



## Memorandum

Governor's Office of Planning & Research

Date: June 20, 2019

**JUNE 20 2019**

To: Mr. Jason Wilkinson  
California Department of Transportation  
District 5  
50 Higuera Street  
San Luis Obispo, CA 93401

### STATE CLEARINGHOUSE

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

*Michael D. Hickman #585 FOR GREGG ERICKSON*

Subject: Soquel Creek Scour Mitigation Project, Initial Study/Mitigated Negative Declaration, SCH #2019059101, Santa Cruz County

The California Department of Fish and Wildlife (CDFW) has reviewed the proposed Initial Study/Mitigated Negative Declaration (IS/MND) for the proposed Soquel Creek Scour Mitigation 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 IS/MND as a means to inform the California Department of Transportation as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Project.

#### 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 the California Endangered Species Act (CESA) Permit, the Native Plant Protection Act, 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 SUMMARY

The proposed Project is located along State Route 1 at Post-Mile (PM) 13.31 over Soquel Creek on the Soquel Creek Bridge (Bridge No. 36-0013) in Santa Cruz County, California. The Project includes the removal of damaged sacked concrete at bent 12 of the Soquel Bridge and installation of 1,250 cubic yards of rock slope protection (RSP) along the western bank underneath the bridge in a field approximately 130 feet by 50 feet. Construction of the access road and staging area will require vegetation removal and a temporary stream diversion and dewatering operations would also be necessary within Soquel Creek to conduct the work in a dry streambed. Filling the associated scour hole and excavating areas of the streambed before installing the RSP will be necessary to maintain the existing stream cross sectional area.

<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.

The Project shall occur between June and October and take approximately 60 working days and is proposed to start during the summer of 2023.

## **PROJECT DESCRIPTION COMMENTS AND RECOMMENDATIONS**

### Rock Slope Protection Alternative

The Project Description and associated technical design drawings are not clear in providing sufficient information on the extent of the RSP field compared to current conditions at the Project location. The technical design drawings should provide a proposed cross-section of the RSP and provide a comparison technical design drawing of the current conditions of the site. Furthermore, an updated technical design drawing is needed that adequately illustrates the newly proposed channel invert. Page 10 of the IS/MND illustrates nearly vertical slopes which are not appropriate for stream bank design with bio-technical engineering design elements.

CDFW strongly recommends the Project incorporate bio-technical engineering design elements in order to avoid impacts that result in a permanent, hardscape structure with no habitat value within the bed, bank and channel of Soquel Creek. CDFW recommends recontouring the slope of the bank on the western side of the creek and creation of a toed rock slope protection that incorporates earthen fill on the top of the RSP to create a floodplain bench that can mimic natural habitat, also called a mounded toe or terrace. Incorporation of this design element would address wildlife connectivity and fish passage concerns noted later in this letter as well as provide on-site mitigation that can offset some of the mitigation/restoration requirements CDFW would require as a result of Project implementation. Please reference the *California Salmonid Stream Habitat Restoration Manual, Part XII, Fish Passage Design and Implementation, July, 2009* for conceptual design plans of the toed rock slope and floodplain bench for bio-technical engineering design methods that may be appropriate to offset permanent impacts and address fish passage and wildlife connectivity avoidance and minimization. Coordination with CDFW on specific design concepts is also strongly recommended.

CDFW also strongly recommends the incorporation of plantings within the proposed RSP fields in sections of the RSP that will not permanently be in the shadow of the bridge. See the Federal Highway Administrations Hydraulic Engineering Circular No. 23 (HEC-23) Volume 1 and the NCHRP Report-544 Environmentally Sensitive Channel and Bank Protection Measures for design details of vegetated riprap.

### Insufficiently Sized Culvert on Western Bank

The Project does not specify if it will address the redesign of the Wharf Road culvert that is of insufficient length and insufficient outfall design, creating gully erosion on the western bank of Soquel Creek. The proponent should clearly identify and incorporate the culvert modification into the Project to ensure this culvert is remediated to avoid continued scour on the western bank.

## **LAKE AND STREAMBED ALTERATION AGREEMENT**

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. This Project proposes to impact LSA resources and notification is

required. CDFW may not execute the final LSA Agreement [or Incidental Take Permit (ITP)] until it has complied with CEQA as a Responsible Agency.

### **CALIFORNIA ENDANGERED SPECIES ACT**

Please be advised that a CESA ITP must be obtained if the 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 ITP.

#### Foothill Yellow-Legged Frog

CDFW believes an ITP is warranted for foothill yellow-legged frog (FYLF) (*Rana boylei*). Page 35 of the IS/MND notes suitable habitat within the Biological Study Area (BSA) for FYLF, page 37 of the IS/MND notes no known occurrences within the California Natural Diversity Database (CNDDDB) but infers presence. There is a known occurrence in CNDDDB within 528 meters of the site within the Soquel Creek system for FYLF. Page 50 of the IS/MND notes avoidance and minimization measures to relocate FYLF, this is considered take by CESA. Pursuant to Fish and Game Code section 2081(b), foothill yellow-legged frog (*Rana boylei*), a species designated as candidate listed-threatened pursuant to the CESA (Fish and Game Code, § 2050 et seq.) an ITP is required to conduct actions that result in take of the species. On June 21, 2017, the Fish and Game Commission (Commission), determined that listing foothill yellow-legged frog (*Rana boylei*) as a threatened species under CESA may be warranted [Fish and Game Code, § 2074.2, subd.(e)(2)]. On June 27, 2017, the Commission provided notice that the aforementioned species is a candidate species as defined by Fish and Game Code section 2068. On July 7, 2017, the notice of findings for foothill yellow-legged frog was published in the California Regulatory Notice Register (No. 27-Z, p. 986). The species status may change following the decision of the Fish and Game Commission to designate the species as threatened or endangered but if there is such a designation, the species will remain a covered species.

### **WILDLIFE CONNECTIVITY**

The IS/MND should better address impacts to wildlife connectivity and should include additional documentation describing wildlife connectivity and how connectivity can be incorporated into the Project. CDFW recommends additional avoidance and minimization measure, such as a floodplain bench or terrace, be incorporated into the Project to ensure structures are not created that would impede terrestrial movement and incorporates and would allow terrestrial wildlife movement under the Soquel Bridge even in periods of heavy flow events. The Project should incorporate undercrossing areas for wildlife conducive to allow wildlife to pass in open corridors from north to south within the creek and riparian habitat. Additionally, the current RSP field proposed should be minimized in order to allow for wildlife connectivity.

### **FISH PASSAGE**

The placement of artificial structures such as RSP can result in impacts to aquatic habitats that should be avoided, minimized, or otherwise mitigated. Connectivity is the capacity of a landscape to support the movement of organisms, materials, or energy (Peck, 1998). The health of fish populations ultimately depends on the health of their ecosystems which includes processes and materials moving through the stream. Physical processes include the movement

of woody debris, sediment and migration of channel patterns. It is important that woody debris and bed material pass unhindered through stream crossing structures.

CDFW is unable to determine if the proposed field of RSP is designed to be inserted beyond the centerline of the creek. CDFW does not recommend RSP be inserted beyond the centerline as this has the potential to prevent the passage of debris and create barriers that would prevent fish and other aquatic organisms from passing through the structure. Additionally, habitat may be degraded above and below the stream crossing through the loss of debris and sediment transport. The proposed design may also create a partial or temporal passage for specific species or size classes under certain flow conditions that could result in significant migration delays leaving fish vulnerable to predation, disease, overcrowding, and potentially affecting reproductive success (Lang et al., 2004). Proposing an alternative design that incorporates environmental engineering concepts such as a floodplain bench and toed slope could reduce to fish passage impacts below a level of significance.

### **GENERAL AVOIDANCE AND MINIMIZATION MEASURES**

The IS/MND does not include a section on possible significant impacts to bat species known to occur within the vicinity of the Project nor are avoidance and minimization measures included. The IS/MND should include a section that discusses bat species including but not limited to pallid bat (*Antrozous pallidus*) and Townsend's big eared bat (*Corynorhinus townsendii*) both designated as California Species of Special Concern. Section 15380 of CEQA requires the Lead Agency to treat sensitive species as though they were listed, if the species meets the criteria for listing described in the section. As a California Species of Special Concern, CDFW considers the pallid bat and Townsend's big eared bat to meet this criteria. The following avoidance and minimization measure can reduce potential impacts to bat species below a level of significance and should be incorporated into the IS/MND:

#### Bats

A Qualified Biologist will conduct a habitat assessment for potentially suitable bat roosting habitat, including within open expansion joints of the bridge and trees in the Project area from March 1 to April 1 or August 31 to October 15 prior to bridge construction activities. If the habitat assessment reveals the bridge structure is suitable roosting habitat for bats, then the appropriate exclusionary measures will be implemented prior to bridge 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. If bats are known to use the bridge structure, 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 two 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 bridge or structure removal, removing parts of the bridge and allowing other to persist that maximizes the use of potential roosting habitat over the course of the Project as safety will allow.

Bats will not be disturbed without specific notice to and consultation with wildlife agencies. If bats are found a phased exclusion/removal plan shall be required to submit for approval to the wildlife agencies. The plan should incorporate a phased removal strategy that allows roosting habitat to persist in transitioning areas throughout the course of the entire Project. A temporary roost habitat installation may be required on-site if roosting habitat will not be available for one full season or more due to Project related constraints. The plan submitted to wildlife agencies should also incorporate monitoring protocols before, during and after construction.

## **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 #2019059101