

State of California
Department of Fish and Wildlife

Governor's Office of Planning & Research



Memorandum

JUNE 1 2023

STATE CLEARINGHOUSE

Date: June 1, 2023

To: Ms. Lara Bertaina
California Department of Transportation
District 5; Senior Environmental Scientist
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DocuSigned by:

Erin Chappell

From: B77E9A6211FF486...
Ms. 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 Auxiliary Lanes Bus-on-Shoulder Improvements-Freedom Blvd. to State Park Dr.-and Coastal Rail Trail Segment 12 Project, Draft Environmental Impact Report, SCH No. 2020090347, Santa Cruz County

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) for the State Route 1 Auxiliary Lanes Bus-on-Shoulder Improvements-Freedom Blvd. to State Park Dr.-and Coastal Rail Trail Segment 12 (Project) located in the Santa Cruz County, pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹ CDFW is submitting comments on the **DEIR** as a means to inform the California Department of Transportation (Caltrans) as the CEQA Lead Agency, of potentially significant impacts to sensitive resources associated with the proposed Project.

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 these 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 the 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.).

¹ 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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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.

Project Location and Description

The Project is located in Santa Cruz County on State Route (SR) 1 from Post Mile (PM) 8.1, south of Freedom Boulevard, to PM 10.7, north of State Park Drive. The Project also includes 1.14 miles of trail along the Santa Cruz County Regional Transportation Commission-owned Santa Cruz Branch Rail Line between State Park Drive and Rio Del Mar Boulevard. The total length of the Project on SR-1 is 2.6 miles, and on the Santa Cruz Branch Rail Line is 1.14 miles. The Project will construct auxiliary lanes, structures along SR 1, retaining walls along SR-1, sound walls along SR-1, bus-on-shoulder features, signage, and construction along the Coastal Rail Trail.

Auxiliary Lanes

The Project includes the construction of auxiliary lanes on the northbound and southbound sides of SR-1 between the Freedom Boulevard to Rio Del Mar Boulevard interchanges and between the interchanges of Rio Del Mar Boulevard to State Park Drive. The auxiliary lanes will improve merging operations and reduce conflicts between traffic entering and exiting SR-1 by connecting the on-ramp of one interchange to the off-ramp of the next. The total roadway widening is 2.6 miles in length. Southbound, the auxiliary lanes will begin at the existing State Park Drive loop on-ramp and end at the existing off-ramp to Freedom Boulevard. Northbound, the auxiliary lanes will begin at the existing Freedom Boulevard on-ramp and end at the existing diagonal off-ramp to State Park Drive. The new auxiliary lanes will be 12 feet wide. From Freedom Boulevard to Rio Del Mar Boulevard, the width needed for the new lane will be added in the median. The existing median barrier will be reconstructed in its current location. From Rio Del Mar Boulevard to State Park Drive, the width needed for the new lane will be added outside the existing shoulders; the outside shoulders will be standard 10 feet wide. Moosehead Drive to the south of SR-1, south of Aptos Creek, will be realigned where it runs parallel to SR-1 due to the outside widening of SR-1.

Structures, State Route 1

The Project will include the replacement of the two Santa Cruz Branch Rail Line railroad bridges over SR-1 and widening of the SR-1 bridge over Aptos Creek and Spreckels Drive to accommodate the proposed auxiliary lanes. The existing two-span Santa Cruz Branch Rail Line railroad bridges (underpass structures) will be replaced with longer spans. In addition to the railroad bridges, new trail overcrossings will be constructed adjacent to the new railroad bridges for the ultimate trail configuration of the Coastal Rail Trail Segment 12 for the SR-1 improvements. The widening of the SR-1 bridge over Aptos Creek and Spreckels Drive will occur on the south side of SR-1 only and require

abutment walls along the existing embankments along the south side of Aptos Creek and the embankment on the north side of Spreckels Drive. The widened bridge will accommodate six lanes, each 12 feet wide (four through-lanes plus an auxiliary lane in each direction), 10-foot-wide outside shoulders, and a 9-foot-wide median with a 2-foot-wide inside shoulder in the northbound direction and 5-foot-wide inside shoulder in the southbound direction.

Retaining Walls, State Route 1

The Project will include 10 retaining walls along SR-1 where existing hillsides need to be set back to allow for freeway widening and where fill will be brought into embankments. The total length of all the retaining walls combined will be 3,786 feet or 0.72 miles long. The retaining walls range from 8 feet high to 27 feet high, averaging 19.2 feet.

Sound Walls, State Route 1

Two sound walls will be installed during the Project. A 606-foot-long, 16-foot-high sound wall will be installed on northbound SR-1 along PM 9.7 to PM 9.8. Another sound wall that is 885 feet long, 14 feet high will be installed along the southbound SR-1 near PM 9.95 to PM 10.1.

Bus-on-Shoulder Features

The Project will include construction of transit-only shoulder lanes within interchanges (off-ramp to on-ramp). The shoulder improvements would allow buses to drive on the new auxiliary lanes between interchanges and the outside shoulder through the interchanges. At the Freedom Boulevard, Rio Del Mar Boulevard, and State Park Drive interchanges, the Project will widen and improve SR-1 shoulders.

Other Features, State route 1 Bus-on-Shoulder

New signs will be installed to advise motorists that only buses are allowed to use the highway shoulders through interchanges during peak traffic hours. Along northbound SR-1, a sign would be provided south of each of the three interchanges in the Project area. Along southbound SR-1, a sign will be installed north of each interchange.

Coastal Rail Trail Segment 12

The ultimate trail configuration includes construction of a paved bicycle and pedestrian shared-use trail alongside the existing railroad track alignment. New trail bridge crossings of SR-1 at two locations and adjacent to the existing railroad bridges at Aptos Creek/Soquel Drive, and Valencia Creek/Soquel Drive will be constructed. New at-grade trail crossings will be constructed at Aptos Creek Drive, Parade Street, and Trout Gulch Road.

Structures

At the two locations where the existing railroad bridges cross over SR-1, the Rail Trail will be placed adjacent to the reconstructed rail underpasses on separate independent structures. Where the Rail Trail crosses over Aptos Creek, Valencia Creek, and Soquel Drive, the existing structures have been evaluated for their loadbearing capacities, and it has been determined there is not enough data to cantilever the Rail Trail. Therefore, the Project will include construction of new Rail Trail bridges adjacent to the existing railroad structures on separate independent structures.

Fencing

Fencing will be used to separate trail users and the railroad for the ultimate trail improvements. In accordance with the Federal Railroad Administration guidelines, there will be a 10-foot offset from the centerline of the railroad to the edge of the trail, although an 8-foot, 6-inch offset from the centerline of the railroad may be allowed in some circumstances. The fencing type is undetermined at this time but will be constructed using concrete posts (4 feet, 6 inches in height) etched to resemble wood, and multiple smooth wire strands. Fence post construction will require 3-foot-deep excavation. The new trail bridges over Aptos Creek, Valencia Creek, and Soquel Drive will include a railing.

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 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 Negative Declaration (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

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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 section 45).

Fully Protected Species

Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except for collecting these species for necessary scientific research and relocation of a fully protected bird species for the protection of livestock. Take of any fully protected species is prohibited, and CDFW cannot authorize their take in association with a general project except under the provisions of a Natural Communities Conservation Plan (NCCP), 2081.7 or a Memorandum of Understanding for scientific research purposes. "Scientific Research" does not include an action taken as part of specified mitigation for a project, as defined in Section 21065 of the Public Resources Code.

Migratory Birds and Raptors

CDFW has authority over actions that may result in the disturbance or destruction of active bird nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include section 3503 (regarding unlawful take, possession, or needless destruction of the nests or eggs of any bird), section 3503.5 (regarding the take, possession, or destruction of any birds-of-prey or their nests or eggs), and section 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist Caltrans in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on biological resources.

COMMENT 1: Mitigation Measure BIO-73 Valencia Creek Fish Passage

Issue: CDFW appreciates Caltrans' continued efforts and mutual agreement to remediate a known fish passage barrier at PM 9.97 on SR-1 and improve anadromous fish passage. As stated on page 445 of the DEIR, the current Project shall move forward with an improvement to the PM 9.97 fish passage barrier and Project 05-1N900 shall incorporate long-term remediation to the fish passage barrier at PM 9.97 and PM 9.88. CDFW supports and encourages Caltrans to engage in continued coordination before design commences on a potential passage remediation structure and has the following comments and recommendations for changes to the currently proposed engineering design.

Recommendations: CDFW Conservation Engineering and Habitat Conservation Staff issued a technical fish passage memorandum to Caltrans on January 12, 2023. This

evaluation referenced specific Caltrans documents and field site visits with Caltrans staff that include: 1) Field reconnaissance with CDFW and Caltrans staff on November 17, 2022; 2) ICF's Technical Memorandum – Technical Memorandum Summarizing Fish Passage Conditions at the Project, dated August 11, 2022; 3) ICF's Draft Valencia Channel Concept Design submitted to CDFW via email on November 17, 2022; and 4) Caltrans Aptos Creek Bridge General Plan and Foundation Plan prepared and presented by Mark Thomas structural engineer Marshall Moore on November 17, 2022. The technical fish passage memorandum included the following:

Recommended Avoidance and Minimization Measure 1: Fish Passage Design

Coordination: CDFW recommends Caltrans engage with CDFW in early and continued coordination before design commences on a potential passage remediation structure. See the CDFW Fish Passage Design Manual for guidance on barrier remediation (CDFW, 2009).

Recommended Avoidance and Minimization Measure 2: Fish Passage Design

Technical Memo: CDFW recommends Caltrans update the following:

1. Re-analyze the placement of the pile at Bent No. 2 along riverbank right outside of the Valencia Creek culvert and placement of the Bent No. 1 piles that straddle the existing culvert;
2. Relocate the Bent No.1 piles further away from Valencia Creek and develop a long-term fish passage barrier remediation design for the Valencia Creek culvert. The proposed placement of Bent No.2 in the draft channel design along Valencia Creek riverbank right has a high potential to constrain Valencia Creek and create future channel constraints to fish passage;
3. Clarify the grading design on Aptos Creek riverbank left and Valencia Creek riverbank right. The current structure plan, provided on November 17, 2022, indicates a significant modification to the channel within Valencia and Aptos Creeks near Bent Nos.1 and 2. This location should be analyzed using a hydraulic model that includes the existing and proposed topography along Aptos Creek riverbank left and downstream of the Valencia Creek culvert structure to the confluence with Aptos Creek;
4. Provide a watershed level assessment of the Aptos Creek watershed including Valencia Creek, develop a sediment analysis and habitat analysis for Valencia Creek, disclose historical records of Valencia Creek, in regard to the historical placement and historical relocation of the Valencia Creek channel. Finally, provide any available information on the historical alignment of Valencia creek;
5. The proposed long-term fish passage barrier remediation design verbally provided by Caltrans Hydraulic Engineering staff on-site November 17, 2022, was limited to minor modification of the existing culvert and did not include increasing the capacity of the existing culvert to meet fish passage design

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criteria. The proposed design included modification to the concrete bottom of the culvert structure, without a structural engineering evaluation. The Valencia Creek culvert was constructed in 1948 and information should be provided about the expected service-life of the Valencia Creek culvert and the feasibility of the proposed design to provide adequate fish passage while maintaining the structural integrity of the modified culvert;

6. Replacement of the wooden baffles with the steel baffles could be an interim solution. The use of full span steel baffles within the Valencia Creek culvert could increase fish migration through the culvert during a wider range of fish passage design flows. Caltrans should coordinate the development of the design with CDFW Conservation Engineering staff to improve fish passage within the culvert and downstream to the confluence with Aptos Creek;
7. The concreted Rock Slope Protection (RSP) within the channel of Valencia and Aptos Creeks should be removed. The concrete within the downstream area of Valencia Creek culvert to Aptos Creek limits habitat for fish and wildlife resources and restricts the natural movement of sediment. The hardscape creates turbulent conditions at the downstream end of the Valencia Creek culvert's concrete apron; and
8. CDFW supports the concept of the use of redwoods along riverbank right downstream of the Valencia Creek culvert upstream of the confluence at Aptos Creek.

Recommended Avoidance and Minimization Measure 3: Fish Passage Design

Comment Response Matrix: CDFW recommends Caltrans utilize a response matrix to identify and respond to the individual CDFW recommendations provided for Recommended Avoidance and Minimization Measure 2: Fish Passage Design Technical Memo. The response matrix should include design details during the 30 percent, 60 percent, and 90 percent design phases of the Project. Please contact CDFW staff for response matrix template examples.

CONCLUSION

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect CDFW 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 Will.Kanz@wildlife.ca.gov; or Mr. Wes Stokes, Senior Environmental Scientist (Supervisory), at Wes.Stokes@wildlife.ca.gov.

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cc: Office of Planning and Research, State Clearinghouse (SCH No. 2020090347)

REFERENCES

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&gs=n&form=QBRE&sp=-1&lq=0&pg=cdfw+fish+passage+design+manual+2009&sc=10-36&sk=&cvid=DD6D8F7BFED24996AAB6C93859B4B988&ghsh=0&ghacc=0&ghpl=>