



State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
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*GAVIN NEWSOM, Governor*  
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December 19, 2024

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**SUBJECT: MEN 128 CULVERT REHABILITATION AND FISH PASSAGE PROJECT,  
STATE CLEARINGHOUSE NUMBER: 2024110567**

Dear Laurel Osborn:

On November 18, 2024, the California Department of Fish and Wildlife (CDFW) received an Initial Study and Proposed Negative Declaration (IS/ND) from the California Department of Transportation (Caltrans; Lead Agency) for the MEN 128 Culvert Rehabilitation and Fish Passage Project (Project), Mendocino County, California. CDFW understands that the Lead Agency will accept comments on the Project through December 20, 2024.

As a Trustee Agency for the State's fish and wildlife resources, CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary to sustain their populations. As a Responsible Agency, CDFW administers the California Endangered Species Act (CESA) and other provisions of the Fish and Game Code (Fish & G. Code) that conserve the State's fish and wildlife public trust resources. CDFW offers the following comments and recommendations in our role as Trustee and Responsible Agency pursuant to the California Environmental Quality Act (CEQA; California Public Resource Code, § 21000 *et seq.*). CDFW participates in the regulatory process in its roles as Trustee and Responsible Agency to minimize Project impacts and avoid potentially significant environmental impacts by recommending avoidance and minimization measures. These comments are intended to reduce the Project impacts on public trust resources.

*Conserving California's Wildlife Since 1870*

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### **Project Description**

As stated in the IS/ND, the Project is located on a section of State Route (SR) 128 in Mendocino County, California. SR 128 is an east-west route that operates as a rural two-lane highway. The Project area begins at Post Mile (PM) 0.0 and ends at PM 50.5 and proposes to rehabilitate 116 deteriorating drainage facilities at 103 locations and includes one fish passage location. Proposed improvements include "cut and cover" culvert replacements at 91 locations, high-density polyethylene liner installation of five culverts, invert paving of four reinforced box culverts (RCB), cast-in-place replacement of two RCB culverts, and replacement of one culvert with a full span bridge facilitating fish passage at Mustard Gulch.

As summarized in the IS/ND, the Project includes many Standard Measures and Best Management Practices to avoid or minimize impacts to biological and other resources. The IS/ND states that Caltrans has prepared this Initial Study and, pending public review, expects to determine that the proposed Project would not have a significant impact on the environment and no mitigation is required.

### **Environmental Setting and Special Status Species**

The Project is located east of the Pacific Ocean and occurs within a 50 mile stretch of SR 128, within the Navarro River and Russian River watersheds. The IS/ND states the Project's biological study area contains potential habitat for at least 58 special status species, seven amphibians and reptiles, five birds, four fishes, three mammals, and two invertebrates. Additionally, the IS/ND states the study area contains two Sensitive Natural Communities, 0.675 acres of wetlands and other Waters of the State<sup>1</sup>, and 1.62 acres of riparian habitat.

### **CDFW Consultation History**

CDFW consultation for this Project began in 2020, with CDFW staff attending preliminary site visits for potential fish passage locations. On July 18, 2023, CDFW attended a site visit at the Mustard Gulch Project location. While some preliminary discussion has occurred regarding which locations require fish passage designs, the IS/ND should include analyses to support Caltrans'

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<sup>1</sup> "Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state (Cal. Wat. Code, § 13050).

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determinations. CDFW looks forward to further coordination by the Lead Agency regarding specific Project components, impacts, and proposed Project designs.

### **CDFW Permitting**

Based on information provided in the IS/ND, the proposed Project will have substantial impacts to the bed, bank or channel of tributaries to the Navarro River and Russian River. Caltrans should notify CDFW for a Lake or Streambed Alteration (LSA) Agreement.

Based on information provided in the IS/ND, CDFW agrees with the Lead Agency there is potential for coho salmon<sup>2</sup> (*Oncorhynchus kisutch*) to be present within the Project work area. If the Project has the potential to result in take<sup>3</sup> of species listed as threatened or endangered pursuant to Fish and Game Code, the Project should coordinate further with CDFW and obtain take authorization. CDFW looks forward to continuing coordination with Caltrans to ensure that mitigation approaches will be compatible with state permitting requirements, including further coordination on mitigation approaches for impacts to onsite habitat.

### **CDFW Comments on the IS/ND:**

#### **1. Fish Passage Assessments**

The IS/ND states all but one of the drainage work locations in the Project are on a steep grade or have natural downstream barriers that are not accessible to salmonids and that Mustard Gulch (PM 7.27) is the only location currently accessible to salmonids. The IS/ND states nine additional Project locations were investigated for fish passage (PMs 15.37, 27.76, 32.08, 32.34, 32.98, 35.54, 43.30, 43.67, 45.09) and were found to not be barriers to anadromy. The IS/ND does not include these assessments, or a description of the methodology used.

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<sup>2</sup> Central California Coast Evolutionarily Significant Unit of coho salmon is listed as Endangered pursuant to the California Endangered Species Act.

<sup>3</sup> Take means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill (Fish & G. Code, § 86).

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These nine additional locations are designated as full or partial barriers on the California Fish Passage Assessment Database (PAD; Elston, 2024). Changes to these or any other PAD location designation from barrier to non-barrier status is important because Fish & G. Code section 5901 makes it is unlawful to construct or maintain any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish up and down stream. Additionally, Senate Bill 857 (Streets and Highways Code section 156.3) requires projects using state or federal transportation funds (if the project affects a stream crossing on a stream where salmon or steelhead are, or historically were) to remediate any fish passage barrier. Fish passage assessments should also be included for Project locations at PMs 26.07, 26.51, and 32.77.

Therefore, CDFW recommends the IS/ND be revised to include these fish passage assessments, including a description of the methodology used (**Recommendation 1**). Pursuant to Fish & G. Code section 5901, these assessments should also include potential habitat for resident trout, including those with potential steelhead (*O. mykiss irideus*) genetics above Lake Sonoma (Deiner et al. 2007).

## 2. Fish Passage Design

Based on information provided in the IS/ND, it is unclear if the Environmental Study Limits (ESL), Right of Way (ROW), and Temporary Construction Easements (TCE) are large enough to encompass areas needed at Project locations where fish passage design and/or stream bed vertical adjustment is needed. More specifically, the IS/ND does not contain related information regarding the development of geomorphic site assessments, longitudinal profile elevation surveys that fully capture the site geomorphic context to guide stream restoration, channel cross sections with existing and proposed Project elements, and hydraulic modeling studies. Without this information CDFW is not able to evaluate the appropriateness of proposed engineered road-stream crossing lengths/widths, the full effects of the existing and proposed road-stream crossings have had on the stream system, effects of streamflow modifications, and distance/locations of streamflow bypass around construction areas. As a result, CDFW cannot evaluate the adequacy of the ESL, ROW, and TCE. These parameters are needed to identify the entire Project area and the "whole of the action," which will inform

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appropriate ESL, ROW, and TCE (CEQA Guidelines sections 15003 (h), and 15063(a)(1)). Additionally, insufficient ROW or TCE areas could result in Project delays or unforeseen additional costs to Caltrans.

Therefore, CDFW recommends the IS/ND be revised to include (for complex fish passage remediation locations and/or locations where stream bed vertical adjustment is needed) a minimum of 30 percent design plans (including stream grading and engineered streambed material) that utilize the geomorphic site assessments, longitudinal profile elevation surveys, channel cross sections, and existing hydraulic modeling to determine the project footprint, stream reach length, and ROW/TCE required to restore geomorphic function to these Project locations **(Recommendation 2)**. Conducting this work prior to preparing a CEQA document will increase the likelihood that the ESL, ROW, and TCE are sufficient for biological effects analyses, and the appropriate Project design footprint as well as site access for construction activities.

### **3. Culvert Sizing for 100-Year Storm Events**

The IS/ND cites Caltrans' Climate Change Vulnerability Assessment for District 1 (Caltrans 2019) and discusses a potential 9.9 percent increase in the 100-year storm precipitation event in the Project area. The IS/ND also states the 100-year storm event is a metric commonly used in the design of stream crossing culverts and the Project would replace existing deteriorated culverts with larger pipe sizes, where needed. The IS/ND states that increasing the diameter of culverts is anticipated to reduce the occurrence of flooding upstream of culverts and decrease water velocities at the outlet of culverts, but no information is provided to assess whether the proposed culvert sizes will pass 100-year storm event flows (e.g. watershed area, 100-year stormflow, etc.).

CDFW typically recommends stream crossings be designed to accommodate the estimated 100-year flow (1% annual exceedance probability [AEP]), including debris and sediment loads. Designing for larger storm events will become increasingly important in the context of a changing climate (Michaelis et al. 2022; Kunkel et al 2013), and can also provide terrestrial wildlife connectivity benefits. The Project's pending LSA notification should include an assessment of each culvert's watershed area, the 1% AEP flow, and the design discharge (e.g.,  $Q_{100}$ )

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**(Recommendation 3).** If Caltrans proposes culverts at stream crossings with hydraulic capacity less than the estimated 100-year flow (including sediment and debris), Caltrans should provide site-specific justifications and risk assessments.

#### **4. Herpetofauna Passage**

Herpetofauna are a group of organisms that includes both amphibians and reptiles. Steep or vertical culverts and drainage inlets (DI) types are known to be barriers to herpetofauna passage, and these can entrap species such as foothill yellow-legged frog (*Rana boylei*), a species of special concern in the Project area and listed as threatened/endangered in other parts of California. In other prior Caltrans project locations, "amphibian ladders" have been incorporated into project designs to allow passage of herpetofauna. The Project's pending LSA notification should include an assessment of herpetofauna passage and propose passage designs, where appropriate **(Recommendation #4)**.

### **Summary of Recommendations**

1. CDFW recommends the IS/ND be revised to include fish passage assessments, including a description of the methodology used. Pursuant to Fish & G. Code section 5901, these assessments should also include potential habitat for resident trout, including those with potential steelhead genetics above Lake Sonoma.
2. CDFW recommends the IS/ND be revised to include (for complex fish passage remediation locations and/or locations where stream bed vertical adjustment is needed) a minimum of 30 percent design plans (including stream grading and engineered streambed material) that utilize the geomorphic site assessments, longitudinal profile elevation surveys, channel cross sections, and existing hydraulic modeling to determine the project footprint, stream reach length, and ROW/TCE required to restore geomorphic function to these Project locations.
3. CDFW recommends the Project's pending LSA notification include an assessment of each culvert's watershed area, the 1% AEP flow rate, and the design flow (e.g., Q100). If Caltrans proposes culverts with a design


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flow less than the estimated 100-year flow (with sediment and debris), Caltrans should provide a site-specific justification and risk assessment.

4. CDFW recommends the Project's pending LSA notification include an assessment of herpetofauna passage and propose passage designs, where appropriate.

Thank you for the opportunity to comment on this IS/ND. CDFW staff are available to meet with you to consult with or address the contents of this letter in greater depth. If you have questions on this matter or would like to discuss these recommendations, please contact Senior Environmental Scientist Specialist Greg O'Connell at [Gregory.OConnell@Wildlife.ca.gov](mailto:Gregory.OConnell@Wildlife.ca.gov).

Sincerely,

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