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Governor's Office of Planning & Research

March 16, 2020

**MAR 17 2020**

## STATE CLEARINGHOUSE

Mr. Jim Browne  
Alameda County Flood Control and Water Conservation District  
399 Elmhurst Street,  
Hayward, CA 94544  
[Jimb@acwpa.org](mailto:Jimb@acwpa.org)

Subject: Lower Alameda Creek Fish Restoration in Flood Control District Zone 5, Initial Study/Mitigated Negative Declaration, SCH #2020029059, Alameda County

Dear Mr. Browne:

The California Department of Fish and Wildlife (CDFW) received an Initial Study/Mitigated Negative Declaration (IS/MND) from the Alameda County Flood Control and Water Conservation District (ACFCD) for the Lower Alameda Creek Fish Restoration in Flood Control District Zone 5 (Project) pursuant the California Environmental Quality Act (CEQA).

CDFW is submitting comments on the IS/MND to inform the ACFCD, 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 (Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 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 permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources. Pursuant to our jurisdiction, CDFW has the following concerns, comments, and recommendations regarding the Project

### REGULATORY REQUIREMENTS

#### *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 restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). 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 section 2080.

#### *Lake and Streambed Alteration*

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, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or Incidental Take Permit) until it has complied with CEQA as a Responsible Agency.

### **PROJECT DESCRIPTION SUMMARY**

**Proponent:** Alameda County Flood Control and Water Conservation District

**Description and Location:** The ACFCD proposes to implement the following restoration activities in Lower Alameda Creek in the existing U.S. Army Corps of Engineers (USACE) constructed Flood Control Channel. The Project extends approximately 5.6 miles (29,730 feet) within the USACE Flood Control Channel between the BART Weir fish ladder upstream to 600 feet below the Union Pacific Railroad (UPRR) crossing downstream in Flood Control District Zone 5, cities of Fremont and Union City, California.

The Project involves the following: optimization of the existing low-flow channel within the 230-foot-wide flood control channel from the scour pool immediately downstream of the BART Weir to about 600 feet downstream of the UPRR crossing. The IS/MND describes this Project as dual purpose: first, to improve the capacity of the existing flood control channel and reduce sediment accumulation issues in this reach; and secondly to improve fish passage conditions for Central California Coast steelhead trout in the flood control channel upstream of the UPRR bridge.

The Project description states this will be accomplished by steepening the profile of the channel immediately below the BART weir to alleviate sediment accumulation in this reach and tying in with a new channel profile that will extend to the UPRR bridge. The Project also involves modification of the Rubber Dam 2 (RD2)/Larinier fishway concrete structure; modification of existing grade control structures; installation of grouted rock stream bottoms at bridges at Sequoia Terrace, Isherwood Way, Decoto Road, Interstate 880, Alvarado Boulevard, and the UPRR crossing; protection of Pacific Gas and Electric Company's (PG&E) gas main channel crossing upstream of UPRR; installation of a new modified grade control structure downstream



of Dry Creek. A new channel would be built through the entire reach with a smaller low-flow channel incorporated within to facilitate low-flow fish passage. Boulders would be installed to improve habitat; rock veins would be installed to reduce channel erosion impacts on flood control levees; and native shrubs and grasses would be planted on terraces between the levees.

## COMMENTS AND RECOMMENDATIONS

CDFW offers the below comments and recommendations to assist ACFCD in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

### *Hydraulic Modeling*

The IS/MND, p. 40, discusses sources used to assess the low flow channel to verify hydraulic and sediment transport functions of the channel. However, the IS/MND does not substantiate the assertion that the Project will improve fish passage conditions for steelhead trout. Hydraulic modeling results for the Project that are representative of all major elements and stream reaches in the Project, including at grade control sills and all bridge crossings, should be analyzed in light of current hydraulic conditions in the channel, and should account for fish passage criteria for anadromous salmonids recommended by the National Marine Fisheries Service (NMFS) and CDFW. For fish passage criteria see: (California Department of Fish and Game, 2001) *Culvert Criteria for Fish Passage* and (National Marine Fisheries Service, 2002) *Guidelines for Salmonid Passage at Stream Crossings*. The hydraulic modeling results should be provided to responsible agencies for review and comment.

The IS/MND on p. 7 states ACFCD will re-grade the existing floodway to include a vegetated bench, a flood and sediment transport channel with typical top and bottom widths of 78 and 24 feet, and within this channel, a fish passage low-flow channel will be incorporated that would pass fish at a minimum of 5 cubic feet per second, and have top and bottom widths of 8 and 2 feet respectively, and a 1.6-foot depth. Again, the Project does not incorporate hydraulic analysis to assess fish passage with the prescribed channel design. Additionally, it is unlikely design dimensions or functions of a low-flow fish passage channel could be maintained within a floodway channel that is subject to dramatic changes in flow, and high sediment and debris loads.

### *Grouted Riprap*

CDFW has concerns regarding hardscape components of the Project, specifically the installation of grouted rip-rap at six different bridges. The IS/MND does not analyze how this action could affect passage for steelhead trout. Concrete inverts under bridges typically compromise fish passage function, creating shallow laminar flow conditions that are impassable to fish at low-flow conditions. Furthermore, the lack of roughness at higher flows creates fields where velocity is too high for upstream fish passage. CDFW strongly recommends using adequately sized engineered streambed material and rip-rap to establish channel paths and protect piers at bridge crossings. This would likely improve fish passage at these locations relative to the current design.

*Low Flow Channel Optimization Approach*

Please define the specific flow amounts (stream discharge) that are key to Project design. i.e. 2-year, 10-year, 100-year, 500-year, etc. Also, please clarify what Figures 11 A. and 11B on p. 41 are supposed to convey.

*Phased Project Approach*

CDFW is concerned about the general lack of description regarding the phased approach, as well as measures that will be taken to stabilize the channel, tie-in rebuilt sections of channel with future phases, and prevent new fish passage impediments from forming or sedimentation from compromising both newly constructed channel sections or downstream future Project phases.

*Avoidance and Minimization Measures*

Table 7, starting at p. 26, Avoidance and Minimization Measure C-1, Channel Protection. This measure should include providing a detailed dewatering plan for CDFW and NMFS review and comment.

Measure C-12, Burrowing Owl. The IS/MND should evaluate the potential for burrowing owls to be present within and adjacent to the Project area by documenting the extent of fossorial mammals that may provide burrows used by owls during the nesting and/or wintering seasons. Burrowing owls may also use unnatural features such as debris piles, culverts and pipes for nesting, roosting or cover. If potential burrowing owl habitat is present, CDFW recommends that surveys be conducted following the methodology described in Appendix D: *Breeding and Non-breeding Season Surveys of the CDFW Staff Report on Burrowing Owl Mitigation* (Staff Report), which is available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843>.

Burrowing owl surveys should be conducted by a qualified CDFW-approved biologist. In accordance with the Staff Report, a minimum of four survey visits should be conducted within 500 feet of the Project area during the owl breeding season which is typically between February 1 and August 31. A minimum of three survey visits, at least three weeks apart, should be conducted during the peak nesting period, which is between April 15 and July 15, with at least one visit after June 15. Additional surveys should be conducted during winter months to document presence of wintering owls. Pre-construction surveys should be conducted no-less-than 14 days prior to the start of construction activities with a final survey conducted within 24 hours prior to ground disturbance.

Please be advised that CDFW does not consider exclusion of burrowing owls or "passive relocation" as a "take" avoidance, minimization or mitigation method, and considers exclusion as a significant impact. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of evicted or excluded owls is unknown. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented in order to avoid "take".

The CEQA document for the Project should also include measures to avoid or minimize loss of burrowing owl foraging habitat, and mitigation for loss of habitat that cannot be fully avoided. Although the Project is outside of the East Alameda County Conservation Strategy (EACCS) the



EACCS's Mitigation Guidance (p.3-66) for burrowing owl recommends mitigating the loss of habitat by protecting habitat in accordance with the mitigation guidelines outlined in Table 3-10 (BUOW-3) through acquiring parcels, through fee title purchase or conservation easement, where known nesting sites occur or where nesting sites have occurred in the previous three nesting seasons (BUOW-1 and BUOW-2). Additionally, the Project applicant could work with the EACCS's Implementation Committee to fund the implementation of an annual monitoring program in coordination with local conservation groups on all burrowing owl nest colonies on protected lands using monitoring protocols established by the California Burrowing Owl Consortium (1993). The results of these surveys would be submitted to the CNDDDB and the Conservation Strategy database (BUOW-4 and BUOW-5). This would allow for informed avoidance of impacts in the future.

Measure C-13, Western Pond Turtle and Measure C-15 Coast Horned Lizard. The measure recommends conducting surveys 15 days prior to start of construction with relocation and exclusion if pond turtles are found. The measure should include conducting surveys immediately prior to construction for each phase and each work area. Western pond turtles are mobile and may move up and down the stream channel as well as in the upland areas. Wildlife exclusion fencing should be installed around work areas to prevent wildlife from entering construction and staging areas.

Measure C-14, Disturbance of Nesting Birds. ACFCD is responsible for ensuring that the Project does not result in any violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes. If work will occur during nesting bird season (February 1 through August 31) no more than thirty (30) days prior to work commencing, including staging and mobilization, the CDFW-approved qualified biologist should survey a sufficient area around the work site to identify any nests, including raptor nests, that are present and determine their status. Once construction work begins, the survey effort should continue to ensure any nest starts established after the work commences are identified. 'Sufficient' in the context of this measure means any nest within an area that could potentially be affected by the Project. In addition to direct impacts, such as nest destruction, nesting birds might be affected by noise, vibration, odors and movement of workers or equipment. Identified active nests should be monitored for the first 24 hours prior to any construction-related activities to establish a behavioral baseline of the adults and any nestlings. Once work commences, all active nests should be monitored by the qualified biologist to detect any signs of disturbance and behavioral changes as a result of the Project. If signs of disturbance and behavioral changes are observed, the biologist must cease work causing that change and contact the CDFW representative for guidance.

For raptor nests, a biological monitor, experienced in raptor behavior and approved by CDFW, should be assigned to monitor the behavior of any raptors nesting within disturbance distance of the Project activities. Even within species, disturbance distances can vary according to time of year or geographical location. The biological monitor should have authority to order the cessation of all Project activities within disturbance distance of any raptor nest if the birds exhibit abnormal nesting behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young). Abnormal nesting behaviors which may cause reproductive harm include but are not limited to: defensive flights/vocalizations directed towards project personnel, standing up from a brooding position, interrupted feeding patterns, and flying away from the



nest. Project activities within line of sight of the nest should not resume until the biological monitor has consulted with CDFW and both the biological monitor and CDFW confirm that the bird's behavior has normalized or the young have left the nest.

In Table 7, for Avoidance and Minimization During On-Going Maintenance, starting on p. 29, Measure O&M-1 should include as built post-construction channel longitudinal profile and stream cross-section surveys. These surveys should be repeated post-construction every 5 years as part of the Adaptive Management for the Project and the results provided to CDFW and NMFS for review and comment.

#### *Biological Resources Analysis*

Chapter 8 Biological Resources Analysis does not assess potential effects on longfin smelt, a threatened species under the CESA. University of California, Davis researchers have documented presence of this species and spawning in tidal sections of neighboring Coyote Creek. It is likely longfin smelt may also periodically access and be present in tidal sections of Alameda Creek downstream of the Project area.

Non-native fish, p. 77 should include channel catfish.

On p. 131, the minimization measure (C-11) for Pacific lamprey includes fish rescue and relocation. Standard electrofishing techniques used for capture of other fish species are not effective for lamprey ammocoetes (larval stage of lamprey). The ammocoetes drift downstream to areas of low velocity and fine substrates where they burrow, grow and live as filter feeders for 3 to 7 years and feed primarily on diatoms and algae. Standard electrofishing techniques stun lamprey ammocoetes within their burrows. CDFW recommends using the Bureau of Land Management (2010) *Best Management Practices for Instream Activities to Avoid Adverse Effects to Pacific Lampreys*. Attachment A includes methods for electrofishing to capture lamprey ammocoetes. This document can be at: <https://www.blm.gov/download/file/fid/10772>

#### *Anticipated Future Projects*

The San Francisco Public Utilities Commission (SFPUC) recirculated a portion of the Alameda Creek Recapture Project draft EIR, in December 2019. Under the revised operations, the SFPUC estimates that compared to the operations presented in the June 2017 EIR, the average annual recapture volume would be reduced from 7,178 acre-feet per year to 6,045 acre-feet per year. The range of recapture volume would be reduced from a range of 4,878 to 9,161 acre-feet per year to a range of 4,045 to 8,031 acre-feet per year. On p. 172 the IS/MND states, "The future operation of the ACRP may result in changes to the quantity of SFPUC water released and/or bypassed that may reach the Niles Gage. However, the level of detail in the NOP is insufficient to integrate into existing analyses on fisheries, flood control, and water supply, which are analyzed on a daily time step." The recirculated draft EIR, starting in section 15.2.3.2 provides a revised approach to analysis and revised hydrologic analysis of flows. ACFCD should review and consider this new information. The revised draft EIR can be found at: [https://sfplanning.org/environmental-review-documents?field\\_environmental\\_review\\_categ\\_target\\_id=All&items\\_per\\_page=All](https://sfplanning.org/environmental-review-documents?field_environmental_review_categ_target_id=All&items_per_page=All)

### *Cumulative Effects*

The IS/MND p. 174, Section 22.7 Significance of Effects Concludes “for wildlife, and particularly for steelhead, the cumulative impacts of continued enhancement of the channel and maintenance of the sills and low flow channel would be beneficial and off-sets the adverse effects of historic modifications of the channel.” CDFW doesn’t completely agree with this statement since the Project is not restoring this section of channel to anything resembling the historical ecological condition. The Project is merely improving its existing function as a floodway by increasing capacity and improving sediment dynamics. Therefore, CDFW does not currently concur with the Project’s assertion of improving steelhead passage unless it can be demonstrated with hydraulic modeling results.

The flood control channel will be a migration corridor for a restored Alameda Creek steelhead population. This flood control channel’s greatest negative effect on steelhead is the channel’s overall lack of complexity and cover, which, for migrating steelhead smolts, make them particularly vulnerable to predation by the abundant non-native predatory fish population in the flood control channel. Migrating steelhead also opportunistically rear during the downstream journeys to the ocean to put on additional growth which betters their likelihood of surviving at sea. The IS/MND asserts that riparian plantings on floodplain benches, instream habitat boulders, and rock veins will help improve complexity. CDFW recommends that details on these elements be incorporated into the engineering designs, and designs, along with the Basis of Design Report be provided to CDFW for review and comment.

CDFW recommends incorporating additional elements that could improve the channel’s overall complexity and, if designed appropriately, be compatible with the projects primary flood protection function. These elements include, but are not limited to: establishing a more natural channel with sinuosity, braided channel features, backwaters, pools, sediment bars and riffles; installing engineered anchored large woody debris structures designed to 100-year-flow to scour pools and provide cover; and planting of riparian plants that interact and provide in-channel cover and complexity. CDFW recommends that ACFCD engage with responsible agencies to have additional discussion about how to incorporate these elements into the designs while still building a channel that meets the USACE’s design standards.

Additionally, engineering designs, design report and hydraulic modeling results should be provided to CDFW.

### **FILING FEES**

The Project, as proposed, would have an impact on fish and/or 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 and Game Code, § 711.4; Pub. Resources Code, § 21089).



Mr. Jim Browne  
Alameda County Flood Control and Water Conservation District  
March 16, 2020  
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## CONCLUSION

CDFW appreciates the opportunity to comment on the IS/MND to assist ACFCD in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Marcia Grefsrud, Environmental Scientist, at (707) 644-2812 or [Marcia.Grefsrud@wildlife.ca.gov](mailto:Marcia.Grefsrud@wildlife.ca.gov); Mr. Sean Cochran, District Fisheries Biologist, at (707) 576-2575 or [Sean.Cochran@wildlife.ca.gov](mailto:Sean.Cochran@wildlife.ca.gov); or Ms. Brenda Blinn, Senior Environmental Scientist (Supervisory), at (707) 944-5541 or [Brenda.Blinn@wildlife.ca.gov](mailto:Brenda.Blinn@wildlife.ca.gov).

Sincerely,



Gregg Erickson  
Regional Manager  
Bay Delta Region

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