# State of California **Department of Fish and Wildlife**

# Memorandum

August 11, 2022 Date:

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California Department of Transportation District 4; Senior Environmental Planner

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DocuSigned by:

Erin Chappell

Erin Chappell, Regional Manager From:

California Department of Fish and Wildlife-Bay Delta Region, 2825 Cordelia Road, Suite 100, Fairfield, CA 94534

subject: State Route 84 Storm Damage Permanent Restoration Project, Mitigated Negative

Declaration, SCH No. 2022070096, San Mateo County

The California Department of Fish and Wildlife (CDFW) has reviewed the draft Mitigated Negative Declaration (MND) for State Route 84 Storm Damage Permanent Restoration Project (Project), pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines. 1 CDFW is submitting comments on the draft MND as a means to inform the California Department of Transportation (Caltrans) as the Lead Agency, of our concerns regarding 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 comments 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 (LSA) regulatory authority (Fish & G. Code, § 1600 et seg.). 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



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<sup>&</sup>lt;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.

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(CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project.

### PROJECT LOCATION AND DESCRIPTION

The Project is located on State Route (SR) 84, at post mile (PM) 7.8, along the bank of San Gregorio Creek, in San Mateo County, California.

Within the Project limits, there is an existing 65-foot secant pile wall built along San Gregorio Creek. This secant pile wall acts as a retaining wall, with alternating primary and secondary piles that form a continuous impervious structure. Several of the piles in the first row of the wall have been exposed due to erosion along this segment of the roadway.

# **Build Alternative – Proposed Project**

The proposed Project includes building a new soldier pile and timber lagging wall, reconstructing the drainage system; replacing the existing metal beam guardrail (MBGR); replacing California ST-10 bridge rails with CA ST-75 bridge rails; and repaving the bridge deck at PM 7.8 on SR-84 along San Gregorio Creek. The Project will utilize bioengineered bank stabilization methods and indirect channel training measures to locally restore the San Gregorio Creek channel and shift the creek to a more westerly alignment to provide an additional buffer between the channel and the roadway.

### **Structure Work**

The new soldier pile and timber lagging wall will be 129 feet long and will be constructed in front of the existing 65-foot secant pile wall, which will be left in place. The new wall will be offset from the current wall by 6 feet. The wall's foundation will be made of 14-inch steel soldier piles placed into 30-inch (in diameter) drilled holes. The maximum exposed wall height will be 20 feet. The area behind the soldier pile wall will be backfilled with cellular concrete which will be wrapped by a heavy-duty plastic barrier. The existing MBGR will be upgraded to Midwest guardrail system (MGS), which is the standard guardrail system currently used by Caltrans. The existing California ST-10 bridge rails will be replaced with CA ST-75 bridge rails.

### **Instream Work**

Temporary diversion methods will be needed to create a dry work area within San Gregorio Creek. Stream dewatering may include temporary diversion channels, pumparounds, piped diversions, coffer dams and other similar practices. The purpose of utilizing a temporary creek diversion system (TCDS) is to protect water quality by passing upstream flows around an active construction zone. The system will be in place

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during the in-water work window between June 1-October 31, and in-water work will not exceed this work window. The TCDS may extend beyond Caltrans ROW and hence will require a temporary construction easement (TCE) prior to it being installed. Nonetheless, it will be removed at the completion of scheduled in-water work. The specific TCDS utilized on this project will be a type of coffer dam which confines flows to one side of the stream.

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After San Gregorio Creek has been temporarily diverted, a total of 19 CIDH piles spaced 7 feet apart on center will be installed. Installation of the piles will require trenching of about 10 feet deep and up to 35 feet from the existing wall for the purposes of bank stabilization. In addition to the installation of the new soldier pile wall, the creek will be realigned to the west to provide an additional buffer between the channel and retaining wall. Realignment of the creek will occur via bioengineered bank stabilization methods that may include the installation of a combination of large woody debris, root wads, engineered log jams, boulder clusters, and native material revetments accompanied by native plantings. Indirect channel training measures, including bank stabilization, may include the installation of submerged or partially submerged rock weirs, rock vanes, rock spurs, or rock dikes upstream of the wall location. These measures are anticipated to work with the natural stream geomorphology to guide the creek to a more westerly alignment over a period of time. Creek restoration will strive to recreate, to the maximum extent feasible, microhabitats (deep pools, side channel ponds, cobblestone substrates, etc.) that are conducive to various life stages of aquatic invertebrates, salmonids, and other aquatic species.

# **Roadway Work**

Roadway pavement will be grinded and overlaid with 0.1 feet of new asphalt-concrete. The roadway shoulder on the creek side will be widened by approximately 6 to 8 feet. At the ends of the new wall, the widened shoulder will be transitioned and conformed to the existing shoulder width.

# **Drainage Reconstruction**

There is an existing 24-inch corrugated steel pipe (CSP) cross-culvert that is located beneath SR-84 at approximately 300 feet and outpours into San Gregorio Creek. The existing CSP cross-culvert will be replaced with an alternative pipe culvert (APC) of the same diameter and length. The existing drainage inlet (DI) located behind the existing MBGR along the eastbound side of SR 84 will remain. The 24-inch CSP culvert from the DI to San Gregorio Creek will be replaced in kind. This section of the culvert will go through the proposed soldier pile wall and outfall at the same location. A flared end section will be placed at the outfall directing flows over existing bank revetments into San Gregorio Creek. Caltrans will remove all human-made debris that currently litters the creek bed within the Project footprint (CSP, metal sheeting, telecommunications infrastructure, etc.).

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### **REGULATORY AUTHORITY**

## **Lake and Streambed Alteration Agreement**

The Project has the potential to impact stream resources including mainstems, tributaries, drainages and floodplains associated with varied aquatic resource types within the Biological Study Area (BSA) including but not limited to San Gregorio Creek. If work is proposed that will impact the bed, bank, channel or riparian habitat, including the trimming or removal of trees and riparian vegetation, please be advised that the proposed Project may be subject to LSA notification. CDFW requires an LSA notification, pursuant to Fish and Game Code § 1600 et. seq., for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, bank or channel 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 generally subject to notification requirements.

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# 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, 1<sup>3</sup>/<sub>8</sub>, 1<sup>1</sup>/<sub>2</sub>, 1<sup>7</sup>/<sub>8</sub>, 2, 2<sup>1</sup>/<sub>4</sub>, 2<sup>1</sup>/<sub>2</sub>, 2<sup>3</sup>/<sub>4</sub>, 3, 3<sup>1</sup>/<sub>2</sub>, 4, 4<sup>1</sup>/<sub>8</sub>, 4<sup>1</sup>/<sub>2</sub>, 4<sup>3</sup>/<sub>4</sub>, 11, 12, 13, 23, and 25, any device or contrivance that prevents, impedes, or tends to prevent or 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 & G. Code § 45).

# **California Endangered Species Act**

Please be advised that a CESA Permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. Issuance of a CESA Permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. 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 Permit. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (CEQA Guidelines §§ 21001 subd. (c), 21083, 15380, 15064 and15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code, § 2080. More information on the CESA permitting process can be found on the CDFW website at <a href="https://www.wildlife.ca.gov/Conservation/CESA">https://www.wildlife.ca.gov/Conservation/CESA</a>.

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# **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.

#### COMMENTS AND RECOMMENDATIONS

CDFW will like to thank Caltrans for preparing the draft MND. CDFW recommends the following updates, avoidance and minimization measures be imposed as conditions of Project approval by the lead agency, Caltrans, to ensure all Project-related impacts are reduced below a level of significance under CEQA.

# **COMMENT 1: Project Design Analysis and Coordination**

**Issue:** CDFW believes MND does not sufficiently disclose or analyze potentially significant impacts to some fish and wildlife resources. CDFW is also concerned the proposed Project design to re-align San Gregorio Creek may not be the least environmentally impactful alternative. In addition, the MND notes that unidentified culverts may also be modified as a result of Project completion. Site-specific locations are needed to ensure culverts are designed to meet the flow capacity of a given system, protect fish passage in fish bearing systems and to ensure potential barriers are remediated.

Recommendation 1 – Design Coordination: Early coordination with CDFW Habitat Conservation and the CDFW Conservation Engineering Branch is recommended to provide review and analysis of any proposed structures or Project elements with the potential to impact fish and wildlife resources. CDFW Conservation Engineering Branch should be provided engineered drawings and design specification planning sheets during the initial design process, prior to design selection and re-initiating design consultation at 30% design at minimum and through the permitting process for review and comment as identified in the Interagency Agreement (Agreement Number 43A0398).

Recommendation 2 – Bridge and Stream Crossing References: CDFW recommends utilizing the design principles outlined in the California Salmonid Stream Habitat Restoration Manual, Part XII (CDFW, 2009) and NOAA Fisheries Service Guidelines for Salmonid Passage at Stream Crossings (NMFS, 2001) into stream crossing designs. CDFW strongly recommends the above manuals are included and referenced when designing the structure and creek work aspect of the Project. Such

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designs allow natural stream flow and sedimentation processes to continue for longterm dynamic channel stability.

## **COMMENT 2: Marbled Murrelet**

**Issue:** The MND has not sufficiently disclosed or adequately analyzed the potentially significant impacts to marbled murrelet (Brachyramphus marmoratus). The marbled murrelet is a small seabird which uses coastal redwood forests from Santa Cruz to Del Norte counties during the breeding season (March 24 to September 15). The marbled murrelet is listed as state endangered pursuant to Fish and Game Code 2050 et seq., and federally threatened pursuant to Title 16, United States Code 1531 et seq. Marbled murrelets have been documented nesting in mature, old-forests as well as younger forest stands with late-seral elements such as large trees with limbs >6 inches wide or limb defects. The proposed Project is located within the breeding range of the marbled murrelet. The Project is adjacent to Sam McDonald County Park (approximately 400 feet south), which is designated Critical Habitat for MAMU (https://ecos.fws.gov/ecp/species/4467#crithab), CDFW is aware of known suitable habitat approximately 350 feet north of the Project. Surveys were conducted in 2014 and had "Presence" detections of murrelets flying over. The Project is also adjacent to San Gregorio Creek, which is a known flyway for murrelets. During the breeding season, marbled murrelets will use this flyway to travel twice a day (dawn and dusk) to and from the ocean to breeding habitat in the forest.

According to the Project description, in-water construction activities will be conducted between June 1 through October 31 which is prior to the end of the marbled murrelet breeding season (September 15). Equipment such as backhoes, excavators, front loaders, skid steers, drill rigs, and hydraulic cranes fit the "High" (81-90 dB) to "Very High" (91-100 dB) category within the U.S. Fish and Wildlife Service (USFWS) sound categories. To reduce sound levels in the forested habitat to a degree that would avoid take or adversely affecting marbled murrelets, the harassment distance for equipment in the "High" and "Very High" categories are an estimated 165 and 825 feet, respectively. The use of hydraulic cranes and other equipment may also exceed the visual disturbance threshold of harassment.

Nesting chronology of the marbled murrelet varies greatly between nesting seasons and geographic areas (McShane *et al.* 2004). In California, evidence suggests that murrelet juveniles typically fledge prior to September 10; however, this is based on a small number of records (Hamer and Nelson 1995). Adult murrelets flying past the Project area to nest sites located further upstream during parental feeding of young may therefore experience noise and visual disturbance from construction activities. Most adult murrelet flights to deliver food to the young occur before sunrise (two-thirds), while some occur at dusk (one-third), and occasionally during the day (Hamer and Nelson 1995).

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To evaluate and avoid potential impacts to marbled murrelet, CDFW recommends incorporating the following mitigation measures into the draft MND, and that these measures be made conditions of approval for the Project:

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Recommendation 1 – Marbled Murrelet Habitat Assessment: In areas where marbled murrelet nesting habitat or designated critical habitat may be present, CDFW recommends a qualified avian biologist conduct a habitat assessment prior to the start of Project activities. The habitat assessment shall include a visual inspection of suitable nesting habitat features within 0.25 miles of the Project area and access road that occur within forested unburned, low, or moderate burn severity areas as these burn severities may result in habitat still considered suitable. Suitable habitat characteristics shall be defined as mature and old-growth coniferous forest stands, and younger coniferous forest stands having platforms with a relatively flat surface at least 10 cm in diameter and 10 m high in the live crown of a coniferous tree. Platforms can be created by a wide bare branch, moss or lichen covering a branch, mistletoe, witches' brooms, and other deformities, or structures such as squirrel nests (Evans Mack 2003). Habitat features found during the assessment shall be identified, flagged, or marked for avoidance and retention as a sensitive area and shall be communicated to CDFW.

If no suitable marbled murrelet nesting habitat is identified within 0.25 miles of the Project area and access road, then no specific marbled murrelet mitigation measures are required.

Recommendation 2 – Marbled Murrelet Surveys: If any suitable marbled murrelet nesting habitat is identified during the habitat assessment, CDFW recommends a qualified biologist conduct protocol level audio-visual murrelet surveys following the Pacific Seabird Group Methods for Surveying Marbled Murrelets in Forests: A Revised Protocol for Land Management and Research (Evans Mack 2003) available online at <a href="http://www.pacificseabirdgroup.org">http://www.pacificseabirdgroup.org</a>, which may entail two years of surveys. Protocol level surveys shall be utilized to determine the presence of nesting murrelets within 0.25 miles of the Project area and access road and whether Project activities will have an impact on marbled murrelets.

Recommendation 3 – Marbled Murrelet Audio and Visual Disturbance Buffers: If conducting two-year protocol level surveys is not feasible, or if nesting marbled murrelets are detected during surveys, CDFW recommends a qualified biologist develop appropriate avoidance disturbance buffers around suitable habitat identified within 0.25 miles of the Project area and access road to be implemented during Project activities that occur during the murrelet breeding season (March 24 to September 15). Appropriate audio and visual disturbance buffers shall follow the USFWS' Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California, dated October 1, 2020. Although the cover letter indicates that the guidance is valid only to the southern limit of the Russian River watershed, CDFW recommends use of the guidance document throughout the entire murrelet range including San Mateo and Santa Cruz counties.

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If the determined audio and visual disturbance buffers around the identified suitable nesting habitat do not incorporate the project area and access road footprint, then no specific marbled murrelet mitigation measures are required.

CDFW staff is available to provide further guidance and consultation on appropriate avoidance and mitigation measures for the marbled murrelet.

**Recommendation 4 – Construction Activities Occurring Daily:** CDFW recommends that construction activities be prohibited within two hours of official sunrise and sunset to avoid visual and noise disturbance during peak hours of adult murrelet flights from the ocean to the nest trees.

**Recommendation 5 – Avoid Attracting Predators:** CDFW recommends that measures be taken to avoid attracting predators of murrelets as result of construction activities at the Project. Ravens, crows and jays, which have large home ranges, are known predators of marbled murrelet eggs and nestlings (Marzluff and Neatherlin 2006). CDFW recommends that the biological monitor instruct the work crew that all garbage and food scraps shall be packed out and disposed of in animal-proof containers. Workers, when feasible, should consume food inside their vehicles. These measures shall also apply for construction activities occurring during the marbled murrelet breeding season outside the seasonal disturbance buffer.

### 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 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 Will Kanz, Environmental Scientist, at (707) 337-1187 or <a href="Will.Kanz@wildlife.ca.gov">Will.Kanz@wildlife.ca.gov</a>; or Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or <a href="Wesley.Stokes@wildlife.ca.gov">Wesley.Stokes@wildlife.ca.gov</a>.

cc: State Clearinghouse #2022070096

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