CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
DIRECTOR'S OFFICE
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CALIFORNIA ENVIRONMENTAL QUALITY ACT STATUTORY EXEMPTION FOR RESTORATION PROJECTS
CONCURRENCE NO. 21080.56-2023-045-R1

Project:	Wadulh Lagoon Tidal Wetland Enhancement Project
Location:	Humboldt County
Lead Agency:	Humboldt County Resource Conservation District
Lead Agency Contact:	Doreen Hansen; doreen@hcrcd.org

Background

Project Location: The Wadulh Lagoon Tidal Wetland Enhancement Project (Project) is located within a 78-acre parcel along the upper western portion of and adjacent to the Mad River Slough on Humboldt Bay; approximately 1.25 miles west of the City of Arcata, in Humboldt County, California. Approximate coordinates are 40.891815, -124.139325.

Project Description: The United States Fish and Wildlife Service (USFWS) proposes to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend and restore or provide habitat for California native fish and wildlife. The Project is designed to benefit native fish, wildlife, and plant species by restoring tidal process and ecosystem function to a diked agricultural pasture. The Project includes 1) breaching and lowering approximately 2,000 linear feet of the Mad River Slough Levee, 2) excavating and grading 3.5 acres of low-lying areas of the pasture to elevations that will support eelgrass (*Zostera marina*), 3) excavating a tidal channel network, 4) placing approximately 27,000 cubic yards of native fill to raise low-lying areas to elevations that will support salt marsh, 5) constructing two cross levees, and 6) removal of invasive plant species. The completed project will restore and protect 62.1 acres of intertidal salt marsh, brackish marsh, freshwater emergent wetlands, and fringe wetlands. The Project provides an opportunity to restore a natural shoreline with a transition from slough to salt marsh to freshwater riparian wetlands.

Tribal Engagement: Wadulh is the word for dunes in the Wiyot language, and the name Wadulh Lagoon was selected in recognition of the Wiyot Tribe's significant cultural connection to the Project area. The USFWS has engaged with the Wiyot Tribe and other tribes in the region (i.e., Table Bluff, Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, and Cher-Ae Heights Indian Community of the Trinidad Rancheria) since 2021. In early 2023, the USFWS held an in-person meeting with tribal representatives to provide updates and receive input on designs, funding, upcoming cultural surveys, and restoration elements. The Wiyot Tribe will be an active participant in concept, design, and final

interpretive signage around the restoration site and will use the site to educate its members and provide eco-cultural interpretation.

Interested Party Coordination: The Project has been in development for nearly a decade, and the USFWS, as landowner of the Project area, is the partnering federal agency on the Project. Prior to the transfer of the Project parcel to USFWS, in August 2015, Caltrans, the previous landowner, held conceptual design coordination meetings with neighbors, stakeholders, and agencies to present and choose a restoration option to use the site for Caltrans' mitigation needs. Since the transfer of ownership of the property, the Project designs have continued to be refined. The Project is supported by California Senator Mike McGuire, Assemblymember Jim Wood, and Humboldt County Supervisor Mike Wilson. The Project is also supported by local non-profit organizations Friends of the Dunes and Redwood Region Audubon Society.

Anticipated Project Implementation Timeframes: Start date: June 1, 2024
Completion date: December 30, 2026

Lead Agency Request for CDFW Concurrence: On December 4, 2023, the Director of the California Department of Fish and Wildlife (CDFW Director) received a concurrence request from the Humboldt County Resource Conservation District (Lead Agency) pursuant to Public Resources Code section 21080.56, subdivision (e) (Request). The Request seeks the CDFW Director's concurrence with the Lead Agency's determination on December 1, 2023, that the Project meets certain qualifying criteria set forth in subdivisions (a) to (d), inclusive, of the same section of the Public Resources Code (Lead Agency Determination). The CDFW Director's concurrence is required for the Lead Agency to approve the Project relying on this section of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

Concurrence Determination

The CDFW Director concurs with the Lead Agency Determination that the Project meets the qualifying criteria set forth in Public Resources Code section 21080.56, subdivisions (a) to (d), inclusive (Concurrence).

Specifically, the CDFW Director concurs with the Lead Agency that the Project meets all of the following conditions: (1) the Project is exclusively to conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or is exclusively to restore or provide habitat for California native fish and wildlife; (2) the Project may have public benefits incidental to the Project's fundamental purpose; (3) the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery; and includes procedures and ongoing management for the protection of the environment; and (4) Project construction activities are solely related to habitat restoration. Pursuant to Public Resources Code section 21080.56, subdivision (g), CDFW will post this Concurrence on its CEQA Notices and Documents internet page: https://wildlife.ca.gov/Notices/CEQA.

This Concurrence is based on best available science and supported, as described below, by substantial evidence in CDFW's administrative record of proceedings for the Project.

This Concurrence is also based on a finding that the Project is consistent with and that its implementation will further CDFW's mandate as California's Trustee Agency for fish and wildlife, including the responsibility to hold and manage these resources in trust for all the people of California.

Discussion

A. Pursuant to Public Resources Code section 21080.56, subdivision (a), the CDFW Director concurs with the Lead Agency that the Project will exclusively conserve, restore, protect, or enhance, and assist in the recovery of California native fish and wildlife, and the habitat upon which they depend; or restore or provide habitat for California native fish and wildlife.

   The purpose of the Project is to restore 62.1 acres of a diked agricultural pasture to a combination of estuarine and palustrine wetland habitats, including salt marsh, brackish marsh, mudflat, subtidal/intertidal eelgrass habitat, while enhancing and protecting existing forested wetlands. This will be achieved by reconnecting and restoring the Project area to the larger Humboldt Bay tidal system where native species will benefit and thrive from the complex habitat creation.

B. Pursuant to Public Resources Code section 21080.56, subdivision (b), the CDFW Director concurs with the Lead Agency that the Project may have incidental public benefits, such as public access and recreation.

   The creation of off-channel habitat in the Project area will provide critical salmonid rearing and refugia habitat that will contribute to the recovery of the area's commercial and recreational fisheries. Multiple tidal and riverine restoration projects have demonstrated the utilization of created or enhanced habitats through post-construction fish surveys to measure project effectiveness. Additionally, the Project will improve public access. The Wadulh Lagoon Project area will be available to the public as part of the current permit and guided tour access options. Additionally, the Wiyot Tribe will use the site to educate its tribal members and provide eco-cultural interpretation.

C. Pursuant to Public Resources Code section 21080.56, subdivision (c), the CDFW Director concurs with the Lead Agency that the Project will result in long-term net benefits to climate resiliency, biodiversity, and sensitive species recovery, and includes procedures and ongoing management for the protection of the environment.

   Long-term Net Benefits to Climate Resiliency: The Project will build resilience for coastal communities and endangered species regarding future sea level rise by utilizing a nature-based approach. When the Project is completed, there will be several mechanisms that will capture suspended sediment within the Project area. Tidal currents in the tidal lagoons will have low velocity and the water will be sufficiently

deep to produce conditions that promote settling of sediment carried by tidal flooding. At higher tides, flood tide flows will overtop the lowered levees, the salt marsh ridges, and fringing salt marsh. Salt marsh vegetation is effective at trapping suspended sediment when overtopping occurs. Ebb flows will circulate through the network of channels within the lagoons providing more opportunity to trap sediment. There is evidence that suggests that there is sufficient sediment to maintain salt marshes within the Project area under projected local rates of sea level rise until 2100. Project design elements are intended to trap suspended sediment brought in by tides which may allow marshes to keep pace with sea level rise for a longer time. To allow for ecological development, barriers to upslope migration of salt marsh will be removed. Thus, the Project is designed around process-based restoration where individual features will likely evolve due to the dynamic nature of a tidal setting. The Project is expected to persist and provide value for at least 50 years given sea level rise.

Long-term Net Benefits to Biodiversity: The Project will result in long-term net benefits for coastal wetlands and associated dependent species, including restoration and protection of 62.1 acres of intertidal salt, brackish marsh, freshwater emergent wetlands, and fringe wetlands. It will restore diked and drained salt marsh and intertidal areas, reestablish a natural transition from uplands to shoreline and the slough, and provide nursery and significant off-channel habitat for federally and state-listed fish species and habitat for shorebirds and raptors. Creation of aquatic habitat will also promote eelgrass beds in the northern Humboldt Bay and Mad River Slough, which in turn are known to support among the highest diversity and abundance of shorebirds in the western hemisphere as well as significant rearing and refugia habitat for fish and invertebrate species.

The loss of salt marsh habitat within Humboldt Bay is an important factor contributing to the decline of numerous plant and wildlife species, including Lyngbye's sedge (*Carex lyngbyei*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinus anatum*), American kestrel (*F. sparverius*), merlin (*F. columbarius*), sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*Accipiter cooperii*), and northern red-legged frog (*Rana aurora*). The Project will play an important role in the recovery of these wildlife species. The Project is located adjacent to the Lanphere Dunes Unit of Humboldt Bay National Wildlife Refuge, which is the only place on the Bay where the transition from slough to salt marsh to freshwater wetlands to upland (dunes) is preserved. The Project is an opportunity to restore a natural shoreline with a transition from slough to salt marsh to freshwater riparian wetlands. The Project's salt marshes will support a broad array of shorebirds and raptors including osprey (*Pandion haliaetus*), white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), and northern harrier (*Circus hudsonius*). Fringing brackish marsh areas will be used by northern red-legged frogs. The Project will also enhance and protect existing riparian habitat. This habitat has been monitored for bird use for the past 30 years by the Humboldt Bay Bird Observatory and is used by a variety of neotropical migrants and other songbirds.

Long-term Net Benefits to Sensitive Species Recovery: Diking and draining of salt marshes has contributed to the substantial population declines of local salmonid

species, including Coho Salmon (*Oncorhynchus kisutch*), Chinook Salmon (*O. tshawytscha*), and steelhead trout (*O. mykiss*), as well as Tidewater Goby (*Eucyclogobius newberryi*). Restoration of tidal channels, eelgrass beds, and salt marsh will restore and provide critical fish refugia and nursery habitat that result in long-term net benefit to these sensitive species. Juvenile salmonids utilize the estuary, especially areas with eelgrass, as nursery areas for extended periods before entering the ocean. Estuaries provide habitat where juvenile fishes obtain the size needed to increase their chances of survival at sea. Similarly, studies of other northern California estuaries and lagoons show that steelhead trout and Coastal Cutthroat Trout (*O. clarkii clarkii*) use these habitats year-round. Created habitat will also benefit Tidewater Goby which prefer salt marshes that border freshwater wetlands for both spawning and rearing.

Procedures for the Protection of the Environment: The following procedures and best management practices will be followed to minimize impacts to the environment.

General Construction

- Work will occur during the dry season – July 15th to October 15th.
- Staging areas, equipment storage sites, roadway, and construction footprint will be selectively placed and directed onto the roadway or construction site and away from aquatic habitats.
- All machinery must be in good working condition, showing no signs of fuel or oil leaks. Oil, grease, or other fluids will be washed off at designated wash stations prior to equipment entering the construction site.
- All fuel and chemical storage, servicing, and refueling will be done in an upland staging area or other suitable location with secondary containment to prevent spills from traveling to surface water.
- Staging areas will have a stabilized entrance and exit and will be located in upland areas to the extent possible and at least 100 feet from bodies of water unless site-specific circumstances do not provide such a setback or would result in further damage to sensitive resources, in which case the maximum setback possible will be used.

Water Quality

- Silt curtains may be installed as required to prevent the delivery of turbid water to open water areas connected to the Project area.
- Construction equipment shall not be stored in inundation areas or sloughs.
- The contractor(s) will ensure that any liquid fuel pumps used on-site (for dewatering, etc.) shall be placed on absorbent pads and containment implements. The contractor(s) shall have spill containment materials located at the site, with operators trained in spill control procedures. All staging shall be within the limits of disturbance, and the contractor(s) shall not unnecessarily disturb aquatic habitat and wetlands. At the close of construction, the contractor(s) shall restore staging areas and temporary haul roads to pre-project conditions (de-compacted and naturalized as needed).

- During excavation, management of groundwater and saturated soils may be required. Water management may be required to reduce nuisance water within the active work area. Dewatering may be required to remove groundwater seepage in excavation areas. Water shall be treated for sediment removal and discharged onto areas that are not susceptible to damage from saline water.

Erosion Control

- Installation of temporary fiber rolls, as needed.
- Silt fence installed around proposed construction staging area.
- Seed mix applied to all disturbed areas above elevation 7.5 ft.
- Sufficient erosion control supplies will always be maintained on site, available for prompt use in areas susceptible to erosion during rain events.
- Disturbance of existing vegetation will be minimized to only that which is necessary to complete the work.

Invasive Species

- The spread or introduction of invasive exotic plant species by arriving vehicles, equipment, imported gravel, and other materials, will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the Project area will be removed and properly disposed of in a manner that will not promote their spread. Equipment will be cleaned of any sediment or vegetation at designated wash stations before entering or leaving the Project area to avoid spreading pathogens or exotic/invasive species.

Biological

- A Qualified Biologist will relocate/protect aquatic species.
- Nesting Bird surveys will be performed by a Qualified Biologist to avoid impacts on native nesting birds during the breeding season. Restoration activities will be preceded by a nesting bird survey to identify any active nests. If nests are found, the biologist will create appropriately sized buffer areas around the active nest. Active nests will be avoided until they become inactive.

<u>Ongoing Management for the Protection of the Environment:</u> The following post construction monitoring and management will occur across the Project area.

- Monitoring and management of planted riparian vegetation.
- Invasive species control will continue for the life of the project.
- Annual fish monitoring for presence and species richness for three years.
- Water quality parameters will be collected during fish surveys.
- Avian surveys will continue.
- General observational project oversite will occur multiple times a year to guide any required adaptive management.

D. Pursuant to Public Resources Code section 21080.56, subdivision (d), the CDFW Director concurs with the Lead Agency that the Project does not include any construction activities, except those solely related to habitat restoration.

   All Project construction activities are solely related to the overall goal of the Project to restore and manage wetland habitat.

Scope and Reservation of Concurrence

This Concurrence is based on the proposed Project as described by the Lead Agency Determination and the Request. If there are any subsequent changes to the Project that affect or otherwise change the Lead Agency Determination, the Lead Agency, or any other public agency that proposes to carry out or approve the Project, shall submit a new lead agency determination and request for concurrence from CDFW pursuant to Public Resources Code section 21080.56. If any other public agency proposes to carry out or approve the Project subsequent to the effective date of this Concurrence, this Concurrence shall remain in effect and no separate concurrence from CDFW shall be required so long as the other public agency is carrying out or approving the Project as described by the Lead Agency Determination and the Request.

Other Legal Obligations

The Project shall remain subject to all other applicable federal, state, and local laws and regulations, and this Concurrence shall not weaken or violate any applicable environmental or public health standards. (Pub. Resources Code, § 21080.56, subd. (f).)

CDFW Director's Certification

By: _____ Date: 1/17/24

Charlton H. Bonham, Director
California Department of Fish and Wildlife