

COASTAL CONSERVANCY

Staff Recommendation
March 22, 2018

**EEL RIVER ESTUARY AND CENTERVILLE SLOUGH ENHANCEMENT PROJECT:
IMPLEMENTATION**

Project No.: 12-018-04
Project Manager: Michael Bowen

RECOMMENDED ACTION: Consideration and possible authorization to disburse up to \$1,511,462 to The Wildlands Conservancy to implement the Eel River Estuary and Centerville Slough Enhancement Project.

LOCATION: Centerville Slough, tributary to the Salt River, near Ferndale, Humboldt County (Exhibit 1)

PROGRAM CATEGORY: Coastal Resource Enhancement

EXHIBITS

- Exhibit 1: [Project Location Maps and Alternative 4](#)
- Exhibit 2: [Proposed Actions and Budget](#)
- Exhibit 3: [Staff Recommendation February 2, 2017](#)
- Exhibit 4: [CEQA Settlement Agreement](#)
- Exhibit 5: [Conservancy Determination Regarding CEQA Sufficiency](#)
- Exhibit 6: [Support Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251–31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to \$1,511,462 (one million five hundred eleven thousand four hundred sixty-two dollars) to The Wildlands Conservancy (TWC) to implement the Eel River Estuary and Centerville Slough Enhancement Project subject to the following conditions:

1. Prior to the disbursement of funds, TWC shall submit for the review and approval of the Conservancy’s Executive Officer: 1) a work program including schedule and budget, and the names of any contractors it intends to use to complete the improvements, 2) a sign plan, and 3) evidence that all necessary permits and approvals have been obtained.

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2. Prior to commencing the Project, TWC shall enter into and record an agreement pursuant to Public Resources Code 31116(c) sufficient to protect the public interest in the improvements.
3. In carrying out the Project, TWC shall comply with all applicable mitigation and monitoring measures identified in the *Final Environmental Impact Report for the Eel River Estuary and Centerville Slough Enhancement Project, January 2017* (EIR) and comply with all measures that are required by any permit or approval.
4. TWC shall comply with all applicable terms and conditions imposed by any federal or state grant.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The authorization is consistent with Chapter 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources.
2. The Project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. The EIR was certified by the Conservancy at its February 2, 2017 meeting. Substantial evidence supports the conclusion that no further documentation is required under the California Environmental Quality Act.
4. The Wildlands Conservancy is a nonprofit organization existing under section 501(c) (3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”

PROJECT SUMMARY:

Staff is recommending the Conservancy approve the disbursement of \$1,456,462 to The Wildlands Conservancy (TWC) to implement the Eel River Estuary and Centerville Slough Enhancement Project (“Project”) on the Eel River Estuary Preserve (EREP). The Conservancy is lead agency under the California Environmental Quality Act (“CEQA”) for the Project, and certified the Final Environmental Impact Report (EIR) and selected Alternative 4 in the EIR for implementation at its February 2, 2017 meeting. TWC has since advanced design to a 65% level and applied for all necessary permits and approvals for the Project. Thus far, permits received include a Lake and Streambed Alteration Permit (CDFW §1600) and a State Lands Commission lease. The U.S. Army Corps §404 Permit process has commenced and the USACE has initiated its federal consultations under the Endangered Species Act. The Coastal Development Permit likely will be scheduled for the September 2018 Coastal Commission meeting.

The Project will significantly advance ecosystem restoration and agricultural preservation in the Eel River Delta, an area once hosting more than six thousand acres of tidally influenced habitat that has received national recognition for the several significant ecosystem restoration projects underway there. The goal of the Project is to improve geomorphic and ecosystem function on the EREP. The Project will enhance habitats for native fisheries and aquatic species, support

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waterfowl and wildlife species, and benefit agricultural land management by more effectively managing onsite flooding and sedimentation. The Project objectives also incorporate various measures intended to accommodate future climate change and sea level rise. Finally, a key objective is to provide public access for outdoor education as defined in TWC's Access Plan for the property. Proposed actions and costs of the Project are summarized in Exhibit 2.

Proposed activities will enhance the approximately 1,237-acre Project area, transitioning it from a landscape of diked pasture land to a system of pastures and natural habitats, including estuarine and tidal slough channels, freshwater streams, freshwater waterfowl ponds and enhanced agricultural pastures. Critical to achieving the Project goals and objectives is an enhancement in tidal flushing to reactivate wetlands functions within the Inner Marsh and Centerville Slough portion of the Project area (Exhibit 1).

The Project includes design and installation of new tidegates to introduce muted tidal prism into the Inner Marsh and Centerville Slough, occupying historic tidal slough channels persisting as dry channels for more than a century, despite former reclamation efforts, floods and significant tectonic activity. This project will enhance aquatic organism passage from the Eel River to Centerville Slough, and Russ Creek, while improving drainage efficiency for the betterment of agricultural activities in the Project area, including adjacent lands.

TWC's core mission is to provide outdoor education for youth, so the project includes a variety of features to enhance that experience. These include improvements to the main barn and parking area, provision of a dune walkway and overlook, two kayak put-in/take-outs and road, bridge, and pasture improvements that minimize impacts to the Project area for a range of vehicle types and weight classes.

TWC is a nonprofit organization whose dual mission is to "preserve the beauty and biodiversity of the earth and to provide programs so that children may know the wonder and joy of nature." TWC has extensive experience in agricultural land management, public access and education and natural resource enhancement, has successfully managed Conservancy grants for this purpose and therefore has the necessary skill and capacity to achieve the goals and objectives of the Project.

The Project will culminate years of planning and design work funded by the Conservancy and the California Department of Fish and Wildlife (CDFW). The construction elements and anticipated costs are summarized in Exhibit 2 and described at length in the February 2, 2017 staff recommendation (Exhibit 3).

Site Description: The Project area is limited to the Eel River Estuary Preserve (EREP) owned by TWC. It is approximately 1,237 acres and is located four miles west of the City of Ferndale. The EREP, formerly known as Connick Ranch, comprises approximately 1,153 acres of reclaimed remnant tidal sloughs, tidal wetlands managed for agricultural production, and a strip of approximately 84 acres of coastal dunes about 3 miles long and 1-3 acres wide, formerly known as the "Palco Property." TWC acquired Connick Ranch in 2008 and then assembled the highly fragmented Palco Property parcels with private funding at significant effort and expense. TWC continues to make this scenic area available for ecological enhancement and recreational use, while maintaining and improving agricultural use through land management efforts and leases to the Miranda Brothers. The EREP extends from the mouth of the Eel River nearly to Centerville Beach, 3.5 miles to the south. (Exhibit 1).

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The Project site is part of the greater floodplain of the Eel River, and is at the mouth of the Eel River Delta, an area extending from the mouth up to the confluence of the Van Duzen River. The Delta, located 13 miles south of the City of Eureka, covers approximately 33,000 acres, or 50 square miles. Elevations range from sea level at the river mouth to approximately 700 feet in upland areas near Table Bluff and the Wildcat Hills. Most of the delta lands are relatively flat. The Eel River estuary, particularly the Project area, was once comprised of an intricate network of sloughs, side channels and open water, which, in combination with the tidal exchange and a substantial input of freshwater, provided a hospitable and ever-changing environment for a rich assemblage of wildlife. Due to the depth and complexity of the channel network, the Project area supported a significant commercial shipping industry capable of transporting much of the bounty of southern Humboldt County to faraway ports such as San Francisco.

The Eel River estuary, and the Project area particularly, were significantly altered over the last 150 years. By 1900, much of the Project area had been patented and reclaimed from tidal marsh for agricultural purposes. By 1970, the estuary, inclusive of sloughs and side channels, was reduced by tens of thousands of acres to 2,200 acres, or 3.4 square miles. The reduction in estuarine size corresponded with the increase of agricultural land within the delta region, as salt marsh was converted to pasture. It also corresponds to a general decline in the quality and quantity of the estuarine environment, declining salmon populations, and a marked reduction in the tidal prism of the estuary. This equates to a possible 60 percent reduction in overall tidal prism¹ and a commensurate decrease in estuarine area over time.

Due to the reduction in hydraulic connectivity and associated tidal prism, flooding and ponding has increased over time. As with the nearby Salt River, drainage of flood waters is impaired by diminishment of channel capacity. Unlike the Salt River, however, the Project area experiences additional challenges in the form of dune breaches and tidal incursions.

Project History: Early history and recent Conservancy involvement in the Project are described extensively in the EIR and in the February 2, 2017 staff recommendation (Exhibit 3), respectively. A 2013 authorization by the Conservancy awarded funds to California Trout, Inc., matched by CDFW funds, to prepare designs for tidal marsh restoration on the EREP. Total funding for planning and design exceeded \$1 million. Extensive enhancement planning amongst various stakeholders and TWC ensued from 2009 to 2015, at which time the Coastal Conservancy agreed to serve as lead agency under CEQA.

The Conservancy certified the EIR on February 2, 2017 and selected Alternative 4 for implementation.

Subsequently, a group of property owners whose properties neighbor the project area, and who had earlier requested to be included in the project, (“petitioners”) sued the Conservancy under the California Environmental Quality Act, Public Resources Code section 21000 et seq. (“CEQA”). Petitioners alleged many deficiencies in the EIR. However, petitioners’ main concerns were that the project would adversely affect drainage on their lands and could adversely impact their agricultural operations. The petitioners were also concerned about increased public access to the project site over a disputed easement, but the petitioners and TWC agreed to

¹ The tidal prism is the quantity of water that flows in and out of an area with changes in tides.

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address that separately. The parties negotiated the terms of a settlement. The petitioners requested dismissal of the petition on November 17, 2017. Execution of the settlement agreement and dismissal of the petition enabled the project to proceed.

PROJECT FINANCING

Coastal Conservancy	\$1,511,462
US Fish and Wildlife Service NCWC Grant	\$950,000
<i>North American Waterfowl Conservation Grant (requested)</i>	<i>\$1,000,000</i>
<i>US Fish and Wildlife Service NCWC (invited)</i>	<i>\$950,000</i>
<i>Wildlife Conservation Board (requested)</i>	<i>\$3,000,000</i>
<i>Other</i>	<i>\$296,538</i>
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Estimated Total Project Budget	\$7,708,000
This Authorization Total	\$1,511,462

The expected source of \$1,465,462 of Conservancy funds for this project is an appropriation to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (Section 79731). Section 79732 identifies specific purposes of Chapter 6 and includes: protect and restore aquatic, wetland and migratory bird ecosystems, including fish and wildlife corridors; protect and restore coastal watersheds, including, but not limited to bays, marine estuaries, and nearshore ecosystems; and assist in the recovery of endangered, threatened or migratory species by improving watershed health, instream flows, fish passage and coastal or inland wetland restoration.

As required by Proposition 1, the proposed project provides multiple benefits. By working to restore the Russ Creek/Centerville Slough watershed, historically a tidal slough tributary of the Salt River and thence the Eel River fed by multiple tributary streams, the Project has and will continue to defragment coastal estuarine habitat and significantly improve ecological and hydraulic function, while also increasing the agricultural productivity of the EREP and surrounding ranch land by alleviating long-term flooding and ponding. The Project will help achieve the three Chapter 6 purposes identified above in that it will restore an historic channel that provided both aquatic habitat and hydraulic conveyance capacity, both of which were lost as the channel filled or was filled with sediment.

In accordance with Section 79707(b), which requires agencies to prioritize “projects that leverage private, federal, or local funding or produce the greatest public benefit”, this project has already secured nearly \$1 million in federal funds through the national Coastal Wetland Conservation Grant Program, and seeks another \$1 million through that program and another \$1 million through the North American Waterfowl Conservation Act (NAWCA) Program. Additionally, as a demonstration project of innovative adaptive management techniques intended to protect the function and maintain the performance of the Project, the project satisfies Section 79707(e) which grants “special consideration” to “projects that employ new or innovative

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technology or practices.”

The Project was selected through a competitive grant process under the Conservancy’s *Proposition 1 Grant Program Guidelines* adopted in June 2015 (“Prop 1 Guidelines”). (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this “Project Financing” section, the “Project Summary” section and in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section of this report.

The expected source of the remaining \$55,000 of the Conservancy authorization is the fiscal year 2017/2018 appropriation to the Conservancy of the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000 (Proposition 12, Public Resources Code § 5096.300 et seq.). Funds from this appropriation are available for public access projects north of the Gualala River, and are thus an appropriate source for necessary improvements to bridge structures on the site that provide for public access.

The estimated construction cost for the Project is approximately \$7.7 million. The Coastal Conservancy and TWC are working with California Trout and state and federal agency staff to help secure sufficient funds while the permitting process is reaching its completion. If the additional funds are not obtained, the Project will be implemented in phases with a primary emphasis on initial construction of the inner marsh/salt marsh restoration until sufficient funding is secured for the preponderance of the Centerville Slough.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The Project will be undertaken pursuant to Chapter 6 of the Conservancy’s enabling legislation, Public Resource Code sections 31251-31270, as follows:

Pursuant to section 31251, the Conservancy may award grants to nonprofit organizations in order to relocate improperly designed or located improvements and for other corrective measures that will enhance coastal resources that have suffered loss of natural and scenic values due to natural or human-induced events or incompatible land uses. The Project consists of corrective measures to restore an estuarine area degraded by reclamation and improperly located agriculture and tide gates. The Project will restore hydrologic and estuarine connectivity within the remnant Centerville/Cut-Off Slough system, and restore many acres of salt marsh and freshwater habitat on the EREP property while also preserving and enhancing agriculture by relocating it to areas of the EREP better suited for and more capable of sustaining higher production levels. Implementation activities under this grant will benefit a variety of natural resources within and outside the coastal zone (Pub. Resources Code § 31251.2), particularly coastal salmon populations of the Eel River that utilize habitat within and outside the Coastal Zone.

Consistent with section 31252, the County of Humboldt’s Local Coastal Program includes policies in favor of public action (in particular, the County, working with property owners and state and federal agencies) to resolve resource protection problems in the Eel River area, including the Project site, as described in the “Consistency with Local Coastal Program Policies” section below.

Consistent with section 31253, the amount of funding recommended for the Project is based on the total amount of funding available for coastal resource enhancement projects, the fiscal

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resources of the applicant and its partners, and the urgency of the Project relative to other eligible coastal resource enhancement projects.

CONSISTENCY WITH CONSERVANCY'S 2018-2022 STRATEGIC PLAN GOALS & OBJECTIVES:

Consistent with **Goal 2, Objectives A and D**, respectively, the Project will provide new facilities as described in the EIR that will enable people, including those with disabilities, to enjoy coastal recreational opportunities and learn about the natural, cultural and historical resources of this remarkable area.

Consistent with **Goal 5, Objective B**, the Project will protect working lands by restoring hydraulic connectivity and providing protection from wave incursion and saltwater damage through channel restoration and dune enhancement measures.

Consistent with **Goal 5, Objective C**, the Project will preserve fish and wildlife corridors between core habitat areas along the coast and from coastal to inland habitat areas by restoring full hydraulic and biological connectivity between the Eel River estuary and the headwaters of Russ Creek, via a newly restored Centerville Slough.

Consistent with **Goal 6, Objective B**, the implementation of this Project will restore 1,200-acres of coastal habitat, including coastal wetlands and intertidal areas, stream corridors, and dunes, achieving more than one quarter of the Conservancy's objective for the strategic plan period for the entire state.

Consistent with **Goal 6, Objective D**, the project will preserve and enhance coastal watersheds and floodplains within the lower Eel River, and in the Russ Creek-Salt River complex specifically, by reconnecting historic channels to the floodplain and providing for floodplain based habitat enhancement and sediment management for agricultural production.

Consistent with **Goal 6, Objective E**, the project will restore fish passage and fish habitat and ensure sufficient instream flow and favorable water temperatures by reconnecting Russ Creek to the Eel River Estuary via a re-excavated Centerville Slough.

Consistent with **Goal 6, Objective G**, the project will significantly improve water quality in the Eel Estuary for the benefit of coastal and ocean resources by restoring tidal prism and providing durable and freely available access to a true freshwater-saltwater ecotone, a habitat type rare even amongst ongoing and proposed estuarine enhancement projects in California.

Consistent with **Goal 7, Objective B**, the project will foster the long-term viability of coastal working lands by providing habitat improvements that also guard against sea level rise and increase drainage in highly productive pasture.

Consistent with **Goal 8, Objective C**, the project will increase resilience to sea level rise using nature-based solutions and other multi-benefit strategies. Indeed, the Project has incorporated a site-specific vulnerability assessment crafted in accord with the Coastal Commission's newly adopted Sea Level Rise Guidance Manual and devised project components that address these threats. The Project does so in a way that protects natural resources and provides maximum public benefit by protecting prime agricultural lands ("working lands") from sea level rise and wave intrusion through dune enhancement and drainage improvements, while also reestablishing

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and preserving a fish and wildlife corridor through historic Centerville Slough that has been absent for 150 years.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The Project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:** The Project is consistent with the following state and federal plans and policies concerning restoration of riparian habitat and increasing natural production of the coastal salmon populations that depend upon that habitat for certain life history stages:
 - a. The Project is consistent with the recommendations for planning, acquisition and habitat enhancement made in the report *Natural Resources of the Eel River Delta*, published by the California Department of Fish and Game in November 1974. Among other things, the report recommended higher levels of protection for the Delta's natural resources, restoration and floodplain enhancement efforts and acquisitions that will help advance ecosystem restoration—though they didn't use that expression—as a "highest and best use" of the Delta. This specific site is identified in that plan as the highest priority for acquisition and enhancement within the entire Eel River Delta.
 - b. While it doesn't specifically address the Eel Delta, the *Steelhead Restoration and Management Plan for California* of February 1996 features the Eel River and underscores the importance of reversing watershed disturbance through restoration activities. Focusing primarily on the introduction of Pikeminnow to the Eel River, the study's author could have noted that juvenile salmonids are safer from predation in the Delta because Pikeminnow cannot tolerate the high salinity of the Delta during summer months. Therefore, the Delta provides a refuge for juvenile salmonids, and other species, in an altered system. Thus, the Project specifically addresses the issues raised in the Steelhead Plan through alternative and likely more feasible and successful means than the chemical treatments recommended in the plan. Finally, and thematically, the plan advises that "(h)abitat improvement projects should be focused on the many areas throughout the State where steelhead habitat is severely degraded and restoration work is sorely needed." This is certainly true in the highly reclaimed Delta where

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opportunities abound to support the growth and survival of juvenile salmonids and other marine and freshwater species.

- c. More recently, and more specifically, the Project is consistent with the California Fish and Game issued *Recovery Strategy For California Coho Salmon* of February 2004 in that the highest priority recommendation of that plan relating to the Eel Delta is to “(e)ncourage the Salt River Local Implementation Plan to incorporate coho salmon-friendly measures, in cooperation with the agencies.” Centerville Slough is the largest historic tributary to the Salt River, and its enhancement advances the goals and objectives of the Recovery Strategy within the Eel Delta. TWC and its partners have developed the Project in a way that benefits from experiences gained at the nearby Salt River Ecosystem Restoration Project, and the Project is likely to leverage those ecological benefits significantly. Additionally, the plan recommends that “(i)n cooperation with agencies and landowners, plan to re-establish estuarine function, restore and maintain historical tidal areas, backwater channels and salt marsh” (ER-HU-12 pg. 8.27).
- d. The Project is consistent with the *Final Recovery Plan for the Southern Oregon/Northern California Coast Evolutionarily Significant Unit of Coho Salmon (Oncorhynchus kisutch)* (National Marine Fisheries Service 2014). That report highlights the statewide importance of the Eel River population of Coho salmon and adds that “(t)he tributaries and estuary located within this population may serve as essential non-natal rearing habitats for all populations in the Eel River watershed” (SONCC 26-7). The report states that “(i)n the estuary, salt marsh was drained and riparian vegetation cleared to convert tidelands to pasture...Tideland reclamation and the construction of dikes and levees have changed the function of the estuary considerably. Slough and creek channels that once meandered throughout the delta are confined by levees, sufficiently slowing flow to a point that many have become filled with sediment. Remnant slough channels are visible throughout the delta. The estuary and tidal prism have been reduced by over half of their original size (CDFG 2010b).” (SONCC p. 26-4). Top recommendations from the report include: 1) setback or remove dykes and levees; 2) restore salt marsh and tidal sloughs, and; 3) reconnect tidal channels and wetlands.
- e. The Project is consistent with the California Water Action Plan, a collaborative effort of the California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture. This plan was developed to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water resources system. It lays out the state’s challenges, goals and actions needed to put California’s water resources on a safer, more sustainable path. The plan identifies ten overarching strategies to protect our resources, include two particular to this Project that the Conservancy can help implement: 4) *Protect and restore important ecosystems (restore coastal watersheds and strategic coastal estuaries to restore ecological health and nature system connectivity to benefit*

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local water systems and help defend against sea level rise, eliminate barriers to fish migration) and 7) Increase flood protection (encourage flood projects that plan for climate change and achieve multiple benefits).

- f. The *California State Wildlife Action Plan 2015 Update (SWAP 2015 Update)* points out that the North Coast and Klamath Province is known for its extensive river systems and the anadromous fish populations they support. These rivers, according to CDFW, support one-third of the state's Chinook salmon, most of the state's coho salmon and steelhead, and all of the coastal cutthroat trout. These populations have suffered significant declines. That is why one of the fourteen conservation targets for the Province is the "native aquatic species assemblages/communities of coastal watersheds." Restoring lost rearing habitat in former salt marsh is a proven strategy for protecting and enhancing populations of these native aquatic species assemblages, as well as a host of other aquatic and terrestrial species.
 - g. Finally, *California @ 50 Million: The Environmental Goals and Policy Report (2013 Draft)* Key Action #3 for the "Preserve and Steward State Lands and Natural Resources" section calls for building resilience in natural systems and specifically points out that wetlands "provide important carbon sequestration opportunities for the state."
3. **Support of the public:** The Project is supported by Senator Mike McGuire, Assemblyman Jim Wood, the County of Humboldt, the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, North Coast Regional Water Quality Control Board, Pacific Birds Partnership, the Pacific Marine Estuarine Partnership, California Trout, Trout Unlimited, the landowner, its lessees and others. Some of the support letters received over the past year, some in relation to the solicitation of funds from other agencies, are included (Exhibit 6).
 4. **Location:** The Project is located at the mouth of the Eel River, near Ferndale, in Humboldt County.
 5. **Need:** Approximately 85 percent of the tidal marsh in Humboldt Bay and the Eel River Delta has been lost since the Gold Rush, leading to dramatic losses of fish and wildlife, decreased water quality and increased turbidity in the Bay, and changes to physical processes as the size of the Estuary shrank, increasing the need for dredging and the local hazards of flooding. The need for restoration of tidal marsh in Humboldt Bay and the Eel River Delta in order to aid in the recovery of at-risk species, and improve water quality and the physical health of the area, is well-recognized among scientists and resource managers.
 6. **Greater-than-local interest:** Restoration of this area is of national significance. It will result in up to 100 acres of tidal wetland restoration and extensive dune enhancement that will provide benefits to a large number of species, including anadromous salmonids, migratory waterfowl and shorebirds, and aid in the recovery of several threatened or endangered species. In addition, the Project will improve flood management for agricultural operations in the area and provide regional recreational opportunities.

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7. **Sea level rise vulnerability:** Due to their location, all tidal wetland restoration projects can be vulnerable to sea-level rise impacts. This Project site is somewhat protected from such effects due to the fact that the reintroduction of tidal prism is muted and occurring within a closed cell. Nonetheless, as a low-lying coastal floodplain, the area is highly vulnerable. Conservancy staff conducted a thorough analysis of the Project using the Coastal Commission's new Sea Level Rise Policy Guidance, adopted August 12, 2015. This effort helped determine how sea level rise may impact the Project site from flooding and erosion; identified the longevity and durability of each Project component; and evaluated the impacts of the Project on agricultural resources, coastal habitats, and public access in light of sea level rise.

This analysis found that the Project area is predicted to be affected by sea level rise sooner and more extensively than other areas in the Humboldt region and on the north coast due to subsidence in the area. According to the "Humboldt Bay: Sea Level Rise Hydrodynamic Modeling, and Inundation Vulnerability Mapping" report by Northern Hydrology and Engineering (2015), the closest site to the Project area (Hookton Slough in southern Humboldt Bay) has the highest rate of subsidence (VLM of -3.56 mm/yr) and thus the highest relative sea-level rise rate, 5.84 mm/yr, relative to other study sites in the Humboldt region and north coast.

The Project is designed to protect coastal resources from sea level rise and address the area's vulnerability to sea level rise. The Project incorporates a number of elements designed to increase the lifespan of the area, including: 1) elevated berms with gradually sloping side-slopes capable of promoting vegetative shifts across the landscape, 2) dune enhancements intended to protect the area from wave overwash, and 3) sediment management techniques that provide elevation increases to accommodate shifting habitat types and agricultural productivity in the context of sea level rise. Although high sea level rise rates are predicted, the Eel Delta is an excellent place to accommodate sea level rise, due to the fact that the sedimentation and sediment accumulation rates are very high—second only to the Yangtze River. Once the marsh plain of a restored wetland is colonized by vegetation, the marsh plain becomes an efficient sediment traps, contributing to aggradation and elevation increases. With the exception of the dunes, the longevity of the Project is expected to exceed fifty years due in large part because the Project is within a closed and muted tidal system. Due to erosion, the dune system is unlikely to persist that long, though it will likely accommodate sea level rise for at least twenty years.

Additional Criteria

8. **Urgency:** Failing infrastructure, wave overwash events, aggraded drainage channels and other problems are rendering much of the Project area unsuitable for farming, and inadequate for habitat enhancement. The Project is needed urgently to protect agricultural resources while also enhancing habitat to a semblance of its historic abundance.
9. **Resolution of more than one issue:** The restoration of wetlands combined with enhancements to and increased protection of agricultural areas in the Coastal Zone provides an excellent opportunity to protect and enhance two of the most important natural resource values in the North Coast.

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10. **Leverage:** See the “Project Financing” section above.
11. **Innovation:** The Project provides an excellent opportunity to restore ecological function and agricultural productivity within a muted system, thereby providing significant improvements to habitat function, while also honoring and maintaining the existing agricultural utility and infrastructure of the site, an area that has provided significant economic and social benefit for more than a century.
13. **Realization of prior Conservancy goals:** The Project builds on the Conservancy’s participation in the development of the *Salt River Ecosystem Restoration Project*, a more than 25-year effort to restore ecosystem function and agricultural productivity to the Ferndale Bottom region of the Eel River Delta, near Ferndale. Centerville Slough was once the Salt River’s largest tributary, and will be again following Project completion. This award of funds will enable the Conservancy to begin implementing a Conservancy-developed plan and project as enunciated in a Conservancy-led EIR.
15. **Cooperation:** The Conservancy has helped assemble a team of agency personnel, non-governmental organization staff and a private landowner and its lessee intent on developing and advancing the Project. The Project enjoys the foundation of more than five years of preparation, planning, negotiations and design work.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The County of Humboldt Local Coastal Program (LCP) Eel River Area Plan (ERAP) was certified by the Coastal Commission in 1982 and last updated in 1995. The ERAP outlines numerous policies pertaining to the preservation and restoration of sensitive coastal habitat, but it also includes strong provisions in support of agriculture. The Project is consistent with these policies in that it will restore coastal habitat and enhance agriculture. Further, all of these LCP policies will influence the preparation of the Project’s final designs, which will address agricultural preservation and habitat restoration.

There is significant fear within Ferndale’s agricultural community that enhancement efforts at the EREP will result in wholesale conversion of prime agricultural lands to non-agricultural uses. However, the Project has been designed to protect agricultural lands (and will continue to do so as final designs are prepared) consistent with the Coastal Act and the zoning of the Project site. Section 30242 of the Coastal Act limits conversion of agricultural land to non-agricultural uses. (Pub. Resources Code § 30242.) Conversion to non-agricultural uses is allowed only where agriculture is either infeasible, or where such conversion will preserve prime agriculture elsewhere and be compatible with continued agricultural use on surrounding lands. As discussed extensively in the EIR, the Project will convert a small percentage of the agricultural land in the Project area while protecting, preserving and enhancing productivity on non-prime and prime agricultural land elsewhere in the Project area consistent with Section 30242. Ultimately, Section 30242 controls the overall design approach of the Project.

Moreover, the Project area is located primarily in transitional agricultural lands, where development and conversion is even more strongly restricted in favor of maintaining prime agricultural productivity. Thus, per the guidelines of ERAP Section 3.41 C, it is essential that the

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Project adhere to the principal uses in agriculture exclusive designation, notably the production of food, fiber or plants.

With regard to the protection and enhancement of natural resources, Section 3.34 B states that management for watershed and fish and wildlife is a compatible use with agriculture. The Project provides for management of the area for fish and wildlife as a compatible use, in addition to management for agriculture.

In addition to the above guidelines, it is worthwhile noting the following policies that are highly compatible with the Project. Policy 3.41: “Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values”; Policy 3.41 1.a.(2): “The County shall continue to pursue opportunities to restore or enhance, if possible, in-stream flows”; Policy 3.41 F.6.a: “long-term protection of riparian vegetation . . . should be provided. . . . To achieve these objectives, the County should work with property owners and affected State and Federal agencies”; Policy 3.41 G.7: “Natural drainage courses . . . shall be retained and protected from development which would impede the natural drainage pattern or have a significant adverse effect on water quality or wildlife habitat.”

In all respects, the Project will adhere to the LCP.

COMPLIANCE WITH CEQA:

In order to comply with the California Environmental Quality Act (CEQA) the Conservancy prepared the *Final Environmental Impact Report for the Eel River Estuary and Centerville Slough Enhancement Project, January 2017* (EIR). The Conservancy certified the EIR at its February 2, 2017 board meeting and selected Alternative 4 for approval (“the Project”) instead of the 2016 Proposed Project (Exhibit 3). The Conservancy found that the Project avoids, reduces or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the Project may have a significant effect on the environment.

As discussed under Project History, a group of neighboring landowners (“petitioners”) sued the Conservancy under CEQA. Petitioners alleged many deficiencies in the EIR. However, petitioners’ main concerns were that the project would adversely affect drainage on their lands and could adversely impact their agricultural operations. The petitioners were also concerned about increased public access to the project site over a disputed easement, but the petitioners and TWC agreed to address that separately.

The parties negotiated the terms of a settlement. The petitioners requested dismissal of the petition November 17, 2017. Execution of the settlement agreement (Exhibit 4) and dismissal of the petition enabled the project to proceed.

Part of the settlement agreement required the Coastal Conservancy to collect and evaluate new information and determine if project changes warranted further analysis under CEQA. Exhibit 5 to this staff recommendation constitutes the written determination prepared by staff to satisfy this requirement of the settlement agreement.

The settlement agreement identifies a variety of data collection and analytical requirements. Conservancy staff worked together with TWC, Cal Trout, and private consultants to conduct the

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hydraulic modeling required under the agreement and to install a series of new monitoring devices. Exhibit 5 analyzes this new information and concludes that further documentation, such as a subsequent EIR, is not required under CEQA.

Conservancy staff will file a Notice of Determination upon approval.