

State of California  
Department of Fish and Wildlife



## Memorandum

Date: November 1, 2021

To: Mr. Scott Guidi  
California Department of Transportation  
District 10; Environmental Planning  
1976 E. Dr. Martin Luther King Jr. Boulevard  
Stockton, CA 95205  
[Scott.Guidi@dot.ca.gov](mailto:Scott.Guidi@dot.ca.gov)

Governor's Office of Planning & Research

Nov 01 2021

STATE CLEARINGHOUSE

DocuSigned by:

*Stephanie Fong*

From: Ms. <sup>CF047D7F8D234E1</sup>Stephanie Fong, Acting Regional Manager  
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: Interstate 205 Managed Lanes Project, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2021090472, Alameda and San Joaquin County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) for the draft Environmental Impact Report (EIR) for the Interstate 205 Managed Lanes Project (Project), pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup> CDFW is submitting comments on the draft EIR 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 a Trustee Agency with responsibility under CEQA §15386 for commenting on projects that could impact fish, plant and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. CDFW has the following concerns, comments, and recommendations regarding the Project.

### PROJECT LOCATION AND DESCRIPTION

Caltrans, as the lead agency, proposes an expansion of the Interstate 205 (I-205) corridor from the Interstate 580 (I-580), Grant Line Road interchange in Alameda County to the I-205, Interstate 5 (I-5) interchange in San Joaquin County. The Project is proposed from postmile (PM) R1.7 to 0.8 on I-580 in Alameda County, L0.0/R13.2 on I-205 and R12.9 to R13.5 on I-205 in San Joaquin County. The Project proposes four build alternatives and one no build alternative to expand I-205. Alternative 1 is no build. Alternative 2 proposes a partial widening. Alternative 3 involves no expansion and lane

<sup>1</sup> 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.

Mr. Scott Guidi  
California Department of Transportation

2

November 1, 2021

conversion to a high occupancy vehicle (HOV) lane. Alternatives 4 and 5 propose a widening of the entire corridor and to leave the center median open for future expansion. For all alternatives, except the no build, the Project includes improvements and expansions to local road crossings, road under-crossings and interchanges based on the selected alternative.

All alternatives, except the no build would also include detention or retention basins, access roads, transit hubs, park and rides, electric vehicle charging stations, bus stops and train stops. Locations for these improvements are to be determined in coordination with stakeholders and partners.

## **REGULATORY REQUIREMENTS**

### **Lake and Streambed Alteration Agreement**

The Project has the potential to impact stream resources including mainstems, tributaries, drainages and floodplains associated with thirty (30) varied aquatic resource types within the Biological Study Area (BSA) that may require notification to the LSA Program (California Natural Diversity Database (CNDDDB); Dataset 2836 (DS-2836; California Aquatic Resources Inventory). If work is proposed that will impact the bed, bank, channel or riparian habitat, including the trimming or removal of trees and riparian vegetation, please be advised that the proposed Project may be subject to LSA notification. CDFW requires an LSA notification, pursuant to Fish and Game Code § 1600 et. seq., for or any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, bank or channel 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.

### **Fish and Game Code 5901**

Except as otherwise provided in this code, it is unlawful to construct or maintain in any stream in Districts 1, 1<sup>3</sup>/<sub>8</sub>, 1<sup>1</sup>/<sub>2</sub>, 1<sup>7</sup>/<sub>8</sub>, 2, 2<sup>1</sup>/<sub>4</sub>, 2<sup>1</sup>/<sub>2</sub>, 2<sup>3</sup>/<sub>4</sub>, 3, 3<sup>1</sup>/<sub>2</sub>, 4, 4<sup>1</sup>/<sub>8</sub>, 4<sup>1</sup>/<sub>2</sub>, 4<sup>3</sup>/<sub>4</sub>, 11, 12, 13, 23, and 25, any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish up and down stream. Fish are defined as a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals (Fish and Game Code § 45).

### **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

Mr. Scott Guidi  
California Department of Transportation

3

November 1, 2021

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 Guidelines §§ 21001 subd. (c), 21083, 15380, 15064 and 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, § 2080. More information on the CESA permitting process can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA>.

## ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand the Project, and its alternative's, significant impacts on the environment (CEQA Guidelines, §§ 15125 and 15360). CDFW recommends that the CEQA document prepared for the Project provide baseline habitat assessments for special-status plant, fish, and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, § 15380). Threatened, endangered, and other special-status species that are known to occur, or have the potential to occur in or near the Project site, include, but are not limited to:

Common Name	Scientific Name	Status
California red-legged frog	<i>Rana draytonii</i>	SSC, FT
California tiger salamander – Central California DPS	<i>Ambystoma californiense</i>	ST, FT
Swainson's hawk	<i>Buteo swainsonii</i>	ST
Northern harrier	<i>Circus hudsonius</i>	SSC
Big brown bat	<i>Eptesiscus fucus</i>	
California Central Valley steelhead DPS	<i>Oncorhynchus mykiss</i>	FT
Chinook salmon – Central Valley spring run ESU	<i>Oncorhynchus tshawytscha</i>	ST, FT
Chinook salmon – Central Valley fall run/late fall run ESU	<i>Oncorhynchus tshawytscha</i>	SSC, SC
Delta smelt	<i>Hypomesus transpacificus</i>	SE, FT
Western red bat	<i>Lasiurus blossevillii</i>	SSC
Pallid bat	<i>Antrozous pallidus</i>	SSC

Mr. Scott Guidi  
California Department of Transportation

4

November 1, 2021

Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSC
Western Burrowing Owl	<i>Athene cunicularia</i>	SSC
American badger	<i>Taxidea taxus</i>	SSC
<p>Notes:</p> <p>FE = Federally Endangered; FT = Federally Threatened; SE = State Endangered; ST = State Threatened; SC = Special Concern (Federal) SSC = State Species of Special Concern (State); DPS = Distinct Population Segment; ESU = Evolutionarily Significant Unit</p>		

Habitat descriptions and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from “positive occurrence” databases such as California Natural Diversity Database (CNDDDB). Based on the data and information from the habitat assessment, the CEQA document can then adequately assess which special-status species are likely to occur in the Project vicinity. CDFW recommends that prior to Project implementation surveys be conducted for special-status species noted in this comment letter with potential to occur, following recommended survey protocols if available. Survey and monitoring protocols and guidelines are available at: <https://www.wildlife.ca.gov/Conservation/Survey-Protocols>.

## COMMENTS AND RECOMMENDATIONS

CDFW acting as a Responsible Agency, has discretionary approval under CESA through issuance of a CESA ITP and LSA Agreement, as well as other provisions of the Fish and Game Code that afford protection to the State’s fish and wildlife resources. CDFW would like to thank you for preparing the NOP for the EIR. CDFW recommends the following updates, avoidance and minimization measures be imposed as conditions of Project approval by the lead agency, Caltrans, to ensure all Project-related impacts are reduced below a level of significance under CEQA:

### COMMENT 1: Project Design Analysis for Preferred Alternative

The CEQA Guidelines (§§ 15124 and 15378) require that the environmental document incorporate a full Project description, including reasonably foreseeable future phases of the Project and require that it contain sufficient information to evaluate and review the Project’s potentially significant impacts.

To fully address the Project’s potentially significant impacts to fish and wildlife resources and potentially identify a preferred alternative the draft EIR must include a comprehensive comparison analysis of the potentially significant impacts from each of

Mr. Scott Guidi  
California Department of Transportation

5

November 1, 2021

the five alternatives. Please include the following information within the updated environmental document, as applicable:

- A full description of the proposed lane expansion improvements for each alternative that includes maps and descriptions. The descriptions should include detailed information on lane expansions, barrier installation locations, bridge construction locations, culvert replacements or extensions, artificial light sourced installations or replacement locations, signage placements, train station hubs, park and ride hubs, electrical vehicle charging stations, over-crossings, under-crossings and intersection improvements. The text description should include post mile references and cross-reference map figures to fully illustrate the construction areas for each alternative;
- A full description of the proposed improvements noted in the previous bullet that includes quantities of material to be employed and a detailed description of how the proposed work will be completed, as well as a construction schedule for each proposed alternative;
- A full description of the proposed areas of impact for the Project elements noted in bullet one for each alternative described in acres and linear feet as well as an analysis of the vegetation type and number of trees to be trimmed or removed. A table that compares the acres of impacts and tree removals to each applicable habitat type for each of the five alternatives should also be included in the draft EIR;
- An artificial light output analysis for each alternative and table that compares the potential artificial light output for each alternative to existing baseline levels;
- A full description of the proposed locations for staging areas and access routes for each alternative;
- A preliminary design plan set for each alternative.

## **COMMENT 2: Project Design Analysis and Coordination**

**Issue:** The Project has the potential to significantly adversely affect fish and wildlife resources associated with 30 aquatic resource features (CNDDDB; DS-2836) from activities that may be subject to notification requirements pursuant to Fish and Game Code § 1602. It is unclear in the draft EIR if the alternatives with aquatic resource impacts will be designed to allow natural stream flow and sediment transport processes to persist in areas where stream crossings will be affected, for long-term dynamic channel stability.

**Recommendation:** CDFW recommends the following measures be incorporated into the EIR as conditions of approval:

Mr. Scott Guidi  
California Department of Transportation

6

November 1, 2021

**Recommendation Mitigation Measure 1 – Design Coordination:** Early and continued coordination with Habitat Conservation and the CDFW Conservation Engineering Branch is recommended to provide review and analysis of any proposed structures or Project elements with the potential to impact fish and wildlife resources. CDFW Conservation Engineering Branch should be provided engineered drawings and design specification planning sheets during the initial design process and prior to design selection. Re-initiation of design consultation should be at 30% design at minimum and through the permitting process for review and comment.

**Recommendation Mitigation Measure 2 – Bridge and Stream Crossing References:** CDFW recommends utilizing the design principles outlined in the California Salmonid Stream Habitat Restoration Manual, Part XII (CDFW, 2009) and NOAA Fisheries Service Guidelines for Salmonid Passage at Stream Crossings (NMFS, 2001) into stream crossing designs. CDFW strongly recommends incorporation of free-span bridge designs that are at minimum 1.25 times greater than the channel width. Such designs allow natural stream flow and sedimentation processes to continue for long term dynamic channel stability.

**Recommendation Mitigation Measure 3 – Stream Crossing Analysis:** CDFW recommends providing a series of tables and maps that identify all potential stream crossings, culverts and stream modifications for each of the proposed alternatives. The tables should include information that notes PM location of the conveyance, proposed project work, linear feet of impact, acres of impact, proposed tree removals, potential for use of conveyance in terrestrial connectivity (See **Wildlife Connectivity** Comment Section) and potential for use of conveyance for fish passage (see **Fish Passage Assessment** Comment Section).

### **COMMENT 3: Wildlife Connectivity**

**Issue:** The Project has the potential to significantly impact wildlife connectivity over a 15-mile linear stretch of highway within the I-205 corridor. The surrounding habitat supports threatened, endangered and special-status species as noted in the **Environmental Setting** section of this memorandum. The Project has the potential to further fragment thousands of acres of surrounding habitat and may result in potentially immitigable significant impacts if terrestrial connectivity elements such as wildlife friendly culverts, under-crossings and over-crossings are not programmed into the Project as design features or conditions of approval.

**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 operation of the state highway system along I-205 corridor in its current baseline condition represents a significant barrier to wildlife connectivity. Page 5 of the NOP prepared by the lead agency notes the I-205 corridor acts as a wildlife barrier. The Project also represents a potentially significant impact due to the proposed increase to the number of travel lanes,

Mr. Scott Guidi  
California Department of Transportation

7

November 1, 2021

incorporated interchanges, underpasses, overpasses, retention basins, access roads, transit hubs, park and rides, electric vehicle charging stations, bus stops and train stops that will all significantly expand the width and infrastructure 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 infrastructure and development Projects such as transit hubs, park and rides and train stops noted in the NOP by the lead agency. This Project can therefore be regarded as a significant impact for its existing baseline condition as barrier and a significant cumulative impact as it pertains to wildlife connectivity created by the currently proposed Project.

CDFW has identified a connectivity corridor at the western most terminus of the Project (37.74674, -121.57652). The corridor is a conservation planning linkage (CNDDDB; DS-2734) that connects two irreplaceable and essential corridors with one another. The eastern most terminus of the Project (37.763302, -121.332762) is also identified as a conservation planning linkage for wildlife movement (CNDDDB; DS-2734). A conservation planning linkage serves to connect existing habitat core areas and have high connectivity value (CNDDDB; DS-2734).

**Recommendation:** CDFW recommends the following are incorporated into the draft EIR as conditions of approval:

**Recommendation Mitigation Measure 1 – Wildlife Connectivity:** The draft EIR should include the results of a Project wildlife movement study that evaluates the potential for the Project to significantly impact wildlife connectivity. CDFW recommends the study occur over a period of at least 12 months prior to the development of designs so they may be incorporated into the Project as part of the draft EIR. The study should 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 develop 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 should 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 6 to 12 month period, at minimum, to determine the effectiveness of utilization by wildlife of the structures. 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*

Mr. Scott Guidi  
California Department of Transportation

8

November 1, 2021

*Structure Handbook – Design and Evaluation in North America, Publication No. FHWA-CFL/TD-11-003 (FHWA, 2011).*

**Recommendation Mitigation Measure 2 – Wildlife Connectivity and Advanced Mitigation:** CDFW recommends incorporating facets of existing CDFW programs that can be used to promote habitat connectivity. Reference the **Advanced Mitigation Program Section** of this comment memorandum for more information on the programs and Senate Bill 790 (SB-790, 2021).

#### **COMMENT 4: 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 insure that, if the project affects a stream crossing on a stream where anadromous fish are, or 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 [Department of Fish and Wildlife] 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 [Department of Fish and Wildlife].”

**Evidence the impact would be significant:** The Project limits contain 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 California Central Valley Steelhead DPS (CNDDDB; DS-810), Chinook Salmon – Central Valley Spring Run ESU (CNDDDB; DS-801), Chinook Salmon – Central Valley Fall Run/Late Fall Run ESU (CNDDDB; DS-802). 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 recent reports to the Fish and Game Commission and by CDFW. 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:



Mr. Scott Guidi  
California Department of Transportation

9

November 1, 2021

Location 1, Unnamed tributary, PM 0.21; I-205, (Latitude: 37.7428; Longitude: -121.5616; Alameda County), Fish Passage Assessment Database ID# 760941, fish barrier status: 1<sup>st</sup> pass assessment complete, second pass assessment warranted.

Location 2, Unnamed, PM 14.88, I-580, (Latitude: 37.7341; Longitude: -121.5517; San Joaquin County), Fish Passage Assessment Database ID# 763943, fish barrier status: unassessed.

Location 3, Unnamed, PM 2.43; I-205, (Latitude: 37.7413; Longitude: -121.5123; San Joaquin County), Fish Passage Assessment Database ID# 763934, fish barrier status: unassessed.

Location 4, Lower Main Canal, PM 4.5; I-205, (Latitude: 37.7448; Longitude: -121.4860; San Joaquin County), Fish Passage Assessment Database ID# 763439, fish barrier status: unassessed.

Location 5, Unnamed, PM 4.5; I-205, (Latitude: 37.7482; Longitude: -121.4777; San Joaquin County), Fish Passage Assessment Database ID# 763445, fish barrier status: unassessed.

Location 6, Unnamed, PM 5.29; I-205, (Latitude: 37.7539; Longitude: -121.4640; San Joaquin County), Fish Passage Assessment Database ID# 763441, fish barrier status: unassessed.

Location 7, unnamed, PM 7.85; I-205, (Latitude: 37.7636; Longitude: -121.4195; San Joaquin County), Fish Passage Assessment Database ID# 763440, fish barrier status: unassessed.

Location 8, Lower Main Canal, PM 8.4; I-205, (Latitude: 37.7649; Longitude: -121.4860; San Joaquin County), Fish Passage Assessment Database ID# 763446, fish barrier status: unassessed.

Location 9, unnamed, PM 9.4; I-205, (Latitude: 37.7650; Longitude: -121.3917; San Joaquin County), Fish Passage Assessment Database ID# 763447, fish barrier status: unassessed.

Location 10, unnamed, PM 10.2; I-205, (Latitude: 37.7650; Longitude: -121.3778; San Joaquin County), Fish Passage Assessment Database ID# 763448, fish barrier status: unassessed.

Location 11, unnamed, PM 10.7; I-205, (Latitude: 37.7650; Longitude: -121.3686; San Joaquin County), Fish Passage Assessment Database ID# 763450, fish barrier status: unassessed.

Mr. Scott Guidi  
California Department of Transportation

10

November 1, 2021

Location 12, unnamed, PM 11.1; I-205, (Latitude: 37.7650; Longitude: -121.3610; San Joaquin County), Fish Passage Assessment Database ID# 763449, fish barrier status: unassessed.

Location 13, unnamed, PM 11.72; I-205, (Latitude: 37.7656; Longitude: -121.3490; San Joaquin County), Fish Passage Assessment Database ID# 763442, fish barrier status: unassessed.

Location 14, unnamed, PM 12; I-205, (Latitude: 37.7658; Longitude: -121.3470; San Joaquin County), Fish Passage Assessment Database ID# 763444, fish barrier status: unassessed.

Location 15, unnamed, PM 12.6; I-205, (Latitude: 37.7666; Longitude: -121.3384; San Joaquin County), Fish Passage Assessment Database ID# 763443, fish barrier status: unassessed.

Location 16, Paradise Cut, PM 13.01; I-5, (Latitude: 37.7713; Longitude: -121.3262; San Joaquin County), Fish Passage Assessment Database ID# 763443, fish barrier status: unknown, Second Pass Detailed Assessment Required.

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 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 CDFW. CDFW shall be engaged prior to design in early coordination and at 30% design at minimum.

#### **Recommended Mitigation Measure 2 – Fish Passage Design Coordination**

CDFW recommends incorporation into the EIR a condition of approval to engage with CDFW in early and continued coordination before design commences as specified in **Recommendation Mitigation Measure 1 – Design Coordination** and **Recommendation Mitigation Measure 2 – Bridge and Stream Crossing**

Mr. Scott Guidi  
California Department of Transportation

11

November 1, 2021

**References** from the **COMMENT 2: Project Design Analysis and Coordination** section of this comment memorandum.

### **COMMENT 5: Bat Assessment and Avoidance**

**Issue:** Page 5 of the NOP for the draft EIR addresses the potential for bats to roost within the Project limits but does not provide a species list of bats or the potential locations where bats are known to exist throughout the Project limits. 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 tables, maps and text descriptions that note where potential bat habitat exists. It is also important to develop a detailed description, table and map that notes where new structures will be constructed that could provide new roosting habitat structure for bats such as bridges, overpasses and other anthropogenic structures.

**Recommendation:** CDFW recommends incorporating the following mitigation measures into the draft EIR as conditions of approval for the Project:

#### **Recommended Mitigation Measure 1 – Bat Habitat Assessment**

A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat to be included in the draft EIR. 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). The EIR should also include a section that discusses the results of the suitable habitat assessment and if any bats or signs of bats (feces or staining at entry/exit points) are discovered. The surveys should occur at least two seasons in advance of Project initiation.

#### **Recommended Mitigation Measure 2 – Bat Habitat Monitoring**

If potentially suitable bat roosting habitat is determined to be present a qualified biologist shall conduct focused surveys at the trees, bridge(s), causeways and interchanges utilizing night-exit survey methods, sound analyzation equipment survey methods and visual inspection within open expansion joints and portholes of the structures from March 1 to April 1 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

Mr. Scott Guidi  
California Department of Transportation

12

November 1, 2021

indicate bat occupancy, then construction should be limited from March 1 through April 15 and/or August 31 through October 15.

### **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 6: Nesting Birds**

CDFW encourages Project implementation outside of the bird nesting season, which extends from February through early September. However, if anthropogenic structure work activities, ground-disturbing or vegetation-disturbing activities must occur during the nesting season, the lead agency is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act (MBTA) or Fish and Game Code. To evaluate and avoid for potential impacts to nesting bird species, CDFW recommends incorporating the following mitigation measures, and that these measures be made conditions of approval for the Project:

**Recommended Mitigation Measure 1: Nesting Bird Surveys:** A qualified biologist conduct pre-activity surveys for active nests no more than seven (7) days prior to the start of ground or vegetation disturbance and every fourteen (14) days during Project activities 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. Prior to initiation of ground or vegetation disturbance, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having the 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.

Mr. Scott Guidi  
California Department of Transportation

13

November 1, 2021

**Recommended Mitigation Measure 2: Nesting Bird Buffers:** 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 Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers.

#### **COMMENT 7: 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 § 3503, 3503.5 and the federal MBTA.

**Recommendation:** In order to avoid "take" or adverse impacts to Swainson's hawk CDFW recommends incorporation of the following:

**Recommended Mitigation Measure 1 – Swainson's Hawk Protocol Surveys:** CDFW recommends surveys should 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) take avoidance, minimization and mitigation measures. Early consultation with CDFW and other natural resource agencies on Swainson's hawk take avoidance, minimization measures and mitigation measures is strongly recommended.

Mr. Scott Guidi  
California Department of Transportation

14

November 1, 2021

**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.

**COMMENT 8: Light Impact Analysis and Discussion**

**Issue:** A significant portion of the proposed Project limits within the I-205 corridor do not contain any overhead artificial light sources. It is unclear if the Project proposes the installation of new or replacement light sources. CDFW strongly recommends that no artificial lighting is installed as a result of Project completion in areas where no lighting currently exists to avoid a potentially significant impact that could result in a finding of significance. 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. Artificial light pollution also has the potential to significantly and adversely affect biological resources and the habitat that supports them. 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 also have cumulatively significant impacts on fish and wildlife populations.

**Evidence the impact would be significant:** Artificial night 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). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia and reducing their ability to feed during the winter (Contor and Griffith 1995). For nocturnally migrating birds, direct mortality as a result of collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al. 2008) and changes in habitat selection (McLaren et al. 2018). There is also growing evidence that light pollution alters behavior at regional scales, with migrants occupying urban centers at higher-than-expected rates as a function of urban illumination (La Sorte et al. 2021). While artificial light pollution can act as an attractant at both regional (La Sorte et al. 2021) and local (Van Doren et al. 2017) scales, there is also evidence of migrating birds avoiding strongly lit areas when selecting critical resting sites needed to rebuild energy stores (McLaren et al. 2018). Due to the high potential for songbirds and nocturnally active State listed and special status species such as California tiger salamander and American badger CDFW recommends no lighting is installed as a result of Project completion to avoid these potentially significant impacts.

Mr. Scott Guidi  
California Department of Transportation

15

November 1, 2021

**Recommended Mitigation Measure 1 – Light Output Analysis:** The lead agency should submit as part of the draft EIR 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.

**Recommended Mitigation Measure 2 – 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.

**Recommended Mitigation Measure 3 – 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.

**Recommended Mitigation Measure 4 – Reflective Signs and Road Striping:** Retro-reflectivity of signs and road striping should be implemented throughout the Project to reduce the need for electrical lighting.

**Recommended Mitigation Measure 5 – 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 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.

Mr. Scott Guidi  
California Department of Transportation

16

November 1, 2021

### **COMMENT 9: Advanced Mitigation Program**

**Issue:** The current NOP by the lead agency does not specify if the Project will take advantage of long-range, advanced mitigation strategies. The draft EIR should be updated to incorporate facets of the CDFW and Caltrans Advanced Mitigation Program.

**Recommendation:** The lead agency should consider incorporating advance mitigation strategies to ensure timely acquisition of any required mitigation. The Legislative Report from Assembly Bill 1282 Transportation Permitting Task Force ([pdf](#)) states: “Historically, transportation agencies have implemented mitigation on a project-by-project basis once funding is approved for the final stages of a project and environmental permits are obtained. Advance mitigation presents an innovative opportunity for many transportation projects, with potentially significant reductions of time and costs associated with providing necessary mitigation. It can be applied in highway, rail, and transit projects in both urban and rural areas.” In addition, in a 2016 Memorandum of Understanding between Caltrans, CDFW, the California State Water Resources Control Board, the U.S. Army Corps, the U.S. Environmental Protection Agency, United States Fish and Wildlife Service, and National Oceanic and Atmospheric Administration through a Statewide Advanced Mitigation Initiative([pdf](#)) states the following:

- Considering biological conservation and mitigation needs early in a project's timeline, prior to project design and development, can reduce costs and allow natural resources conservation and mitigation to enhance the sustainability of those natural resource systems.
- Long-range advance mitigation and conservation planning would allow transportation agencies to anticipate potential mitigation and conservation needs for planned transportation projects and to meet those needs in a more timely and cost-efficient way.
- Advance mitigation and conservation planning would allow mitigation funding for transportation projects to be directed to agreed-upon conservation priorities and would allow for the establishment, enhancement, preservation, and/or restoration, as appropriate, of habitat that enhance the sustainability of natural systems by protecting or restoring connectivity of natural communities consistent with, but not limited to the Endangered Species Act § 7(a)(1), California Fish and Game Code §2055, Rivers and Harbors Act §10, and Clean Water Act §404 and §401.

**Advanced Mitigation Program:** CDFW currently has three programs that can accommodate advance mitigation planning: Conservation and Mitigation Banking, Natural Community Conservation Planning (NCCP), and Regional Conservation Investment Strategies (RCIS). For banking, proponents can create a bank or credits to meet future mitigation needs, and as of 2021, they now have the ability to purchase multiple credits from existing banks in advance of using



Mr. Scott Guidi  
California Department of Transportation

17

November 1, 2021

them for future permits. Participation in NCCPs and the often associated federal Habitat Conservation Plans (HCPs) can provide streamlined permitting coverage and required mitigation for covered activities under the plan. [Regional Advance Mitigation \(ca.gov\)](#).

## 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.

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](mailto:Robert.Stanley@wildlife.ca.gov); or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or [Wesley.Stokes@wildlife.ca.gov](mailto:Wesley.Stokes@wildlife.ca.gov).

cc: State Clearinghouse No. 2021090472

## REFERENCES

- Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108.
- California Department of Fish and Wildlife. July 2009. California Salmonid Stream Habitat Restoration Manual, Part XII.
- California Department of Fish and Wildlife. February, 1996. Steelhead Restoration and Management Plan for California.
- California Department of Fish and Wildlife. June, 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California.
- California Department of Fish and Wildlife. 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California.
- The California Department of Transportation (Caltrans). March, 2009. Wildlife Crossings Design Manual, Meese et.al., University of California Davis.
- California Natural Diversity Database. 2021. <https://apps.wildlife.ca.gov/bios/>.
- Contor R., Craig, Griffith, J.S. 1995. Nocturnal emergence of juvenile rainbow trout from winter concealment relative to light intensity. *Hydrobiologia* Vol. 299: 179-18.

Mr. Scott Guidi  
California Department of Transportation

18

November 1, 2021

Erickson, Gregg. 2003. Bats and Bridges Technical Bulletin. California Department of Transportation.

Federal Highway Administration (FHWA). March, 2011. Wildlife Crossing Structure Handbook; Design and Evaluation in North America.

Gauthreraux Jr., S.A., and C.G. Belser. 2006. Effects of artificial night lighting on migrating birds. In *Ecological Consequences of Artificial Night Lighting*, edited by C. Rich and T. Longcore, pp. 67-93. Washington D.C.: Island Press

H.T. Harvey and Associates. 2019. Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions.

Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment* 2:191–198.

La Sorte. February, 2021. Seasonal Variation in the effects of artificial light at night on the occurrence of nocturnally migrating birds in urban areas. *Environmental Pollution*, Volume 270.

McLaren, et. al. 2018. Artificial light at night confounds broad-scale habitat use by migrating birds.

Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139.

National Marine Fisheries Service – Southwest Region. September 2001. Guidelines for Salmonid Passage at Stream Crossings.

Poot, H., B. J. Ens, H. de Vries, M. A. H. Donners, M. R. Wernand, and J. M. Marquenie. 2008. Green light for nocturnally migrating birds. *Ecology and Society* 13(2): 47.

Senate Bill 790: Wildlife Connectivity Actions: Compensatory Mitigation Credits, October 11, 2021. [Bill Text - SB-790 Wildlife connectivity actions: compensatory mitigation credits. \(ca.gov\)](#)

Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123–1127. Elsevier Ltd.

Van Doren, et. al. 2017. High Intensity Urban Light Installation Dramatically Alters Nocturnal Bird Migration.