State of California
Department of Fish and Wildlife

Memorandum

Date: January 27, 2022

To: Brian Gassner
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From: Erin Chappell, Regional Manager
California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

Subject: U.S. 101 Mabury to Berryessa Oakland Road Corridor Project, Notice of Preparation of a Draft Environmental Impact Report, SCH No. 2022010022, Santa Clara County

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) for the U.S. 101 Mabury to Berryessa Oakland Road Corridor Project (Project), pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] 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.

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 the California Endangered Species Act (CESA) Permit, the Native Plant Protection Act Permit, the Lake and Streambed Alteration (LSA) Agreement and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources.

PROJECT LOCATION AND DESCRIPTION

Caltrans, as the lead agency in partnership with the City of San Jose proposes improvements on U.S. 101 from Post Mile (PM) 35 to 38.3 at the U.S. 101 and Interstate 880 interchange locations. The Lead Agency for the Project proposes to replace the existing bridge with a bridge in the same location and route upon completion. The Project includes a new interchange is proposed at Berryessa Road. The proposed Project may construct auxiliary lanes along U.S. 101. The proposed Project will include new or reconfigured on- and off-ramps, ramp metering, retaining walls, overcrossings, and frontage roads. The Project will also include multimodal

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

improvements and address deficiencies in pedestrian and bicycle connectivity crossing U.S. 101 and along local roads.

Lake and Streambed Alteration Agreement

The Project has the potential to impact resources including mainstems, tributaries and floodplains associated with Coyote Creek and Silver Creek. 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 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, $1^3/_8$, $1^1/_2$, $1^7/_8$, 2, $2^1/_4$, $2^1/_2$, $2^3/_4$, 3, $3^1/_2$, 4, $4^1/_8$, $4^1/_2$, $4^3/_4$, 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 section 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 mitigation measures may be required in order to obtain a CESA Permit. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency’s FOC does not eliminate the Project proponent’s obligation to comply with Fish and Game Code, section 2080. More information on the CESA permitting process can be found on the CDFW website at https://www.wildlife.ca.gov/Conservation/CESA.

ENVIRONMENTAL SETTING

Sufficient information regarding the environmental setting is necessary to understand the Project, and its alternative's (if applicable), 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**
Steelhead - Central California Coast – Distinct Population Segment (DPS)	*Oncorhynchus mykiss*	FT
Western mastiff bat	*Eumops perotis*	
Pallid bat	*Antrozous pallidus*	SSC
Brazilian free-tailed bat	*Tadarida brasiliensis*	
Canyon bat	*Parastrellus hesperus*	
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC
Hoary Bat	*Lasiurus cinereus*	
Big Brown Bat	*Eptesicus fuscus*	
FE = Federally Endangered; FT = Federally Threatened; SE = State Endangered; ST = State Threatened; SFP = State Fully Protected; SSC = State Species of Special Concern; S1, S2 = Critically Imperiled, Imperiled Notes:		

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 (CNDDB). 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 would like to thank you for preparing the NOP. 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 to fish and wildlife resources are reduced below a level of significance under CEQA:

COMMENT 1: Project Design Analysis and Coordination

Issue: Early interagency Project design coordination with CDFW Habitat Conservation and CDFW Conservation Engineering Branch may be needed to avoid or reduce potentially significant impacts to fish and wildlife resources below a threshold of significance.

Recommendation: CDFW recommends the following early consultation measures be incorporated into the subsequent EIR as conditions of approval:

> **Recommendation Mitigation Measure 1 – Design Coordination:** CDFW recommends the Project lead agency engage in early and continued coordination with CDFW Habitat Conservation and the CDFW Conservation Engineering Branch, before Project design selection. CDFW can generally provide the most helpful review and analysis of any proposed structures or Project elements with the potential to impact fish and wildlife resources early in the Project design phase. Prior to design selection and once a design is selected engineered drawings and design specification planning sheets should be provided to CDFW Conservation Engineering Branch through continued coordination during the design and permitting process for review and comment; re-initiating consultation at 30% design is required at minimum per the standards of the Interagency Agreement Number 43A0398 (CDFW, Caltrans, 2020).
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> **Recommendation Mitigation Measure 2 – Bridge Design 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 any design for potential in water structures. CDFW strongly recommends incorporation of design concepts such as spans that are at minimum 1.5 times greater than the channel width to allow natural stream flow and sedimentation processes to continue for long term dynamic channel stability.

COMMENT 2: Fish Passage Assessment and Bridge Design

Issue: Two potential barriers to fish passage exist within the identified Project limits. Anadromous salmonids were historically found in Coyote Creek and Silver Creek and may still utilize these streams in high flow event years (Leidy, 2005). Caltrans is required by SB 857 to construct new projects so that they do not present a barrier to fish passage.

Supporting Information: According to the Biogeographic Information and Observation System (BIOS), historical species within Coyote Creek and Silver Creek include Steelhead – Central California Coast, distinct population segment (CDFW-BIOS, 2021; DS-806).

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 [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].

> **Recommended Mitigation Measure 1: Fish Passage Barrier Assessment and Design:** If barriers or unassessed barriers noted within the Project limits identified below are found to be a barrier to fish passage, remediation of the problem should be designed into the Project by the implementing agency as a Project feature in consultation with CDFW and other natural resource agencies. CDFW recommends discussing the following locations as they pertain to fish passage: Location 1, Coyote Creek, PM 36.67; U.S.-101, (Latitude: 37.35973; Longitude: -121.873804; Santa Clara County), Fish Passage Assessment Database ID# 734012, fish barrier status: unknown, requires a detailed survey per results of reconnaissance survey (First Pass). Location 2, Silver Creek, PM 36.36, U.S.-101, (Latitude: 37.356605; Longitude: -121.86905; Marin County), Fish Passage Assessment Database ID# 761230, fish barrier status: unassessed.

COMMENT 3: Bat Assessment and Avoidance

Issue: The proposed work has the potential to result in the removal, replacement or updating of an existing bridge that may contain suitable bat roosting habitat such as cracks, crevices or voids. Those cracks, crevices or voids may provide suitable roosting habitat for bats and the loss of access to that habitat may create a potentially significant impacts to bats.

Supporting Information: According to the CNDDB and BIOS potentially suitable habitat exists within the Project for; pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis*), Brazilian free-tailed bat (*Tadarida brasiliensis*), canyon bat (*Parastrellus hesperus*), Townsend's big-eared bat (*Corynorhinus townsendii*), hoary bat (*Lasiurus cinereus*) and big brown bat (*Eptesicus fuscus*) (CDFW-BIOS Datasets (DS) DS-1830, DS-2490, DS-2491, DS-2496, DS-2497 and DS-2498, 2022).

Recommendations: The subsequent EIR should include an assessment and analysis method as a condition of approval in the Biological Resources section to evaluate and survey for the potential bat species to roost within trees or anthropogenic structures within the Project limits. To evaluate and avoid potentially significant impacts to bat species CDFW recommends incorporating the following mitigation measures into the subsequent EIR as conditions of approval:

Recommended Mitigation Measure 1: Bat Habitat Assessment: A qualified biologist should conduct a habitat assessment within the Project limits for suitable bat roosting habitat. The habitat assessment shall include a visual inspection of features within 200 feet of the work area for potential roosting features including trees, crevices, portholes, expansion joints and hollow areas (bats need not be present). The subsequent 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 utilizing night-exit survey methods, sound analyzation equipment methods and visual inspection 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 to allow roosting habitat to persist undisturbed throughout the course of construction. Exclusion netting or adhesive roll material shall not be used as exclusion methods. If presence/absence surveys indicate bat occupancy, then construction should be limited from March 1 through April 15 and/or August 31 through October 15.

Recommended Mitigation Measure 3: Bat Structure Incorporation: If active bat roosts are observed at the Project site that will be impacted as a result of Project completion, the lead agency should incorporate bat roosting structures into the design of the new bridge in consultation with CDFW to reduce the potentially significant impact of reducing habitat for fish and wildlife species.

COMMENT 4: Light Impact Analysis and Discussion

Issue: Artificial light has the potential to impact fish and wildlife sources, the subsequent EIR should include an analysis of artificial light sources proposed throughout the Project and avoid excess light spillage into sensitive habitats.

Evidence of Impacts: Artificial night lighting has 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).

Recommendation: If any new or replacement light sources are proposed the artificial light spillage beyond the prism of the roadway into natural areas such as Coyote Creek or Silver Creek should be avoided and minimized to prevent substantial degradation of the quality of the environment through light pollution. Due to the potential for presence of salmonids within the Coyote and Silver Creek, CDFW recommends lighting is avoided and minimized. CDFW recommends incorporating the following mitigation measures into the subsequent EIR as conditions of approval:

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

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 stripping 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.

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; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or Wesley.Stokes@wildlife.ca.gov.

cc: State Clearinghouse No. 2022010022

REFERENCES

California Department of Fish and Wildlife. July 2009. California Salmonid Stream Habitat Restoration Manual, Part XII.

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.

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