Project

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represents a potentially significant impact to connectivity due to the proposed increase in the number of travel lanes, proposal for median barrier walls, edge of pavement barriers and access roads that will all significantly expand the width and complexity of the corridor.

Section 15355 of the CEQA guidelines states that cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. This Project represents a single project that will be proceeded by additional phases of construction and the construction of supporting infrastructure and development projects surrounding the highway. This Project can therefore be regarded as a potentially significant cumulative impact to terrestrial wildlife connectivity when compared to its existing baseline condition and when considering the future infrastructure phases being proposed or considered.

Recommendation: CDFW recommends the following are incorporated into the MND:

Recommendation Mitigation Measure 1 – Wildlife Connectivity: Terrestrial connectivity elements such as wildlife friendly culverts, under-crossings and other forms of wildlife-crossing designs should be programmed into the Project as design features as conditions of approval. To inform design and placement of connectivity features, the lead agency shall develop a wildlife movement study. The study should occur over a minimum period of 12 months prior to the initiation of construction. The study shall occur within the limits of the proposed Project to develop a baseline understanding of the areas where wildlife movement and crossings are most prevalent. The study should also be utilized to inform Project design to identify areas where wildlife crossing structure(s) installation(s) would result in the largest benefit to rare, threatened and endangered species as well as special-status species and non-special-status species for wildlife connectivity. Analysis during the 12-month study shall be utilized to determine the type, size and number of structures that would be most beneficial to facilitate wildlife connectivity (new wildlife crossing culverts, modification of existing culverts, wildlife crossing bridges, etc.). Upon completion of the Project the wildlife connectivity structures should be studied for an additional 12-month period, at minimum, to determine the effectiveness of structure utilization by wildlife. The protocol for the baseline survey, post-construction surveys, site selection criteria and design criteria for the development of the wildlife connectivity structures should follow the protocols outlined in; *The California Department of Transportation (Caltrans), Wildlife Crossings Design Manual* (Caltrans, 2009) and the *Federal Highway Administration Wildlife Crossing Structure Handbook – Design and Evaluation in North America, Publication No. FHWA-CFL/TD-11-003* (FHWA, 2011).

Recommendation Mitigation Measure 2 – Wildlife Connectivity: The lead agency should develop a series of heat maps for target species along the SR-12 corridor using high value resource layers including but not limited to species presence/absence,

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drainages, culverts, creeks, road-strike data and wildlife linkage corridors for pinpointing key wildlife crossing locations with high permeability.

Recommendation Mitigation Measure 3 – Alternative Design of Median Barriers:

The lead agency should not implement Type 60M concrete barrier wall installation in between travel lanes on SR-12. This will create an impenetrable wall for most species of wildlife to traverse. A Midwest guardrail style design or system designed in consultation with the natural resource agencies has more potential to maintain connectivity for wildlife.

COMMENT 2: Lake and Streambed Alteration Program

Issue: The Project has the potential to significantly impact fish and wildlife resources associated with California aquatic resource features (BIOS; DS-2836) that maybe subject to notification requirements pursuant to Fish and Game Code § 1602.

Recommendation: CDFW recommends the following measures be incorporated into the MND:

Recommendation Mitigation Measure 1 – Stream Crossing Analysis: CDFW recommends providing a series of tables and maps that identify all potential stream crossings, culverts and stream modifications, subject to notification to the LSA Program for each alternative. The tables should include information that notes Post-Mile (PM) location of the conveyance, proposed work, linear feet of impact, acres of impact, proposed tree and vegetation removals and potential for use of conveyance in terrestrial connectivity. The tables should also be cross referenced with maps of the existing or proposed structure locations.

Recommendation Mitigation Measure 2 – Fish and Wildlife Resources: Pursuant to Fish and Game Code section 1603, if CDFW determines that the Project could substantially adversely affect existing fish or wildlife resources CDFW will include measures in the LSA Agreement necessary to protect those resources. Measures may include, but not be limited to on-site and/or off-site enhancement, restoration and/or compensatory mitigation for permanent and temporary impacts. It is recommended that the lead agency includes project related enhancements, restoration and mitigation activities into the MND for subsequent review and comment by the natural resource agencies.

COMMENT 3: Fish Passage Assessment

Issue: Multiple potential fish passage barriers and unassessed locations exist within the identified Project limits, as described in the recommendations section below. Senate Bill 857 (SB-857), which amended Fish and Game Code § 5901 and added § 156 to the Streets and Highways Code states in § 156.3, “For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall ensure that, if the project affects a stream crossing on a stream where anadromous fish are, or

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historically were found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall submit the assessment to the [CDFW] and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the [CDFW].

Evidence the impact would be significant: The Project contains stream crossings within areas mapped as historic or current watersheds where anadromous fish are, or historically were found. The species include but are not limited to Steelhead – California Central Valley DPS (BIOS; DS-810), Steelhead – Central Coast DPS (BIOS; DS-806), Chinook Salmon – Central Valley Fall Run/Late Fall Run ESU (BIOS; DS-802), Chinook Salmon – Winter Run (BIOS; DS-800). The decline of naturally spawning salmon and steelhead trout is primarily a result of the loss of appropriate stream habitat and the inability of fish to get access to habitat, according to reports to the Fish and Game Commission and by the CDFW (CDFW, 1996). Restoration of access to historical spawning and rearing areas should be incorporated into the Project design through barrier modification, fishway installation, or other means (CDFW, 1996).

Recommendations: If barriers or unassessed barriers noted within the Project limits identified below are found to be a barrier to fish passage, remediation of the problem should be designed into the Project by the implementing agency as a Project feature in consultation with CDFW and other natural resource agencies. CDFW recommends discussing the following locations as they pertain to fish passage:

Location 1, Unnamed Channel to Hill Slough, PM 7.9; SR-12, (Latitude: 38.2358; Longitude: -121.9842; Alameda County), Fish Passage Assessment Database ID# 761298, fish barrier status: unassessed.

Location 2, unnamed channel to Hill Slough, PM 8, SR – 12, (Latitude: 38.2347; Longitude: -121.9830; Alameda County), Fish Passage Assessment Database ID# 761299, fish barrier status: unassessed.

Location 3, Union Creek, PM 8.5, SR-12, (Latitude: 38.2295; Longitude: -122.9758; Alameda County), Fish Passage Assessment Database ID# 761300, fish barrier status: unassessed.

Location 4, Simmons Slough, PM 9.5, SR-12, (Latitude: 38.2284; Longitude: -121.9592; Alameda County), Fish Passage Assessment Database ID# 761301, fish barrier status: unassessed.

Location 5, unnamed channel to Luco Slough, PM 11.9, SR-12, (Latitude: 38.2283; Longitude: -121.9150; Alameda County), Fish Passage Assessment Database ID# 761302, fish barrier status: unassessed.

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Location 6, Denverton Creek, PM 13, SR-12, (Latitude: 38.2276; Longitude: -121.8962; Alameda County), Fish Passage Assessment Database ID# 761303, fish barrier status: unassessed.

Location 7, unnamed channel to Denverton Creek, PM 14.1, SR-12, (Latitude: 38.2145; Longitude: -121.8836; Alameda County), Fish Passage Assessment Database ID# 761304, fish barrier status: unassessed.

The fish passage section should discuss the current status of the crossing location noted in the California Fish Passage Assessment Database, conduct first pass and or second pass fish assessments, as necessary, as well as provide images of the upstream and downstream ends of water conveyance structure. CDFW requests a fish passage discussion section is included to address this potentially significant impact through the following avoidance and minimization measures, which should be made conditions of approval by the lead agency.

Recommended Mitigation Measure 1 - Fish Passage Assessment: To evaluate potential impacts to native fish species and fisheries resources, Caltrans should submit the assessment to the CDFW and add it to the CALFISH database. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the CDFW. CDFW shall be engaged prior to design in early coordination and at 30% design at minimum.

COMMENT 4: Bat Assessment and Avoidance

Issue: The Project has a high potential for bat species identified in the Environmental Setting section of this letter to roost within the Project limits (BIOS; DS-2498, DS-2497 and DS-2496). In order to determine the extent to which impacts may occur to bats and determine where habitat loss may occur from the replacement of structures or removal of trees, it is important the lead agency develop information in tables, maps and text descriptions to depict where potential bat habitat exists. Detailed information should also be provided in the subsequent draft EIR that includes a description, table and map where new structures will be constructed that could provide new roosting habitat structures for bats such as bridges, culverts and overpasses.

Recommendation: CDFW recommends incorporating the following into the AMM-BIO-8: Pre-Construction Bat Surveys and Avoidance Measures is updated to incorporate the following:

Recommended Mitigation Measure 1 – Bat Habitat Assessment: A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). A report

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should be provided by the qualified biologist and incorporated into the MND that includes a section discussing the locations of suitable bat habitat and if any bats or signs of bats (feces or staining at entry/exit points) are discovered. The surveys should occur at least two years in advance of Project initiation.

Recommended Mitigation Measure 2 – Bat Habitat Monitoring: If potentially suitable bat roosting habitat is determined to be present based on recommended mitigation measure one above, a qualified biologist shall conduct focused surveys at the trees, bridge(s), culverts and overpasses. Methods should include utilizing night-exit surveys, sound analyzation equipment and visual inspection within open expansion joints and portholes of the structures. Surveys should occur from March 1 to April 15 or August 31 to October 15 prior to construction activities. If the focused survey reveals the presence of roosting bats, then the appropriate exclusionary or avoidance measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance methods may include temporary, exclusionary blocking, one way-doors or filling potential cavities with foam. Methods may also include visual monitoring and staging of work at different ends of the Project to avoid work during critical periods of the bat life cycle or to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited to avoid the most sensitive stages of the bat species life cycle (maternity/pupping season).

Recommended Mitigation Measure 3 – Bat Project Avoidance: If active bat roosts are observed during environmental assessments or during construction, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to be implemented at the Project site. Once the plan is implemented, Project activities may recommence in coordination with the natural resource agencies. The bat avoidance plan should utilize seasonal avoidance, phased construction as well as temporary and permanent bat housing structures developed in coordination with CDFW.

Recommended Mitigation Measure 4 – Permanent Bat Roost Design: CDFW recommends inclusion of permanent bat roost structures into the design of new bridges or overpasses to avoid potentially significant impacts from permanent habitat loss. The structures should be designed in coordination with CDFW and include the appropriate baffle spacing or features to accommodate multiple species of bats as specified in the *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions Manual* (H.T. Harvey, 2019).

COMMENT 5: Swainson's Hawk

Issue: The Project is located within and adjacent to grassland habitat that may be suitable foraging, and suitable nesting habitat for Swainson's hawk, a State threatened species, also protected under Fish and Game Code section 3503, 3503.5 and the federal Migratory Bird Treaty Act (MBTA).

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Recommendation: In order to avoid “take” or adverse impacts to Swainson’s hawk CDFW recommends incorporation of the following into AMM-BIO-6: Swainson’s Hawk Pre-Construction Surveys:

Recommended Mitigation Measure 1 – Swainson’s Hawk Protocol Surveys: CDFW recommends surveys be conducted according to the Swainson’s Hawk Technical Advisory Committee’s (TAC) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California’s Central Valley* (CDFW, 2010). CDFW strongly recommends that the TAC survey method be strictly followed by starting early in the nesting season (late March to early April) in order to maximize the likelihood of detecting an active nest. Surveys should be conducted within a minimum 5-mile radius of the proposed Project area and should be completed for at least the two survey periods immediately prior to initiating any Project-related construction work. Raptor nests may be very difficult to locate during egg-laying or incubation, or chick brooding periods (late April to early June) if earlier surveys have not been conducted. These full-season surveys may assist with Project planning, development of appropriate avoidance, minimization and mitigation measures, and may help avoid any Project delays.

Recommended Mitigation Measure 2 – Swainson’s Hawk Nests: CDFW recommends avoiding all Project-related disturbance within a minimum of 0.5 miles of an active Swainson's hawk nest during the nesting season. Please refer to the CDFW guidance document on Swainson’s hawk (CDFW, 1994, 2010) take avoidance, minimization and mitigation measures. Early consultation with CDFW and other natural resource agencies on Swainson’s hawk take avoidance, minimization and mitigation measures is strongly recommended.

Recommended Mitigation Measure 3 – Swainson’s Hawk Nest Tree Survey: CDFW defines an active nest as a nest that has been utilized once over a 5-year period (CDFW, 2010). CDFW recommends an inventory of potential trees within the Project limits is conducted following the protocols noted in Recommended Mitigation Measure 1 – Swainson’s Hawk Protocol Surveys. The inventory should include maps and tree inventory that notes tree species, diameter at breast height, health status, potential nest use and proposed project related trimming or removal.

CONCLUSION

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

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Questions regarding this letter or further coordination should be directed to Mr. Robert Stanley, Senior Environmental Scientist (Specialist), at (707) 339-6534 or Robert.Stanley@wildlife.ca.gov; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

cc: State Clearinghouse #2022100135

REFERENCES

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