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February 21, 2020

Ms. Antonella Gentile
Santa Cruz County
Flood Control and Water Conservation District - Zone 7
701 Ocean Street 410
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PajaroProject@santacruzcounty.us

Subject: Pajaro River Flood Risk Management Project, Notice of Preparation of a Draft Environmental Impact Report, SCH #2020010386, Monterey and Santa Cruz Counties

Dear Ms. Gentile:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) of a draft Environmental Impact Report (EIR) prepared by the County of Santa Cruz for the proposed Pajaro River Flood Risk Management Project (Project) located in the County of Santa Cruz and County of Monterey. CDFW is submitting comments on the NOP regarding potential impacts to biological resources associated with the proposed Project.

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (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.

PROJECT DESCRIPTION AND LOCATION

The proposed Project area is located along the Salsipuedes and Corralitos creeks tributaries to the Pajaro River and the Pajaro River tributary to the Pacific Ocean in Santa Cruz and Monterey counties.

The Project includes improving and/or adding floodwalls and setback levees, as well as repairing existing levees to reduce the threat of flooding to the City of Watsonville, the Town of Pajaro, and surrounding agricultural areas in Santa Cruz and Monterey counties.

The CEQA Guidelines (§§15124 and 15378) require that the draft EIR incorporate a full Project description, including reasonably foreseeable future phases of the Project, and require that it contain sufficient information to evaluate and review the Project's environmental impact. Please include a complete description of the following Project components in the Project description:

1. Floodwalls – including detailed explanation of floodwall toe protection and representative cross-sections of these features.
2. Riprap – including a plan view image identifying the location of riprap and representative cross sections of these features.
3. Sheet pile levee – include representative cross sections of these features.
4. Operation and maintenance – at a minimum, the draft EIR should include detailed description of vegetation management and sediment management activities after the Project has been built.

ENVIRONMENTAL SETTING

The state special-status species that are known to occur, or have the potential to occur in or near the Project site, include:

- American badger (*Taxidea taxus*), a state species of special concern;
- California red-legged frog (*Rana draytonii*), federally listed as threatened under the federal Endangered Species Act (ESA) and a state species of special concern;
- Northern California legless lizard (*Anniella pulchra*), a state species of special concern;
- Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), a state and federally endangered species and a state fully-protected species;
- Tidewater goby (*Eucyclogobius newberryi*), federally listed as endangered under ESA and a state species of special concern;
- Tricolored blackbird (*Agelaius tricolor*), state listed as threatened species;
- Western bumble bee (*Bombus occidentalis*), currently a candidate species for listing as endangered under CESA;
- Western pond turtle (*Emys marmorata*), a state species of special concern; and
- Western snowy plover (*Charadrius alexandrinus nivosus*), federally listed as threatened under ESA and a state species of special concern.

GENERAL COMMENTS

Comment 1: Proposed Project

CDFW appreciates that the County of Santa Cruz has developed an alternative proposed project to the United States Army Corps of Engineers General Reevaluation Report and Integrated Environmental Assessment (Alternative 2). Specifically, CDFW appreciates that the County of Santa Cruz has increased levee setback locations, increased levee setback distances, and decreased riprap amounts as compared to Alternative 2. Increased levee setbacks will allow the Pajaro River and its tributaries to meander, allow floodplains to reconnect and reestablish, and provide habitat for fish and wildlife species.

Comment 2: Species Baseline

CDFW recommends that the Project's draft EIR provide baseline habitat assessments for special-status plant, fish and wildlife species located and potentially located within the Project area and surrounding lands, including all rare, threatened, or endangered species (CEQA Guidelines, §15380).

Habitat assessments and species profiles should include information from multiple sources: aerial imagery, historical and recent survey data, field reconnaissance, scientific literature and reports, and findings from "positive occurrence" databases such as California Natural Diversity Database (CNDDB). Based on the data and information from the habitat assessment, the CEQA document can then adequately assess which special-status species are likely to occur in the Project vicinity.

Comment 3: Special-Status Species Surveys

CDFW recommends that in the time leading up to Project implementation, special-status species surveys be conducted for species that have the potential to occur or will be impacted by the Project implementation. CDFW recommends, if available, using established species survey protocols.

Survey and monitoring protocols and guidelines are available at: https://wildlife.ca.gov/Conservation/Survey-Protocols.

Comment 4: Fish Passage

Salmonids are known to occur within the Pajaro River and its tributaries. Fish may have difficulty passing areas where rip rap is placed within the span of the levee. CDFW recommends providing salmonid passage throughout the Project and ensure Project design meets National Marine Fisheries (NMFS) and CDFW's fish passage criteria. NMFS and CDFW's fish passage criteria can be found online at: https://wildlife.ca.gov/Conservation/Inland-Fisheries/Coho-HELP.
To evaluate fish passage, CDFW recommends providing representative cross sections, velocities, and jump heights of all design features within the draft EIR.

Comment 5: Riprap

CDFW recommends exploring all other stabilization techniques (e.g., native vegetation plantings) before installing riprap. If riprap is deemed necessary, CDFW recommends planting riprap with native vegetation or identifying if riprap can be covered with sediment or stream simulation bed material to provide habitat for fish and wildlife.

Installation of riprap may have direct and cumulative adverse impacts on fish and wildlife resources within the Pajaro River and its tributaries. Riprap could alter stream flow (e.g., stream deflection), cause stream erosion, and decrease fish and wildlife habitat. Please discuss these effects in the analysis and include mitigation to address significant impacts.

Comment 6: Federally Listed Species

CDFW recommends consulting with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), respectively, on potential impacts to federally listed species including, but not limited to, California red-legged frog and steelhead. Take under ESA is more broadly defined than CESA; take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

Consultation with the USFWS and NMFS, respectively, in order to comply with ESA is advised well in advance of any ground disturbing activities.

Comment 7: Fully Protected Species

The State fully protected Santa Cruz long-toed salamander (SCLTS) has the potential to occur in the vicinity of the Project site. The Project will involve noise, groundwork, and movement of workers adjacent to SCLTS habitat. Impacts that may result from Project activities that may result in take include collapse of small mammal burrows, inadvertent entrapment, loss of upland refugia, water quality impacts to breeding sites, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

To evaluate potential impacts to SCLTS, CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation. CDFW recommends that focused surveys be conducted by experienced biologists at the Project site prior to Project implementation following the "*Guidance on Site Assessment and Field Surveys to Detect Presence or Report a Negative Finding of the Santa Cruz Long-toed Salamander*" (USFWS and CDFW 2012). To avoid take of these species, CDFW recommends conducting these surveys in accordance with protocols developed by CDFW and USFWS (USFWS and CDFW 2012). In the event that SCLTS is found within the Project site, implementation of full avoidance measures is warranted. CDFW recommends that a qualified wildlife biologist be on-site during all Project-related activities and that a 50-foot no-disturbance buffer around suitable habitat. If the 50-foot no-disturbance buffer cannot feasibly be implemented, consultation with CDFW is warranted to determine how the Project may avoid take of fully protected species.

SPECIES COMMENTS

Comment 8: Tricolored Blackbird (TRBL)

Issue: TRBL have the potential to occur within or near the Project site. Review of aerial imagery indicates that the Project site is near dense low vegetation fields that may serve as nest colony sites.

Specific impact: Without appropriate avoidance and minimization measures for TRBL, potential significant impacts include nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Evidence impact would be significant: As mentioned above, aerial imagery indicates that the Project site is near dense low vegetation fields that may serve as nest colony sites. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014). Increasingly, TRBL are forming larger colonies that contain progressively larger proportions of the species' total population (Kelsey 2008). In 2008, for example, 55% of the species' global population nested in only two colonies, which were located in silage fields (Kelsey 2008). In 2017, approximately 30,000 TRBL were distributed among only 16 colonies in Merced County (Meese 2017). Nesting can occur synchronously, with all eggs laid within one week (Orians 1961). For these reasons, depending on timing, disturbance to

nesting colonies can cause abandonment, significantly impacting TRBL populations (Meese et al. 2014).

Recommended Potentially Feasible Mitigation Measure(s)
CDFW recommends conducting the following evaluation of the Project site, incorporating the following measures specific to TRBL into the EIR for the Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: TRBL Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment of the Project site in advance of Project implementation, to determine if the Project site or its vicinity contains suitable habitat for TRBL.

Recommended Mitigation Measure 2: TRBL Surveys
CDFW recommends that Project activities be timed to avoid the typical bird breeding season (February 1 through September 15). However, if Project activities must take place during that time, CDFW recommends that a qualified wildlife biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence/absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 3: TRBL Avoidance
If an active TRBL nesting colony is found during pre-activity surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "*Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015*" (CDFW 2015b). CDFW advises that this buffer remain in place until the breeding season has ended or until a qualified biologist has determined that nesting has ceased, the birds have fledged, and are no longer reliant upon the colony or parental care for survival. It is important to note that TRBL colonies can expand over time and for this reason, the colony may need to be reassessed to determine the extent of the breeding colony within 10 days prior to Project initiation.

Recommended Mitigation Measure 4: TRBL Take Authorization
In the event that a TRBL nesting colony is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire an ITP, pursuant to Fish and Game Code Section 2081(b), prior to any ground-disturbing activities.

Comment 9: Western Bumble Bee (WBB)

Issue: On June 28, 2019, the Fish and Game Commission published findings of its decision to advance WBB to candidacy as endangered. Pursuant to Fish and Game Code Section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of WBB, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines, Section 15380, the status of the WBB as an endangered candidate species under CESA (Fish and Game Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. It is unlawful to

import into California, export out of California or take, possess, purchase, or sell within California, WBB and any part or product thereof, or attempt any of those acts, except as authorized pursuant to CESA. Under Fish and Game Code Section 86, take means to hunt, pursue, catch, capture, or kill, or to attempt to hunt pursue, catch, capture, or kill. Consequently, take of WBB during the status review period is prohibited unless authorization pursuant to CESA is obtained.

WBB have the potential to occur within the vicinity of the Project site. Suitable WBB habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. WBB primarily nest in late February through late October underground in abandoned small mammal burrows, but may also nest under perennial bunch grasses or thatched annual grasses, under brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014; Hatfield et al. 2015). Overwintering sites utilized by WBB mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). Therefore, ground disturbance and vegetation removal associated with Project implementation has the potential to significantly impact local WBB populations.

Specific impact: Without appropriate avoidance and minimization measures for WBB, potentially significant impacts associated with ground- and vegetation-disturbing activities associated with construction of the Project include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality in violation of Fish and Game Code.

Evidence impact is potentially significant: WBB was once common throughout western North America. However, WBB has experienced serious declines in relative abundance averaging a decline value of 40.32% over the past decade (Hatfield et al. 2014).

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to WBB associated with the Project, CDFW recommends incorporating the following mitigation measures into the EIR prepared for this Project and implementing the following mitigation measures as a condition of approval for the Project.

Recommended Mitigation Measure 5: WBB Surveys
CDFW recommends that a qualified biologist conduct focused surveys for WBB and their requisite habitat features to evaluate potential impacts resulting from ground- and vegetation-disturbance associated with the Project, and potential impacts resulting from inundation as a result of the new reservoir.

Recommended Mitigation Measure 6: WBB Take Avoidance
If surveys cannot be completed, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. If ground-disturbing activities will occur during the overwintering period (October through February), consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. Any detection of WBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take.

Comment 10: Western Pond Turtle (WPT)

Issue: WPT have the potential to occur in the Project site. WPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meter have also been reported (Thomson et al. 2016).

Specific impact: Without appropriate avoidance and minimization measures for WPT, potentially significant impacts associated with Project activities could include nest reduction, inadvertent entrapment, reduced reproductive success, reduction in health or vigor of eggs and/or young, and direct mortality.

Evidence impact is potentially significant: WPT are known to nest in the spring or early summer within 100 meters of a water body, although nest sites as far away as 500 meters have also been reported (Thomson et al. 2016). The Project includes levee work along the Pajaro River and Salsipuedes and Corralitos creeks. Additionally, noise, vegetation removal, movement of workers, and ground disturbance as a result of Project activities have the potential to significantly impact WPT populations.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to WPT, CDFW recommends conducting the following evaluation of the Project site, incorporating the following measures specific to WPT in the EIR for the Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 7: WPT Surveys
CDFW recommends that a qualified biologist conduct focused surveys for WPT ten days prior to Project implementation. In addition, CDFW recommends that focused surveys for nests occur during the egg-laying season (March through August) and that any nests discovered remain undisturbed until the eggs have hatched.

Recommended Mitigation Measure 8: WPT Relocation
CDFW recommends that if any WPT are discovered at the site immediately prior to or during Project activities, they should be allowed to move out of the area on their own. If a WPT is unable to move out of the project area on its own, a qualified biologist will relocate WPT out of the project area into habitat similar to where it was found.

Comment 11: California Red-Legged Frog (CRLF)

Issue: CRLF primarily inhabit ponds but can also be found in other waterways including marshes, streams, and lagoons, and the species will also breed in ephemeral waters (Thomson et al. 2016). The Project site contains habitat and CRLF have the potential to occur in the vicinity of the Project site. Avoidance and minimization measures are necessary to reduce impacts to CRLF to a level that is less than significant.

Specific impact: Without appropriate avoidance and minimization measures for CRLF, potentially significant impacts associated with the Project's activities include burrow collapse, inadvertent entrapment, reduced reproductive success, reduction in health and vigor of eggs, larvae and/or young, and direct mortality of individuals.

Evidence impact would be significant: CRLF populations throughout the State have experienced ongoing and drastic declines and many have been extirpated. Habitat loss from growth of cities and suburbs, invasion of nonnative plants, impoundments, water diversions, stream maintenance for flood control, degraded water quality, and introduced predators, such as bullfrogs are the primary threats to CRLF (Thomson et al. 2016, USFWS 2017). Project activities have the potential to significantly impact both species.

Recommended Potentially Feasible Mitigation Measure(s)
To evaluate potential impacts to CRLF, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 9: CRLF Surveys
CDFW recommends that a qualified wildlife biologist conduct surveys for CRLF in accordance with the USFWS "Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog" (USFWS 2005) to determine if CRLF are within or adjacent to the Project area.

Recommended Mitigation Measure 10: CRLF Avoidance
If any CRLF are found during pre-construction surveys or at any time during construction, consultation with CDFW is warranted to determine if the Project can avoid take. CDFW recommends that initial ground-disturbing activities be timed to avoid the period when CRLF are most likely to be moving through upland areas (November 1 and March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends a qualified biologist monitor construction activity daily for CRLF.

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 impact threatened or endangered species [CEQA section 21001(c), 21083, and CEQA Guidelines section 15380, 15064, 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 Program
Notification is required, pursuant to CDFW's LSA Program (Fish and Game Code section 1600 et. seq.) for any Project-related activities that will 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, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute the final LSA Agreement until it has complied with CEQA (Public Resources Code section 21000 et seq.) as the responsible agency.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code section 711.4; Pub. Resources Code, section 21089). 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.

Thank you for the opportunity to comment on the Project's NOP. If you have any questions regarding this letter, please contact Ms. Monica Oey, Environmental Scientist, at (707) 428-2088 or monica.oey@wildlife.ca.gov; or Ms. Randi Adair, Senior Environmental Scientist (Supervisory), at (707) 576-2786 or randi.adair@wildlife.ca.gov.

Sincerely,

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