State of California
Department of Fish and Wildlife

# Memorandum

Date: June 20 2023

To: Ms. Liz Nagle, Environmental Scientist

California Department of Transportation

District 4

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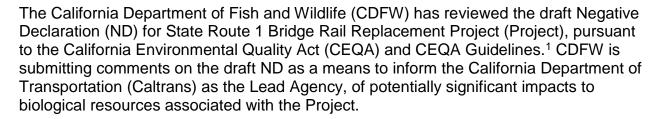
- DocuSigned by:

Erin Chappell

From: Erin Chappell, Regional Manager

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

subject: State Route 1 Bridge Rail Replacement Project, SCH No. 2023050538, Marin County



CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority over the Project pursuant to Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's Lake and Streambed Alteration (LSA) regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent the Project may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.



<sup>&</sup>lt;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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#### PROJECT LOCATION

The Project incorporates four different locations along State Route 1:

- 1. Coyote Creek Bridge (Location 1) is located at Post Mile (PM) 0.42 along State Route (SR) 1 in Marin County;
- 2. Eskoot Creek Bridge (Location 2) is located at PM 12.37 along SR 1 in Marin County;
- 3. Olema Creek Bridge South (Location 3) is located at PM 22.81 along SR 1 in Marin County; and
- 4. Olema Creek Bridge North (Location 4) is located at PM 22.96 along SR 1 in Marin County.

In relation to Locations 3 and 4, the majority of Olema Creek runs parallel to SR 1 except for three places where the creek crosses under SR 1. Therefore, there are three bridges that cross over Olema Creek, and this Project focuses on the two northernmost bridges that span Olema Creek. For the purposes of this comment letter, the two Olema Creek bridges will be referred to as Olema Creek Bridge South/Location 3 and Olema Creek Bridge North/Location 4.

#### PROJECT DESCRIPTION

Caltrans will replace and upgrade the bridge railings at Coyote Creek Bridge/Location 1, Eskot Creek Bridge Location 3, Olema Creek Bridge South/Location 3, and Olema Creek Bridge North/Location 4 on SR 1 in Marin County. In addition, bridges will be widened at each Project location.

The Project will remove the metal beam guardrails (MBGR), concrete baluster barriers, and alternative flared terminal systems. Midwest Guardrail System (MGS) will be installed at Location 1, Location 3, and Location 4, and alternative in-line terminal systems will be installed at the northbound and southbound approaches and departures at Location 3 and Location 4. Alternative in-line terminal systems will be installed at the southbound approach of Location 1. Vegetation control will be installed beneath the MGS at Location 3, and Location 4. The maximum extent of construction related activities, including ground disturbances, staging area, and temporary construction easements (TCEs), will be 1.08 acres at Location 1, 0.27 acres at Location 2, 0.52 acres at Location 3, and 0.46 acres at Location 4.

#### Remove and Replace Bridge Rails

The Project will remove the MBGR (bridge rail) at Location 1 and replace it with a California See-Through (ST)-75 railing. The concrete baluster barriers (bridge rail) at Location 2 will be removed and replaced with concrete Type 85SW. The concrete

with ST-75.

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baluster barriers (bridge rail) at Location 3 and Location 4 will be removed and replaced

# Install Falsework and Widen Bridges, Abutments, and Wingwalls

To upgrade the bridge rails, each bridge will be widened to accommodate the new standard bridge rail system on top of the bridge deck. Location 1 will be widened by 2 feet on each side. Work will include widening of the bridge abutments and modifying the existing wingwalls on either side of the bridge abutments. This work will require excavation at either end of the bridge. Falsework will be installed along the length of the bridge to construct the cast-in place concrete for the bridge widening, followed by form construction over the falsework. Structural steel will be placed in the form, and then concrete will be pumped into the forms. Location 2 will be widened by 2 feet, 1 inch on each side. Location 3 will be widened by 1 foot, 5 inches on each side, and the wingwall at the southbound departure will be modified. Location 4 will be widened by 8 inches on each side.

# Replace Sidewalks

Location 3 has existing 5-foot-wide sidewalks on both sides of the bridge. The Project will remove and reconstruct the sidewalks to accommodate the bridge railing upgrade and bridge widening while maintaining pedestrian access. The sidewalks will be widened to 6 feet. The existing asphalt concrete walkway ramps at the northeast and southwest approaches to the bridge sidewalks will be reconstructed using concrete, and a new concrete walkway ramp will be constructed at the southeast approach of the bridge.

# Remove Alternative Flared Terminal Systems and Install Alternative In-Line Terminal Systems

The Project will remove the alternative flared terminal systems at the northbound and southbound approaches at Location 1 and the northbound and southbound approaches and departures at Location 3 and Location 4. The Project will install alternative in-line terminal systems at the southbound approach at Location 1 and at the northbound and southbound approaches and departures at Location 3 and Location 4.

## **Install Vegetation Control**

Per the Final Marin State Route 1 Repair Guidelines (Caltrans 2015), vegetation control at Location 3 and Location 4 will consist of a non-pavement treatment, such as gravel.

#### **Construction Schedule**

Construction is anticipated to take approximately 19 months or 2 construction seasons to complete. The Project will require 180 working days. Construction will require 22 nights of nightwork which includes, restriping for temporary one-way alternative traffic control; installing temporary barrier systems and temporary crash cushions along the

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centerline of SR 1; removing the MBGR and installing MGS and alternative in-line terminal systems. All other construction-related activities will be limited to daytime hours.

# **Staging Areas**

Staging areas will be established within the lane closed to traffic for the overnight storage of construction-related equipment and materials. Location 1 will have two additional staging areas, one located west of Tennessee Valley Road and the other located east of Tennessee Valley Road. Location 2 will have an additional staging area located east of the northbound lane at PM 12, 0.5 miles south of Location 2. Location 4 will have an additional staging area located west of the southbound lane. The staging areas will not require the removal of vegetation.

## **REGULATORY REQUIREMENTS**

# **Lake and Streambed Alteration Agreement**

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for Project activities affecting rivers, lakes or streams and associated riparian habitat. Notification is required for 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, drainage ditches, washes, watercourses with a subsurface flow, and floodplains is generally subject to notification requirements. In addition, infrastructure installed beneath such aquatic features, such as through hydraulic directional drilling, is also generally subject to notification requirements. Therefore, any impact to the mainstems, tributaries, or floodplains or associated riparian habitat caused by the proposed Project will likely require an LSA Notification. CDFW may not execute a final LSA Agreement until it has considered the final ND and complied with its responsibilities as a responsible agency under CEQA.

# 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, 13/8, 11/2, 17/8, 2, 21/4, 21/2, 23/4, 3, 31/2, 4, 41/8, 41/2, 43/4, 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 § 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

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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 Guidelines §§ 21001 subd. (c), 21083, 15380, 15064 and15065). 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 <a href="https://www.wildlife.ca.gov/Conservation/CESA">https://www.wildlife.ca.gov/Conservation/CESA</a>.

## **COMMENTS AND RECOMMENDATIONS**

#### **COMMENT 1: Project Design Analysis and Coordination**

**Issue:** The ND notes that bridge abutment at Location 1 will be relocated but does not identify where the abutments will be located or if they will be placed outside of the stream channel. Abutment placement within the stream channel can cause scour impacts and fish passage obstructions. Site-specific locations are needed to ensure the four bridge locations are designed to meet the flow capacity of a given system, protect fish passage in fish bearing systems and to ensure potential barriers are remediated.

Recommendation 1 – Design Coordination: Early 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, prior to design selection and re-initiating design consultation at 30 percent design at minimum and through the permitting process for review and comment as identified in the Interagency Agreement (Agreement Number 43A0398).

Recommendation 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 the above manuals are included and referenced when designing the structure and creek work aspect of the Project. Such designs allow natural stream flow and sedimentation processes to continue for long term dynamic channel stability.

**COMMENT 2: Fish Passage Assessment Issue:** Multiple potential fish passage barriers 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

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and added § 156 to the Streets and Highways Code states in § 156.3, "For any project using state or federal transportation funds programmed after January 1, 2006, [Caltrans] shall ensure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were found, an assessment of potential barriers to fish passage is done prior to commencing project design. [Caltrans] shall 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].

Evidence the impact would be significant: The Project contains stream crossings within areas mapped as historic or current watersheds where anadromous fish are, or historically were found. The species include, but are not limited to, Pacific Lamprey (*Entosphenus tridentatus*), Tidewater Goby (*Eucyclogobius newberryi*), Central California Coast Winter-run steelhead (*Oncorhynchus mykiss*), and Coho Salmon (*Oncorhynchus kisutch*) (BIOS; DS-1353). The decline of naturally spawning salmon and steelhead trout is primarily a result of the loss of appropriate stream habitat and the inability of fish to get access to habitat, according to reports to the Fish and Game Commission and by the CDFW (CDFW 1996).

**Recommendations:** 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). 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 the ND include discussion of the following locations as they pertain to fish passage (See California Natural Diversity Database [CNDDB] Fish Passage Assessment Database layer DS-69):

Location 2: Eskoot Creek Bridge (Location 2), PM 12.37; SR 1, (Longitude 37.90, Latitude -122.64 in Marin County) Fish Passage Assessment Database ID# 12282, fish barrier status: Unknown. A detailed survey per the results of the first pass (reconnaissance) survey is needed.

Location 4: Olema Creek Bridge North (Location 4), PM 22.96; SR 1, (Longitude 38.00, Latitude -122.76 in Marin County) Fish Passage Assessment Database ID #12308, fish barrier status: Unknown. A detailed survey per the results of the first pass (reconnaissance) survey is needed.

Additional site-specific details for each location should be incorporated in the updated ND, those details can be found here: <a href="https://nrm.dfg.ca.gov/PAD/">https://nrm.dfg.ca.gov/PAD/</a> 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

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assessments, as necessary, as well as provide images of the upstream and downstream ends of water conveyance structure.

Recommended Mitigation Measure 1: Fish Passage Assessment: To evaluate potential impacts to native fish species and fisheries resources, Caltrans shall conduct fish passage assessments as described above and provide the results to CDFW and 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 percent design at minimum and through the permitting process for review and comment as identified in the Interagency Agreement (Agreement Number 43A0398).

#### 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. Will Kanz, Environmental Scientist, at (707) 337-1187 or <a href="www.wildlife.ca.gov">will.Kanz@wildlife.ca.gov</a>; or Mr. Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or <a href="www.wildlife.ca.gov">wesley.Stokes@wildlife.ca.gov</a>.

cc: Office of Planning and Research, State Clearinghouse (SCH No. 2023050538)

#### **REFERENCES**

California Department of Fish and Wildlife. February, 1996. Steelhead Restoration and Management Plan for California:

https://arm.dfg.co.gov/FileHandler.geby2DecumentID=34008.inline

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California Department of Fish and Wildlife. July, 2009. CDFW Fish Passage Design Manual for guidance on barrier remediation:

https://www.bing.com/search?q=cdfw+fish+passage+design+manual+2009&qs=n &form=QBRE&sp=-1&lq=0&pq=cdfw+fish+passage+design+manual+2009&sc=10-36&sk=&cvid=DD6D8F7BFED24996AAB6C93859B4B988&ghsh=0&ghacc=0&ghp l=

National Marine Fisheries Service, Southwest Region. September 2001. Guidelines for Salmonid Passage at Stream Crossings: <a href="https://media.fisheries.noaa.gov/dam-migration/fish-passage-at-stream-crossings-guidance.pdf">https://media.fisheries.noaa.gov/dam-migration/fish-passage-at-stream-crossings-guidance.pdf</a>