

State of California  
Department of Fish and Wildlife



## Memorandum

Date: August 20, 2020

To: Ms. Yolanda Rivas  
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Governor's Office of Planning & Research

Aug 21 2020

STATE CLEARINGHOUSE

DocuSigned by:  
*Stacy Sherman for*  
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From: Mr. Gregg Erickson, Regional Manager  
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: State Route – 37 Traffic Congestion Relief Project, Notice of Preparation,  
SCH No. 2020070226, Napa and Sonoma County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) for the proposed State Route – 37 Traffic Congestion Relief Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup> Pursuant to our jurisdiction, CDFW is submitting comments on the NOP 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.

### PROJECT LOCATION AND DESCRIPTION SUMMARY

Caltrans proposes improvements to address traffic congestion relief on State Route (SR)-37 by improving traffic flow at peak travel times, as well as, increasing vehicle occupancy within the travel corridor between Mare Island and SR-121. SR-37 narrows from two lanes in each direction to one lane in each direction between Mare Island and SR-121. The NOP proposes three alternatives to reconfigure the existing SR-37 highway lanes from west of the SR-121 intersection to the Walnut Avenue overcrossing at Mare Island. Each alternative would involve widening at Tolay Creek Bridge, but Alternative 1 involves a movable center median barrier while Alternatives 2 and 3 propose four lanes open for travel either part-time or full-time. These alternatives would also involve installation of advance signs to alert drivers approaching the proposed lanes. To allow for advance signs, the overall project limits extend on SR-37 from approximately Lakeville Highway in Sonoma County to the Sacramento Street overhead in the City of Vallejo and on SR-121 approximately 1,000 feet north of SR-37.

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<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.

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## **CDFW ROLE**

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.

## **LAKE AND STREAMBED ALTERATION AGREEMENT**

The Project has the potential to impact resources including mainstems, tributaries, floodplains as well as marsh complexes associated with three major systems known to occur within the identified limits of the Project including; Sonoma Creek, Tolay Creek and the Napa River. If work is proposed that will impact the bed, bank channel or upland 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 for impacts to drainage systems that connect to tributaries of main stem creeks and tributaries that occur within the Project Biological Study Area (BSA). 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 subject to notification requirements.

## **CALIFORNIA ENDANGERED SPECIES ACT**

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if a project has the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the Project. Under CESA, take is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill." Issuance of an ITP is subject to CEQA documentation. 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.

The Project has the potential to result in take of the following species listed under CESA; Swainson's hawk (*Buteo swainsoni*) State Threatened, salt-marsh harvest mouse (*Reithrodontomys raviventris*), State Endangered; Delta smelt (*Hypomesus transpacificus*), State Endangered, Chinook-salmon – Central Valley/late fall-run (*Oncorhynchus.tshawytscha*), State Threatened.

## ENVIRONMENTAL SETTING

The state special-status species that have the potential to occur in or near the Project site, include, but are not limited to:

- Salt-marsh harvest mouse (*Reithrodontomys raviventris*), State Endangered and Fully Protected
- Swainson's hawk (*Buteo swainsoni*), State Threatened
- California black rail (*Laterallus jamaicensis coturniculus*), State Fully Protected
- California's Ridgeway's rail (*Rallus obsoletus obsoletus*), State Fully Protected
- Delta smelt (*Hypomesus transpacificus*), State Endangered
- Chinook salmon – Central Valley/late fall-run (*Oncorhynchus.tshawytscha*), State Threatened
- Steelhead – Central California Coast distinct population segment (*Oncorhynchus mykiss*), Federally Endangered
- White tailed kite (*Elanus leucurus*), State Fully Protected
- Western burrowing owl (*Athene cunicularia*), State Species of Special Concern
- Delta tule pea (*Lathyrus jepsonii var. jepsonii*), Rare Plant Rank 1B
- Saline clover (*Trifolium hydrophilum*), Rare Plant Rank 1B
- Roosting bats
- Nesting birds

## COMMENTS AND RECOMMENDATIONS

CDFW acting as a Responsible Agency, has discretionary approval under CESA through issuance of a CESA ITP and the LSA Agreement as well as other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources. CDFW would like to thank you for preparing the NOP and 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 mitigated to below a level of significance under CEQA:

### **COMMENT 1: Full Project Description of Project Features to Select 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 allow CDFW adequate information to identify a preferred alternative the draft Environmental Impact Report (EIR) must include a comprehensive comparison analysis of the potentially significant impacts from each of the three

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

- A full description of the proposed lane improvements, barrier installations, bridge and lane expansion areas, light installations or replacement locations, signage placements and toll station installation, California Highway Patrol (CHP) observational areas, vehicle pullouts locations, slope protection/reinforcement areas, train crossing signal locations, and intersection improvements that include post mile references and map figures to fully illustrate the construction areas of each project element for each of the alternatives.
- 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 to each applicable habitat type for each of the four alternatives should also be included in the draft EIR.
- A full description of the proposed locations for staging area and access routes for each alternative.
- A preliminary design plan set for each alternative.

## **COMMENT 2: Fish and Wildlife Resources**

CDFW recommends that a full list or table is included in the Biological Resources Section of the draft EIR that notes species common name, scientific name, State and federal listing status (as applicable), habitat type preference and determination on presence for all special-status species with the potential to occur within the Project. CDFW offers the following list of species that have the potential to occur within the Project limits including but not limited to the species noted above in the environmental setting section of this comment letter. A full and complete of fish and wildlife resources should be developed using wildlife databases such as the California Natural Diversity Database (CNDDDB), scientific studies or species inventories from nearby locations, focused survey results or findings associated with the current Project and focused survey results or findings from previous projects within the vicinity of the currently proposed Project.

## **COMMENT 3: In Water Work Windows and Seasonal Avoidance**

The draft EIR Should include the appropriate in-water and seasonal avoidance windows for any proposed in-water work to avoid impacts to state threatened, endangered, rare

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and native aquatic species. Due to the high number of species known to occur within the vicinity of the Project it is recommended that the lead agency confers with the various wildlife and natural resource agencies to determine the most appropriate in water work window to avoid impacts to aquatic species. A general in water work window for most creek systems in Napa and Sonoma County is June 15 to October 31. Recommended in water work windows for fisheries resources in the Napa River and Sonoma Creek systems are identified as August 1 to October 15 for species such as steelhead and August 1 to January 31 for species such as Delta smelt.

#### **COMMENT 4: 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 Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act 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 begins, 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.

##### **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.

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### **COMMENT 5: Swainson's Hawk**

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). 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* (<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline>). 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 0.25-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.

In order to avoid "take" or adverse impacts to Swainson's hawk in the event that an active nest is found during surveys, CDFW recommends avoiding all Project-related disturbance within a minimum of 0.25 miles (and up to 0.5 miles depending on site-specific conditions) of a nesting Swainson's hawk during the nesting season. Please refer to the CDFW guidance document on Swainson's hawk, which is available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline>, on 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.

### **COMMENT 6: Western Burrowing Owl**

The Project is located within and adjacent to grassland habitat that may be suitable foraging, overwintering, and nesting habitat for burrowing owls (*Athene cunicularia*), a California Species of Special Concern and also protected under Fish and Game Code section 3503, 3503.5, and the federal MBTA. The Project may result in burrowing owl nest or wintering burrow abandonment, loss of young, and reduced health and vigor of adults or young from audio and visual disturbances caused by construction activities. Therefore, Project impacts to burrowing owl would be potentially significant.

**Recommended Mitigation Measure 1 Western Burrowing Owl:** For an adequate environmental setting and impact analysis, and to reduce impacts to less-than-significant, CDFW recommends that the draft EIR include a mitigation measure requiring a qualified biologist to conduct surveys following the California Department of Fish and Game (now CDFW) 2012 Staff Report on Burrowing Owl Mitigation survey methodology (see <https://wildlife.ca.gov/Conservation/Survey->

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[Protocols#377281284-birds](#)). Surveys shall encompass the Project area and a sufficient buffer zone to detect owls nearby that may be impacted. Time lapses between surveys or project activities shall trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance before construction equipment mobilizes to the Project area. The qualified biologist shall have a minimum of two years of experience implementing the CDFW 2012 survey methodology resulting in detections.

### **COMMENT 7: Bat Assessment and Avoidance**

The draft EIR should include an assessment and analysis section on special-status bat species known to occur within the vicinity of the Project location. According to CNDDDB, which has a positive finding for pallid bat within three miles of the SR-37 segment and due to the fact that is widely accepted that bats utilize anthropogenic structures for day and night roosts such as bridges and culverts, the potentially significant impacts should be discussed. To evaluate and avoid potentially significant impacts to bat species, CDFW recommends incorporating the following mitigation measures and that these measures be made conditions of approval for the Project.

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

A qualified biologist should conduct a habitat assessment for all locations within the Project limits with the potential to provide suitable roosting habitats for bats. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features (bats need not be present). The draft EIR should include a section with tables and map figures of the potential roosting locations and discuss the results of focused surveys. The table should include information on species discovered, number of individuals observed, type of roost (day or night roost) and describe how each alternative could have the potential to significantly impact roosting bats at each potential roost site.

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

A Qualified Biologist will conduct a habitat assessment for potentially suitable bat roosting habitat, including within open expansion joints of the bridge and trees from March 1 to April 1 or August 31 to October 15 prior to construction activities. If the habitat assessment reveals suitable roosting habitat for bats, then the appropriate exclusionary measures will be implemented prior to construction during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance may include exclusionary blocking or filling potential cavities with foam, visual monitoring and staging Project work to avoid bats, exclusion netting will not be used. If the habitat assessment reveals suitable bat habitat in trees and tree removal is scheduled from April 16 through August 30 and/or October 16 through February 28, then presence/absence surveys will be conducted two to three days prior to any tree removal or trimming.

If presence/absence surveys are negative, then tree removal may be conducted by following a two phased tree removal system. If presence/absence surveys indicate bat occupancy, then the occupied trees will only be removed from March 1 through April 15 and/or August 31 through October 15 by following the two phased tree removal system. The two-phase system will be conducted over 2 consecutive days. On the first day, (in the afternoon) limbs and branches are removed by a tree cutter using chainsaws or other hand tools. Limbs with cavities, crevices, or deep bark fissures are avoided and only branches or limbs without those features are removed. On the second day the entire tree will be removed. The phased removal system should also apply to any anthropogenic structure removal, removing parts of the structure and allowing other to persist that maximizes the use of potential roosting habitat over the course of the Project as safety will allow.

### **Recommended Mitigation Measure 3: Bat Project Avoidance**

If bat colonies are observed at the Project site, at any time, all Project activities should stop until the qualified biologist develops a bat avoidance plan to implement at the Project site. Once the plan is implemented, Project activities may recommence. The bat avoidance plan should utilize phased construction, temporary and permanent bat housing and seasonal avoidance developed in coordination with wildlife agencies.

### **COMMENT 8: Fish Passage Assessment**

Senate Bill 857 (SB-857), which amended Fish and Game Code 5901 and added section 156 to the Streets and Highways Code states in section 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 [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 recommends discussing and incorporating measures to address significant cumulative impacts to fish passage created by the SR-37 corridor. The fish passage assessment section in the draft EIR should be based on the language noted in the previous paragraph, as well as, in terms of identifying this segment of the SR-37 corridor as presenting a significant barrier to fish passage under Fish and Game Code 5901. The project should identify, analyze and incorporate construction elements that upgrade and improve stream crossings and drainage structures to accommodate the passing of flood waters, sea level rise, tidal action, as well as biological processes, such as restorative access to tidal flows and wildlife connectivity (see section below for wildlife connectivity). The following are specific water conveyance locations as it pertains to SB-857: Location



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1, an unnamed tributary (PM 1.9, Sonoma County), Fish Passage Assessment Database ID# 732818, fish barrier status: unknown; Location 2, water tank cattle pass (PM 3.2, Sonoma County), Fish Passage Assessment Database ID# 761446, fish barrier status: unassessed. The fish passage section should discuss the current status of the crossing locations 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 structures. CDFW requests a fish passage discussion section be included to address these potentially significant impacts through the following avoidance and minimization measure, which should be made a condition 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 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 CDFW.

#### **COMMENT 9: Wildlife Connectivity**

CDFW recommends that the lead agency include a discussion section on wildlife connectivity as it pertains to the SR-37 corridor because SR-37 presents a significant barrier to terrestrial and aquatic wildlife movement. All of the Project alternatives propose to install new or replacement median barriers and replace or extend previously existing culverts without significant modification. The existing median barriers and culverts represent a known significant barrier to rare, threatened and endangered species of fish and wildlife that constitutes a cumulatively significant impact to wildlife connectivity. Section 15355 of the CEQA guidelines states that cumulative impacts refers 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, of which this Project is and can therefore be regarded as a significant cumulative impact as it pertains to wildlife connectivity. The Project should identify, analyze and incorporate construction elements that upgrade and improve stream crossings and drainage structures to accommodate the passing of flood waters, sea level rise, tidal action, as well as biological processes, such as restorative access to tidal flows and wildlife connectivity.

#### **Recommended Mitigation Measure 1: Wildlife Connectivity**

The Permittee shall develop a wildlife movement study to occur prior to Project initiation of construction within the limits of the proposed Project to develop a baseline understanding of the areas where wildlife crossing is most prevalent and to

identify areas where wildlife crossing structure(s) installation(s) or culvert improvements would result in the largest benefit to rare, threatened and endangered species as well as to non-special-status species for wildlife connectivity. Analysis during the pre-construction 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, elevated causeways, wildlife crossing bridges, etc.). Upon completion of the Project the wildlife connectivity structures should be studied for an additional timeframe, 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 be conducted in coordination with natural resources agencies and follow the protocols outlined in *The California Department of Transportation (Caltrans), Wildlife Crossings Design Manual, Meese et al., University of California Davis, March, 2009*<sup>2</sup> and the *Wildlife Crossing Structure Handbook – Design and Evaluation in North America, Publication No. FHWA-CFL/TD-11-003, March, 2011*<sup>3</sup>.

#### **COMMENT 10: Light Impact Analysis and Discussion**

The draft EIR should describe the type, quantity, location and specification outputs (in kelvin-scale) of all proposed new and replacement lighting installations for all proposed alternatives and a comparison analysis amongst those alternatives as it pertains to potential light pollution. To accomplish this the draft EIR should provide an analysis of the current lighting regime known to be present on site as well as an analysis of the proposed changes in the lighting regime that will occur as a result of new or replacement lighting installations through the development and comparison of Isolux diagrams described in measure 1 below. The Isolux diagrams should illustrate the area and intensity over which artificial lighting will create additional light impacts over the natural landscape. Artificial lighting has the potential to create a significant impact because 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, 365 days a year that can have a cumulatively significant impact on fish and wildlife populations. The draft EIR should include a discussion in the Biological Resources section of the potentially significant impacts that could be created by increased permanent light installations or replacements or new installations to determine the extent of the impacts to rare, threatened, endangered, nocturnal and migratory bird species known to occur within the Project vicinity. CDFW recommends the following avoidance and minimization measures are incorporated:

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<sup>2</sup> Caltrans Wildlife Crossing Design Manual;

[https://roadecology.ucdavis.edu/files/content/projects/CA\\_Wildlife%20Crossings%20Guidance\\_Manual.pdf](https://roadecology.ucdavis.edu/files/content/projects/CA_Wildlife%20Crossings%20Guidance_Manual.pdf)

<sup>3</sup> FHWA Wildlife Crossing Structure Handbook;

[https://roadecology.ucdavis.edu/files/content/projects/DOT-FHWA\\_Wildlife\\_Crossing\\_Structures\\_Handbook.pdf](https://roadecology.ucdavis.edu/files/content/projects/DOT-FHWA_Wildlife_Crossing_Structures_Handbook.pdf)

**Recommended Mitigation Measure 1: Light Impact Assessment and Avoidance**

The lead agency shall be required to submit to natural resource agencies, 30 days prior to the initiation of construction 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. Within 60 days of Project completion, the lead agency shall conduct a ground survey that compares predicated 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 be required in coordination with the natural resource agencies.

**Recommended Mitigation Measure 2: Light Output Limits**

All LEDs or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2,700 kelvin that results in the output of a warm white color spectrum.

**Recommended Mitigation Measure 3: Vehicle Light Barriers**

Solid concrete 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 plastic inserts (privacy slats) into the spacing of cyclone fencing to create light barriers into 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 increase visibility of roads to drivers and reduce the need for electrical lighting. Reflective highway markers have also been proven effective to reduce raptor collisions on highways in California's Central Valley if installed along highway verges and medians.

**COMMENT 11: Threatened, Endangered, Rare and Native Plant Species**

CDFW recommends that 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," which can be found online at <https://wildlife.ca.gov/Conservation/Survey-Protocols>. This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys

may be necessary. Rare plants known to occur within the vicinity of the Project include but are not limited to saline clover and Delta tule pea.

### **Recommended Mitigation Measure 1: Threatened, Endangered, Rare and Native Plants**

A Qualified Biologist shall conduct a survey during the appropriate blooming period for all special-status plants that have the potential to occur within the Project site prior to the start of construction. Surveys should be conducted following the *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*, prepared by CDFW, dated March 20, 2018<sup>4</sup>. If special-status plants are found, the Project will be re-designed to avoid impacts to special-status plants to the greatest extent feasible. If impacts to special-status plants cannot be avoided completely during construction, compensatory mitigation and onsite restoration will be implemented and the plan provided for CDFW review and approval. A Qualified Biologist in this context should be knowledgeable about plant taxonomy, familiar with plants of the region, and have experience conducting botanical field surveys according to vetted protocols. If take of any species listed under CESA cannot be avoided either during Project activities or over the life of the Project, a CESA ITP is warranted (pursuant to Fish and Game Code Section 2080 *et seq.*).

### **COMMENT 12: Tidal Marsh Species Assessment and Avoidance**

According to multiple records in the CNNDDB, the Project is located within and adjacent to habitat that may be suitable foraging and nesting habitat for tidal marsh species including California black rail (CBR) and California clapper rail (CCR), California Fully Protected species also protected under and the federal MBTA. The Project is also located within and adjacent to suitable habitat for the salt marsh harvest mouse (SMHM), a California Fully Protected species and state listed Endangered species, according to multiple records in CNDDDB. CDFW recommends the following avoidance and minimization measures are included in the draft EIR to reduce impacts below a level of significant.

### **Recommended Mitigation Measure 1: Tidal Marsh Species CBR and CCR**

Work may not be conducted in CCR or CBR habitat between February 1 and August 31 unless surveys indicate the species is not present. If Project activities within 700 feet of CBR/CCR habitat will be conducted during the nesting season (February 1 to August 31), then multiple pre-construction call back surveys shall be required prior to initiation of Project activities. A minimum of four surveys must be conducted between January and April, a minimum of two to three weeks apart. The listening stations will be established at 150-meter intervals along road, trails, and levees that will be affected by Project implementation. CBR and CCR vocalization recordings will be

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<sup>4</sup> <https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>

played at each station. For CBR, each listening station will be occupied for one minute of passive listening, one minute of “grr” calls followed by 30 seconds of “ki-ki-krrr” calls, then followed by another 3.5 minutes of passive listening.

For CCR, each listening station will be occupied for a period of 10 minutes, followed by one minute of playing CCR vocalization recordings, then followed by one additional minute of listening. Sunrise surveys will begin 60 minutes before sunrise and conclude 75 minutes after sunrise (or until presence is detected). Sunset surveys will begin 75 minutes before sunset and conclude 60 minutes after sunset (or until presence is detected). Surveys will not be conducted when tides are greater than 4.5 NGVD. A GPS receiver will be used to identify call location and distance. The call type, location, distance, and time will be recorded on a data sheet. CDFW reserves the right to provide additional measures to this agreement in the event rail species are detected. If CBR/CCR are detected through surveys then Project activities will not occur within 700 feet of an identified calling center. If the activity occurs where the Project site is across a major channel or slough from the Project site greater than 700 feet in distance the activity may continue. If bird activity is surveyed or discovered within the buffer limits immediate consultation with CDFW is required.

If a CCR or CBR is observed within the Project area at any time work shall be stopped immediately by a qualified biologist and the rail species will be allowed to leave the area on its own. If the rail species does not leave the area, then no work shall commence until CDFW has made a determination on how to proceed with work activities. Daily monitoring surveys of Project sites shall occur for CCR and CBR until the Project is complete. If an injured or dead CCR or CBR is discovered at the Project sites, consultation with CDFW is required immediately.

### **Recommended Mitigation Measure 2: Tidal Marsh Species**

In Project locations where suitable or potentially suitable tidal marsh and pickle weed habitat is present, a qualified biologist shall conduct pre-construction for SMHM in any areas designated for vegetation disturbance, sediment removal, bank protection, vegetation management, operation of large equipment, staging, or access within seven days prior to commencing work and immediately preceding equipment mobilization in an area where Project activities will occur. The qualified biologist shall have previous SMHM experience and shall be approved by CDFW to conduct the surveys. If SMHM activity is detected or a SMHM is discovered, immediate consultation with CDFW is required before work may continue.

If a mouse of any species is observed within the Project area, work shall be halted immediately by the qualified biologist within 300 feet of discovery and the mouse shall be allowed to leave the work area on its own. If the mouse does not leave the area, no work shall commence until CDFW can reasonably conclude that no take shall occur. Temporary, exclusionary fencing shall be installed around the work area defined in the Project description and at access roads for each site immediately following vegetation removal, and before excavation activities begin. The fence

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should be made of non-woven material (i.e., heavy gauge plastic) that does not allow SMHM to pass through or over. The biologist/biological monitor must ensure the fence remains an effective barrier to prevent entry of SMHM into work area. Alternative PVC exclusion systems may also be employed. Daily inspection and monitoring of the areas with the potential for SMHM shall occur by the qualified biologist throughout the course of the Project. Upon completion of fence installation, a biological monitor may begin monitoring all work within 250 feet of tidal or pickle weed habitats as determined by the CDFW approved biologist. The biologist shall inspect the work area and adjacent habitats to determine if SMHM are present for a minimum of once per week for the duration of the Project. The biologist/biological monitor shall ensure the exclusionary fence has no holes and the base remains buried. The fenced area will be inspected daily to ensure that no mice are trapped. If any mice are found along or inside the fence work shall be stopped and the mice will be closely monitored until they move away from the construction area of their own accord. The qualified biologist/biological monitor shall remain on-site while work activities are occurring.

SMHM may not be handled or captured at any time during site preparation or Project activities. If an injured or dead SMHM is discovered at the Project site, consultation with CDFW is required immediately before work can proceed.

## **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. 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) 428-2093 or [Robert.Stanley@wildlife.ca.gov](mailto:Robert.Stanley@wildlife.ca.gov); or Mr. Craig Weightman, Environmental Program Manager, at (707) 944-5577 or [Craig.Weightman@wildlife.ca.gov](mailto:Craig.Weightman@wildlife.ca.gov).

cc: State Clearinghouse #2020070226