

State of California
Department of Fish and Wildlife

Memorandum

Governor's Office of Planning & Research

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Date: December 3, 2021

STATE CLEARINGHOUSE

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**Subject: Last Chance Grade Permanent Restoration Project
(SCH# 2021110050)**

On November 4, 2021, the California Department of Fish and Wildlife (CDFW) received a Notice of Preparation and Notice of Intent (NOP/NOI) for the preparation of a Draft Environmental Impact Report/Environmental Impact Statement (DEIR/EIS) from the California Department of Transportation (Lead Agency) for the Last Chance Grade Permanent Restoration Project (Project), Del Norte County, California. CDFW understands that the Lead Agency will accept comments on the Project through December 6, 2021.

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 (FGC) 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 potential significant environmental impacts by recommending avoidance and minimization measures. These comments are intended to reduce the Project's impacts on public trust resources.

Project Description

The Lead Agency proposes to realign the 3.5-mile-long section of U.S. Highway 101 (US 101) in Del Norte County from post mile (PM) 12.0 to 15.5 from Wilson Creek to approximately nine miles south of Crescent City. The Project area is almost entirely within portions of Redwood National and State Parks. According to the NOP/NOI, the EIR/EIS will consider two alternatives: Alternative X would involve relocation and reengineering of the existing roadway by approximately 130 feet inland (east) to improve geotechnical stability and longevity. Alternative X would involve constructing a series of retaining walls (single and terraced) to minimize the potential for landslides on the roadway. Drainage improvements may also be included in this alternative. Alternative F would construct a 10,000-foot-long tunnel that would diverge from the existing

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roadway near PM 14.06 and reconnect to US 101 near PM 15.5, thereby avoiding the portion of existing roadway most prone to landslides and geologic instability. The DEIR/EIS will also evaluate a No Project Alternative that would entail no new long-term feasible and sustainable solution for Last Chance Grade but would instead be a continuation of ongoing maintenance and repair activities needed to enable ongoing roadway operations.

CDFW Consultation History

CDFW consultation for this Project began in 2015, with several CDFW staff participating in a variety of working groups and related meetings. CDFW appreciates the level of communication and coordination by the Lead Agency. While many Project alternatives, potential Project impacts, and potential mitigation for those impacts have been discussed since 2015, the NOP/NOI does not contain information about potential Project impacts or mitigation. CDFW looks forward to reviewing the DEIR/EIS and providing comments on specific Project components, impacts, and proposed mitigation strategies.

CDFW Permitting

The proposed Project will require a Lake or Streambed Alteration Agreement pursuant to FGC 1602 if it will result in substantial impacts to the bed, bank, or channel of streams. If the Project will result in take (defined by FGC Section 86 as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) of any species listed as Threatened, Endangered, or as a Candidate for listing pursuant to the California Endangered Species Act (CESA), the Project will require an appropriate take authorization pursuant to CESA. CDFW looks forward to continued coordination with the Lead Agency regarding state permitting requirements and mitigation approaches.

Environmental Setting and Special Status Species

Special Status Species

The Project area provides habitat for and could result in impacts to a variety of sensitive and special status aquatic and terrestrial fish, wildlife, and plant species, including but not limited to: State and Federally Threatened Southern Oregon Northern California coho salmon (*Oncorhynchus kisutch*) and northern spotted owl (*Strix occidentalis caurina*); State Endangered and Federally Threatened marbled murrelet (*Brachyramphus marmoratus*) and Humboldt marten (*Martes caurina humboldtensis*); State Endangered willow flycatcher (*Empidonax traillii*); State Species of Special Concern northern red-legged frog (*Rana aurora*), Pacific tailed frog (*Ascaphus truei*), southern torrent salamander (*Rhyacotriton variegatus*), foothill yellow-legged frog (*R. boylei*), Sonoma tree vole (*Arborimus pomo*), white-footed vole (*A. albipes*), Fisher – west coast DPS (*Pekania pennanti*), yellow warbler (*Setophaga petechia*), olive-sided flycatcher (*Contopus cooperi*), Purple Martin (*Progne subis*), Vaux’s swift (*Chaetura vauxi*); State Fully Protected species such as American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), and ring-tailed cat (*Bassariscus astutus*); and rare plants such as California Rare Plant Rank (CRPR) 2B.2 ghost-pipe (*Monotropa uniflora*), Oregon coast paintbrush (*Castilleja litoralis*), and CRPR 1B.1 Wolf’s evening-primrose (*Oenothera wolfii*).

Sensitive Natural Communities

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Impacts to a number of Sensitive Natural Communities are likely as a result of a variety of Project activities. Surveys that will be used to inform the DEIR/EIS should follow CDFW's 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. CDFW recommends that, in addition to a protocol level floristic survey for rare plants, surveys identify any natural communities with a rank of S1-S3. Natural communities with ranks of S1-S3 are considered Sensitive Natural Communities that should be addressed in the DEIR/EIS. Please see <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities> for more information.

Old Growth Redwood Forest Habitats:

While information has not been provided on the extent of potential impacts to this habitat type, it appears that the Project may result in potentially significant impacts to old-growth forest habitat. Impacts of losing old-growth forests and large old trees from the landscape are long-term and far reaching and limit available habitat for old-growth dependent species for decades or centuries. Impacts include both the immediate and cumulative sustained loss of old-growth wildlife habitats, and the associated ecosystem inputs that drive and sustain these old-growth forests. CDFW recommends the DEIR/EIS propose appropriate mitigation for any potentially significant impacts to old-growth forest habitat, including a timeline for mitigation activities that provides for implementation concurrently with or in advance of the Project. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments.

Mitigation for the loss of old-growth forest should focus on avoidance, retention, and recruitment of late-seral forest elements on-site and in-kind. If this is not possible, off-site and/or out-of-kind mitigation will likely be required for Project impacts. CDFW is available to discuss mitigation ideas and approaches.

Impacts to Wetlands:

It is State and Federal policy to ensure that proposed projects result in no net loss of wetland or riparian habitat values or acreage. The DEIR/EIS should include a detailed analysis of potential impacts to wetland and riparian habitats including direct, indirect, and cumulative impacts to these resources. If the Project will result in the loss of wetland or riparian habitat, the DEIR/EIS should identify mitigation for their loss. A common mitigation ratio for the loss of wetland and riparian habitat is at least 3:1, but Project-specific ratios must be developed based on the impacts identified in the DEIR/EIS.

Wildlife Connectivity:

The two Project Alternatives are likely to differ greatly in terms of the degree to which they could interfere with the movement of native resident or migratory wildlife within a wildlife corridor. The Project area is within a habitat connectivity linkage identified in the joint Caltrans - CDFW California Essential Habitat Connectivity Project (Spencer et al. 2010). The Project area is part of an important wildlife corridor for large ungulates such as Roosevelt elk (*Cervus canadensis roosevelti*) and mule deer (*Odocoileus hemionus*) as well as mesocarnivores such as Humboldt marten, Fisher (*Pekania pennanti*), and ring-tailed cat. Additionally, the Project area supports a diversity of amphibian species such as northern red-legged frog, foothill yellow-legged frog, and Del Norte salamander (*Plethodon elongatus*), and small mammals such as Sonoma tree vole and white-footed vole.

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CDFW is particularly concerned about potential impacts to northern red-legged frog as a result of the Project. CDFW is aware of a substantial northern red-legged frog breeding population in the DeMartin Pond, approximately 0.25 miles from the southern end of the Project area, and the DEIR/EIS must consider the annual movement of adult frogs to this pond as well as dispersal of post-metamorphic juveniles from the pond to adjacent uplands. In a 2021 study funded by Caltrans, this segment of US 101 was identified as a “Highway Segment of Concern” for northern red-legged frog (Brehme and Fisher 2021). The northern red-legged frog is a State Species of Special Concern (SSC), a designation indicating that the species is in decline, and intended to encourage conservation efforts before these species become rare enough to warrant listing pursuant to State or Federal Endangered Species Acts (Thomson et al. 2016). SSCs are also considered “Species of Greatest Conservation Need” in California’s State Wildlife Action Plan (CDFW 2015).

Because of these wildlife passage concerns, the DEIR/EIS should include mitigation measures, based on best available science, to maintain or improve passage for terrestrial wildlife of all sizes through this known wildlife corridor. CDFW notes that tunnels (i.e., Alternative F) typically serve as wildlife overpasses, and that this alternative would retain full permeability for wildlife over the 10,000-foot length of the tunnel. However, if Alternative X is chosen, permeability will continue to be impacted by the roadway. Therefore, if Alternative X is chosen, the Lead Agency should improve connectivity and permeability for wildlife to the greatest extent feasible, by considering features to help terrestrial wildlife of all sizes safely pass between habitats on either side of US 101. This could be achieved by construction of wildlife overpasses, by oversized culverts beneath the roadway, and by installation of safe amphibian passageways at a variety of locations along the roadway. CDFW recommends resources such as the recent guidance prepared for Caltrans by the Western Transportation Institute in collaboration with the United States Geological Service (Langton and Clevenger 2021).

Because the NOP/NOI does not describe Project activities in detail, this is not an exhaustive list of species or habitats that may be impacted by the Project. Conversely, some of the species or habitats listed here may not be impacted by Project activities, depending on specific details of Project components and actions. CDFW looks forward to reviewing the DEIR/EIS in order to be able to provide more focused comments on Project impacts to fish, wildlife, and plant resources and habitats.

Potentially Significant Impacts

CDFW has identified a number of impacts that could, depending on forthcoming specific details of Project components and actions, be determined to be potentially significant impacts. The Lead Agency should evaluate these impacts in the DEIR/EIS to determine whether they are potentially significant and whether mitigation is necessary to reduce project impacts to less than significant. These impacts may include, but are not limited to:

- Take (defined by FGC Section 86 as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) of special status species (State-and federally-listed species and/or State Species of Special Concern)
- Impacts to rare plants from Project construction
- Impacts to Sensitive Natural Communities from Project construction

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- Permanent impacts to old-growth forest habitats
- Removal, degradation, and/or fragmentation of habitat for special status species
- Impacts to wildlife corridors and connectivity
- Disturbance to wildlife via light, noise, vibration, and other impacts from Project construction

The Lead Agency must include feasible mitigation measures for impacts determined to be potentially significant in order to reduce these impacts to a less than significant level, pursuant to CEQA section 21002. Mitigation measures must contain sufficient details and performance standards to avoid improperly deferring mitigation until some future time, pursuant to CEQA Guidelines section 15126.4 (a)(1)(B). The mitigation measures should, at minimum, commit to performance standards such as mitigation ratios and success criteria, and should provide location(s) of on or off-site mitigation areas, including information regarding land ownership and future proposed management plans. These details should be incorporated into a draft Mitigation Monitoring and Reporting Program (MMRP), which should be circulated with the DEIR/EIS for public review and comment.

CDFW looks forward to continuing to coordinate with the Lead Agency in developing appropriate mitigation that will reduce Project impacts to less than significant and fulfill State permitting requirements.

Environmental Data

CEQA requires that information developed in EIRs and negative declarations be incorporated into a database that may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code Section 21003, subd. (e)). Accordingly, any special status species and/or sensitive natural communities detected during Project surveys must be reported to the California Natural Diversity Database (CNDDDB). The online submission and CNDDDB field survey forms, as well as information on which species are tracked by the CNDDDB, can be found under their corresponding tabs at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>.

Summary of Comments and Recommendations

1. Rare plant and Sensitive Natural Community Surveys that will be used to inform the DEIR/EIS should follow CDFW's 2018 *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. The DEIR/EIS should evaluate impacts to Sensitive Natural Communities for potential significance and propose adequate mitigation as necessary.
2. The DEIR/EIS should propose appropriate mitigation for any potentially significant impacts to old-growth forest habitat, including a timeline for mitigation activities that provides for implementation concurrently with or in advance of the Project. Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally binding instruments.
3. The DEIR/EIS should include a detailed analysis of potential impacts to wetland and riparian habitats including direct, indirect, and cumulative impacts to these resources. If the

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Project will result in the loss of wetland or riparian habitat, the DEIR/EIS should identify appropriate mitigation for their loss.

4. The DEIR/EIS should include mitigation measures to maintain wildlife movement through the wildlife corridor within the Project site. If Alternative X is chosen, the Lead Agency should improve connectivity and permeability for wildlife to the greatest extent feasible, by incorporating infrastructure, based on best available science, to help terrestrial wildlife of all sizes safely pass between habitats on either side of US 101. This could be achieved by construction of wildlife overpasses, by oversized culverts beneath the roadway, and by installation of safe amphibian passageways at a variety of locations along the roadway.
5. The DEIR/EIS must include feasible mitigation measures for impacts determined to be potentially significant. The mitigation measures should, at minimum, commit to performance standards such as mitigation ratios and success criteria, and should provide location(s) of on or off-site mitigation areas, including information regarding land ownership and future proposed management plans. These details should be incorporated into a draft MMRP, which should be circulated with the DEIR/EIS for public review and comment.
6. Data collected for the purposes of the Project must be reported to CNDDDB and/or submitted to the appropriate database pursuant to CEQA Section 21003(e).

Thank you for the opportunity to comment on this Project. 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 Jennifer Olson at (707) 499-5081 or by email at jennifer.olson@wildlife.ca.gov.

Sincerely,

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