

## Haggerty, Nicole@Wildlife

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**From:** Kearns, Zachary@Wildlife  
**Sent:** Friday, December 27, 2024 3:26 PM  
**To:** Meeks Creeks Bridge Replacement@DOT  
**Cc:** Stanfield, Melissa@Wildlife; Wood, Dylan@Wildlife; Sheya, Tanya@Wildlife; Kilgour, Morgan@Wildlife; Wildlife R2 CEQA; Macala, Rick@Wildlife; Lockhart, Mitch@Wildlife  
**Subject:** CDFW Comments - Meeks Creek Bridge Replacement IS/ND - SCH 2024110511

Dear Bibiana Rodriquez:

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Initial Study/Negative Declaration (IS/ND) from the California Department of Transportation (Caltrans) for the Meeks Creek Bridge Replacement Project (project).

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the project that may affect California fish, wildlife, plants and their habitats. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that it, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

### **CDFW ROLE**

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 (Fish & G. Code, § 1802.). Similarly, for purposes of CEQA, CDFW provides, 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 may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed 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.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

### **PROJECT DESCRIPTION SUMMARY**

The project is located in District 3, between Post Mile 24.4 and 25.3 at approximately Latitude: 39.035947, Longitude: -120.125572, in El Dorado County.

The project consists of the removal of Meeks Creek Bridge (Bridge No. 25-0019), the construction of a new bridge on SR 89, repair of scour damage, installation of bicycle and pedestrian access, addition of Transportation Management Systems elements with a Maintenance Vehicle Pullout, and restoration of Meeks Creek channel within Caltrans right of way.

### **Project Description**

The Project description should include the whole action as defined in the CEQA Guidelines § 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment stage area, spoils areas, adjacent infrastructure development, staging areas and access and haul roads if applicable.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the comments and recommendations presented below to assist the California Department of Transportation (Caltrans) in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to adequately review and comment on the proposed project with respect to impacts on biological resources.

### **COMMENT 1: Wetlands and Other Waters, Environmental Consequences, page 49**

**Issue:** It is unclear if the environmental study limits (ESL), right of way (ROW), and temporary construction easements (TCE) are large enough to encompass areas at project locations where fish passage and stream restoration designs are needed. More specifically, the IS/ND does not contain related information regarding the development of a geomorphic site assessment, longitudinal profile elevation surveys that fully capture the site's geomorphic context, channel cross sections with existing and proposed project elements, or hydraulic studies. Without this information, CDFW is not able to evaluate the appropriateness of the proposed engineered stream crossing dimension, effects of streamflow modifications, the full effects the existing and proposed road-stream crossings have had on Meeks Creek, and distance or location of streamflow bypass around the project area. This information is needed to identify both the entire project area and the "whole of the action." As a result, CDFW cannot evaluate the adequacy of the ESL, ROW, and TCE and evaluate if project related activities will have a significant impact on biological resources. Additionally, insufficient ROW or TCE areas could result in project delays or unforeseen additional costs to Caltrans. Specifically, these costs or delays could be incurred during agency review and potential changes to the plans due to requirements for enhanced stream restoration activities or in meeting the long-term objectives of the United States Department of Agriculture (USDA) Forest Service's Meeks Bay Restoration Project, if the assessment and design is not completed in conjunction with the IS/ND.

**Recommendation:** To ensure impacts to biological resources are less than significant, CDFW recommends the IS/ND be revised to include a minimum of 30% design plans including the findings from geomorphic site assessments, longitudinal profile elevation surveys, channel cross sections, existing hydraulic modeling, stream reach length, and ROW/TCE that will be required to restore geomorphic function back to Meeks Creek. Conducting the surveys and assessments will increase the likelihood that the ESL, ROW, and TCE are sufficient for biological effects analyses, and have the appropriate project design footprint as well as site access for construction activities.

### **COMMENT 2: Proposed Alternatives, Build Alternative, page 23**

**Issue:** As described on page 23, it is unclear if replacing the existing bridge with a 90.5-foot length bridge structure is sized of sufficient length and capacity that the bridge geometrics will not have a significant effect on biological resources. This is due to potential alterations on the flow hydraulics and the continuity of geomorphic processes, such as the movement of debris and sediment.

**Recommendation:** To avoid potentially significant effects to biological resources, CDFW recommends the bridge structure fully span the bankfull channel width and allow the continuation of natural bank lines through the bridge structure. This design will promote natural sediment transport

patterns, provide unaltered fluvial debris movement, restore functional continuity and connectivity to the floodplain, provide fish passage for the Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*)(LCT), and provide enhanced opportunities for terrestrial wildlife connectivity. A bankfull width spanning bridge structure with the continuation of natural bank lines through the structure can also help to reduce shear stresses and erosive velocities acting on the abutment channel banks, which can help to eliminate the need for rock slope protection in these areas, further reducing permanent project impacts to potential habitat.

CDFW recommends that Caltrans analyze and prepare a bridge structure alternative that fully spans the bankfull channel width and allows natural channel banks to run unimpeded through the bridge structure. The bridge structure should be “hydraulically transparent” to the Meeks Creek waterway to allow all geomorphic processes to move through the structure unimpeded.

CDFW recommends that Caltrans incorporate the following design principles into the new bridge structure alternative:

1. Bridge structure design width, as a minimum, 1.5 times the bankfull channel width (NMFS, 2023) to incorporate a larger than bankfull width of the existing channel to support a self-sustaining stream-floodplain corridor;
2. If the 1.5 times the bankfull channel width is not wide enough to incorporate natural bank lines through the structure, then analyze the upstream and downstream topography of the natural bank lines so they can be incorporated through the bridge structure design length; and
3. Integrate bioengineered revetments in lieu of any future proposed rock slope protection in the project design which could avoid permanent impacts that result in anthropogenic, hardscape structures with limited or no habitat value within the bed, bank, and channel.

CDFW further recommends that Caltrans provide the following additional studies for the proposed bridge structure alternative:

1. Hydrological analyses for the low and high design flows for fish passage, the bankfull flow or the 2-year flood event as a bankfull flow surrogate, and peak design flows to guide the design of any in-channel stream restoration components (e.g., the 5-year, 10-year, and 100-year flood events);
2. Hydraulic analysis that provides development of the velocities, depths, shear stresses, and scour conditions acting on the channel bed and banks; and
3. As previously stated in **Comment 1**, a geomorphic site assessment that includes, at a minimum, longitudinal profile elevation surveys at the existing channel thalweg at unique and repeatable geomorphic channel features, stream channel stability analysis (both vertical and lateral stability), and cross section analysis; establishing the long-term potential variability and range in channel bed elevations the bridge structure should accommodate through the development and evaluation of the vertical adjustment profile analysis; and selecting the appropriate bridge structure size and needed conveyance.

**COMMENT 3: Threatened and Endangered Species, Lahontan Cutthroat Trout, page 79**

**Issue:** LCT is federally listed as *threatened* and considered a California Species of Special Concern. LCT are endemic to California but have been extirpated from nearly 95% of their natural habitat (CDFW, 2024). There are efforts to reintroduce LCT throughout the Lake Tahoe basin, including in Lake Tahoe itself, and upstream from the proposed project location at Meeks Bridge. If the fish barrier is completely removed, potentially introduced populations upstream would be at risk from non-native fish predation and hybridization with rainbow trout (*Oncorhynchus mykiss*). Hybrid offspring can be fertile, adding further survival pressure on planted LCT populations. The current condition of Meeks Bridge has created a physical barrier which prevents some non-native fish species from travelling upstream. This barrier could protect future reintroduction efforts upstream. CDFW is concerned that completely removing this fish passage barrier would eliminate potential planting locations in historic LCT habitat.

The IS/ND refers to USDA Forest Service's Meeks Bay Restoration Project, which describes a fish management structure that could potentially manage which species of fish are allowed to travel upstream. However, the USDA Forest Service's Meeks Bay Restoration Project is currently only a draft proposal, and not required as a part of any regulatory mechanism, so reliance on the structure to selectively allow fish upstream is not secure. Lastly, the feasibility study conducted by Tahoe Regional Planning Agency and United States Fish and Wildlife Service (USFW) Lake Tahoe Basin Management Unit indicates that the required location and dimensions of an integrated fish management structure would not be feasible with the visual and size requirements of the structure.

**Recommendation:** To avoid impacting future conservation efforts with LCT, CDFW recommends the document describe how selective passage could be achieved at Meeks Bridge to ensure non-native fish will be prevented from predating or hybridizing with introduced LCT populations in the upper watershed. With the unlikely inclusion of a selective fish management structure in USDA Forest Service's Meeks Bay Restoration Project, and the lack of feasibility determined by the Tahoe Regional Planning Agency and USFW Lake Tahoe Basin Management Unit at the Meeks Bridge location, CDFW recommends Caltrans describe a project alternative that will allow for selective fish passage, and allow for future conservation efforts upstream of the project location.

## ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be submitted online or mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov).

## FILING FEES

The project, as proposed, would have an effect on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code § 711.4; Pub. Resources Code, § 21089.)

## CONCLUSION

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the project. Written notifications shall be

directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to [R2CEQA@wildlife.ca.gov](mailto:R2CEQA@wildlife.ca.gov).

CDFW appreciates the opportunity to comment on the project and recommends that Caltrans address CDFW's comments and concerns in their analysis. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts.

If you have any questions regarding the comments provided in this letter or wish to schedule a meeting and/or site visit, please contact Zach Kearns, Senior Environmental Scientist (Specialist) at (916) 358-1134 or [zachary.kearns@wildlife.ca.gov](mailto:zachary.kearns@wildlife.ca.gov).

Sincerely,

Zach Kearns  
Senior Environmental Scientist (Specialist)  
(916) 358-1134  
1701 Nimbus Rd.  
Rancho Cordova, CA 95670



## REFERENCES

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. <http://vegetation.cnps.org/>

California Department of Fish and Wildlife. 2024. Lahontan Cutthroat Trout. <https://wildlife.ca.gov/Conservation/Fishes/Lahontan-Cutthroat-Trout>. West Sacramento, California.

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National Marine Fisheries Service. 2023. NOAA Fisheries Guidelines for Salmonid Passage at Stream Crossings in California. NOAA Fisheries West Coast Region Headquarters, Engineering and Physical Sciences Branch, 1201 Northeast Lloyd Blvd, Portland Oregon.