

COASTAL CONSERVANCY

Staff Recommendation
September 6, 2018

ELK RIVER ESTUARY RESTORATION

Project No. 15-033-03
Project Manager: Joel Gerwein

RECOMMENDED ACTION: Authorization to disburse up to \$980,000 to the City of Eureka for tidal wetlands restoration and public access improvements in and adjacent to the Elk River Estuary on Humboldt Bay in Humboldt County (Exhibits 1 and 2).

LOCATION: Eureka, Humboldt County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

- Exhibit 1: [Project Location](#)
 - Exhibit 2: [Site photographs](#)
 - Exhibit 3: [Elk River Estuary Restoration Staff Recommendation dated November 30, 2017](#)
 - Exhibit 4: [65% designs](#)
 - Exhibit 5: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220, 31113, and 31400 et seq. of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed nine hundred eighty thousand dollars (\$980,000), to be reimbursed by a grant from the U.S. Fish and Wildlife Service (USFWS), to the City of Eureka (City) for implementation of the Elk River Estuary/Inter-Tidal Wetlands Enhancement and Coastal Access Project on Humboldt Bay, which may be implemented in two phases.

This authorization is subject to the following conditions:

1. Prior to disbursement of funds for the project or for a specific phase of the project, the City shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following items, either for the project overall or for the specific phase of the project for which funds are to be disbursed:

- a. A detailed work program, schedule, and budget.
 - b. Names and qualifications of any contractors to be retained in carrying out the project.
 - c. A plan for acknowledgement of Conservancy and USFWS funding.
 - d. Evidence that all permits and approvals required to implement the project have been obtained.
 - e. Evidence that all necessary funds for implementation of the project have been obtained.
2. Prior to commencing the project, the City and the Conservancy shall enter into and record an agreement sufficient to protect the public interest in the improvements for the life of the project.
 3. In addition, to the extent appropriate, the City shall incorporate the guidelines of the Conservancy's 'Standards and Recommendations for Accessway Location and Development' and the requirements of all applicable federal and state laws governing barrier-free access for persons with disabilities into the project.
 4. In implementing the project, the City shall ensure compliance with:
 - a. All applicable mitigation measures and monitoring and reporting requirements for the project that are identified in the Initial Study-Mitigated Negative Declaration ("IS-MND") and the Mitigation Monitoring and Reporting Plan ("MMRP"), or in any permits, approvals or additional environmental documentation required for the project.
 - b. All requirements of the USFWS grant, including compliance with the National Environmental Policy Act."

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 proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection projects, and is consistent with Chapter 9 of Division 21 of the Public Resources Code, regarding a system of public accessways;
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines;
3. The proposed project serves greater than local needs."

PROJECT SUMMARY:

Staff recommends the disbursement of up to \$980,000 to the City of Eureka (City) for implementation of the Elk River Estuary/Inter-Tidal Wetlands Enhancement and Coastal Access Project on Humboldt Bay (Exhibits 1 and 2). The project consists of final design work, preparation of construction bid documents, and construction. Funds for this authorization derive

from a grant to the Conservancy of \$1,000,000 from the US Fish and Wildlife Service (USFWS) National Coastal Wetlands Conservation Program specifically for this project. The remaining \$20,000 in USFWS grant funds will be used to pay for Conservancy staff project management costs. The project will restore approximately 113 acres of tidal marsh complex and construct one mile of associated coastal trail and a boating access point. The project will improve critical habitat for threatened salmonids and other fish and wildlife; protect Highway 101, a wastewater transmission line, and an electrical power line from flooding and storms; sequester carbon to mitigate the impacts of climate change; and expand passive recreational opportunities and coastal access.

Tidal marsh is a threatened habitat type in Humboldt Bay and throughout the United States. Tidal marsh contributes nutrients to the estuarine ecosystem; provides important habitat for fish, invertebrates, shorebirds, and other waterbirds; filters out pollutants; sequesters carbon, and buffers adjacent lands from flood tides and storms. Protection from flooding and storms is becoming more important due to sea level rise. Because of extensive diking, the Humboldt Bay estuary has sustained significant losses of salt marsh, primary productivity, and natural hydrology, resulting in changes to sedimentation, deposition, currents, habitat for estuarine plants and wildlife, and water quality. The Elk River estuary provides a critical opportunity to regain lost salt marsh around Humboldt Bay, but the estuary is currently severely limited in area and habitat diversity. It has become essentially a three-mile long, linear diked slough channel with very few tidal wetlands areas. After restoration, the Elk River estuary and adjacent coastal wetlands will provide approximately 113 acres of critical winter refugia and rearing habitat for threatened Coho salmon, Chinook salmon, steelhead trout, and coastal cutthroat trout. All four species use the main stem of Elk River and many of its tributaries for adult and juvenile migration, rearing, and spawning. Restored and enhanced wetlands will also provide habitat for the endangered tidewater goby, Dungeness crab and many other species of concern including eelgrass, waterfowl and shorebirds. Enhancement of the estuary will complement enhancement projects currently in the implementation stage upstream on both Elk River and Martin Slough.

The project area is owned by the City, and consists of a 26-acre salt marsh on the north bank of the Elk River (Area 1) and 97 acres of seasonal freshwater wetlands on the south bank of the Elk River (Area 2).

Area 1 is comprised primarily of a diked tidal marsh dominated by invasive *Spartina*. The project will remove a double tidegate, excavate tidal channels to increase the tidal prism and restore eelgrass, remove invasive *Spartina*, and enhance native salt and freshwater marsh and riparian habitat through active and passive revegetation. An abandoned railroad grade will be modified to create new freshwater wetlands that will clean storm water prior to overflow into the primary tidal channels once the desired water elevation is reached. Excavated material will be utilized to fill in-board ditches to focus the tidal prism in the main channels and reduce sedimentation of these channels. Public access via land and water will be created at the newly enhanced site through the development of a 0.2-mile segment of the California Coastal Trail on the western edge and a kayak launch on the northern side of Area 1. Resulting habitats will include approximately: 1 acre of eelgrass, 2 acres of open water, 18.5 acres of salt marsh (including 0.7 acres of freshwater wetlands), 4.1 acres of riparian, and 0.6 acres of trail.

Area 2 is comprised primarily of diked historic tidelands dominated by non-native grasses and is used for cattle pasture. The project will breach the dike between Elk River and Area 2 at multiple

locations and excavate a tidal channel network to restore tidal influence. Eelgrass beds, salt marsh, and riparian habitat will be restored in Area 2, using similar methods to those described above for Area 1. Excavated material will be used to create a living shoreline on both the east and west sides of the project area. The living shoreline will help to protect critical infrastructure (sewer line, power and communication line, and State Highway 101) located in the Project area. A 0.8-mile segment of the California Coastal Trail with interpretive signage will be constructed on the western living shoreline. An access road will be constructed on the eastern living shoreline to maintain access for utility companies. Resulting habitats include approximately: 8 acres of eelgrass, 11 acres of open water, 61 acres of salt marsh, 8.7 acres of riparian, and 8 acres of trail/roads.

The project will also provide for the protection from sea level rise for Highway 101, an electrical power line adjacent to the highway, and a wastewater transmission line adjacent to the railroad berm. The stretch of Highway 101 adjacent to the project area is lower in elevation than adjacent stretches of highway and is vulnerable to flooding (Exhibit 1). If current shoreline structures were to be breached, the land adjacent to Highway 101 in the project area would be inundated by tidewater, Highway 101 would become a causeway (a roadway elevated above a body of water without under-roadway flow), and road embankments would be vulnerable to erosion. The flooding risk will grow more severe as sea level rise progresses. Current modeling indicates that with 0.5 meters of sea level rise, the highway road surface in the planning area will be flooded during the 100 year flood if existing shoreline structures, such as the railroad grade, are breached and with 1.0 meter of sea level rise, 57 percent of the dikes and 64 percent of the railroad grade will be overtopped and the highway road surface in the planning area would be tidally inundated. The project will facilitate a tidal marsh restoration project that would reduce flooding impacts to Highway 101 by increasing flood storage and sediment transport, and absorbing wave energy. The project will also construct a tidal ridge that will support marsh vegetation on its slopes and will provide protection from waves and flooding for the highway.

The City is qualified to carry out this project. With a previous Conservancy Prop 1 grant, the City carried out Phase I of this project, producing 30% designs for the restoration and preparing the IS/MND. The City is currently carrying out Phase II (final design and permitting) of the project and has produced 65% designs. The City owns a number of coastal wetland areas, and manages them for open space, wildlife habitat, and public access. The City recently implemented tidal marsh enhancement actions for a 40-acre wetland (PALCO Marsh) north of the Bayshore Mall. In addition, the City is in the process of sea level rise adaptation planning as part of its General Plan update, utilizing funding from the California Ocean Protection Council.

Site Description: The Elk River watershed, located in the coastal temperate forest of Humboldt County, California, is the largest freshwater tributary to Humboldt Bay. Restoration of the Elk River watershed is extremely important to Coho recovery. The Humboldt Bay Coho population is one of the 17 core populations identified in the Southern Oregon Northern California Coast Coho Salmon Evolutionarily Significant Unit Recovery Plan (2012) as most likely to become viable quickly in response to recovery efforts. This core population is currently at a high risk of extinction, with an estimated rate of population decline exceeding ten percent per year.

The project area consists of approximately 123 acres of City-owned property on the north and south banks of the Elk River in the Elk River Estuary (Exhibit 1).

Area 1: The City owns this 26-acre parcel, which has an earthen unfortified dike along Elk River Slough with two top-hinged tide gates (Exhibit 2). The tide gates leak and have created a muted tide cycle supporting salt marsh habitat dominated by invasive *Spartina* and exposed tidal channels. The tidal channels currently do not support eelgrass. The three sides of this area are occupied by a paved access road and trailhead/commuter parking area and U.S. Highway 101, the City’s Hikshari’ Trail, and the North Coast Railroad Authority’s railroad grade.

Area 2: The City owns this 97-acre parcel that is currently used to graze livestock. A naturally occurring sand ridge parallel to Elk River Slough, as well as U.S. Highway 101 to the east, and the NCRA railroad to the west, prevent tidal inundation of this low-lying area that ranges in elevation from 3 to 7 feet (NAVD 88). To the south of Area 2 is private property under a wetlands conservation easement held by the Natural Resources Conservation Service. Vehicular access is from the Highway 101 Humboldt Hill off ramp and Tooby Road. A Humboldt Community Services District forced main sewer line runs parallel to the railroad grade from King Salmon to the Elk River Wastewater Treatment Plant on the north bank of Elk River. A Pacific Gas and Electric electrical power line runs parallel to the highway on the eastern edge of Area 2. The natural drainage pattern in this area has been altered and consists of a series of ditches that convey stormwater to a culvert and tide gate under Highway 101 that drains this property to Elk River.

The Elk River Wildlife Sanctuary, owned by the City of Eureka, and the Elk River Wildlife Area, owned by the California Department of Fish and Wildlife, are located adjacent to the planning area at the mouth of the Elk River and together comprise nearly 400 acres.

Project History: The Conservancy has supported restoration and public access in the Elk River watershed for more than a decade. The Conservancy granted \$350,000 to the City in March 2016 for the preliminary planning and feasibility studies for this project. The Conservancy granted an additional \$175,000 to the City for final planning and design on November 30, 2017. The Conservancy granted \$100,000 to the Redwood Community Action Agency in 2002 to prepare the Martin Slough Enhancement Plan, which was completed in 2005. In 2011, the Conservancy funded the acquisition of a key parcel at the mouth of Martin Slough, a tributary to the Elk River, and also provided a grant to the City to construct the Hikshari’ trail along the river where it enters Humboldt Bay. In 2013, the Conservancy granted \$100,000 to California Trout to support an assessment and planning effort focused on the upper watershed. The Conservancy has also supported coastal wetlands restoration projects on Humboldt Bay for many years, including a \$1,450,000 grant to the Humboldt County Resource Conservation District in 2015 to restore tidal marsh in the White Slough Unit of the Humboldt Bay National Wildlife Refuge, located approximately 1.3 miles south of the project area.

The City worked with the Conservancy to submit a proposal for this project to the USFWS in June 2017. The USFWS awarded the grant to the Conservancy in July 2018.

PROJECT FINANCING

Coastal Conservancy (USFWS NCWC grant)	\$980,000
Humboldt Baykeeper	\$27,000
Ocean Protection Council	\$1,038,853

Pending Grants	\$2,920,147
Project Total	\$4,966,000

The source of funding for the proposed authorization is a USFWS National Coastal Wetlands Conservation Grant awarded to the Conservancy for the project. The USFWS has awarded \$1,000,000 to the Conservancy for project implementation. Approximately \$980,000 of the grant will support project implementation directly, while the remaining \$20,000 will pay for Conservancy staff costs.

On July 25, 2018, the Ocean Protection Council authorized \$1,038,853 for the project. The City has applied to a number of other funding programs for implementation funding, including the California Natural Resources Agency’s Environmental Enhancement and Mitigation Program, the California Department of Fish and Wildlife’s Proposition 1 program, the Conservancy’s Proposition 1 program, and the Wildlife Conservation Board’s Climate Adaptation Program. Decisions on those grant proposals are expected by January 2019. The USFWS construction funds will not be spent until all implementation funds are confirmed.

The City of Eureka, Humboldt Trails Council, Redwood Community Action Agency, California Conservation Corps, and Humboldt State University will provide significant in-kind contributions of staff and volunteer time for trail design, project management, revegetation, and education programs. The value of these in-kind contributions is expected to be over \$15,000.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is undertaken pursuant to Chapters 5.5 and 9 of Division 21 of the Public Resources Code (Section 31220 and 31400 et seq.) and pursuant to Section 31113, as follows:

Pursuant to Section 31220(a) and 31220(b)(2), the Conservancy may award grants to protect and restore coastal habitats if the project “protects or restores fish and wildlife habitat within coastal and marine waters and coastal watersheds.” Consistent with this section, the proposed project will restore and enhance tidal marshes that provide habitat for fish and wildlife, including listed species, in Humboldt Bay.

Pursuant to Section 31220(b)(4), the Conservancy may award grants to protect and restore coastal habitats if the project “contributes to the reestablishment of natural erosion and sediment cycles.” Consistent with this section, the proposed project will restore sediment accretion in tidal marshes in the Elk River, enhancing the ability of those marshes to keep pace with sea level rise.

Pursuant to Section 31220(b)(6), the Conservancy may award grants to protect and restore coastal habitats if the project “restores coastal wetlands, riparian areas, floodplains, and other sensitive watershed lands.” Consistent with this section, the proposed project will restore tidal marshes and riparian areas in the Elk River Estuary.

Pursuant to Section 31220(b)(8), the Conservancy may award grants to protect and restore coastal habitats if the project “provides for public access compatible with resource protection and restoration objectives.” Consistent with this section, the proposed project includes the construction of a trail and non-motorized boat ramp to expand public access in the project area.

The Conservancy has consulted with the State Water Resources Control Board in the development of the project to ensure consistency with Chapter 3 of Division 20.4 of the Public Resources Code regarding water quality. (See Exhibit 5, Project Letters) Section 31220(c) states that “projects funded pursuant to this section shall include a monitoring and evaluation component.” A monitoring plan is being prepared as part of the final design phase of the overall project. The proposed project is consistent with applicable and relevant Integrated Regional Water Management programs, local watershed management plans, and water quality control plans adopted by the state or regional water quality control boards, as discussed in the “Required Criteria” and “Consistency with Local Watershed Management Plan/State Water Quality Plan” sections below.

The project is consistent with Section 31400.1, which allows the Conservancy to provide grants to public agencies to acquire and develop lands for public access purposes. As authorized by this section, the Conservancy would provide funds to allow the City, a public agency, to develop a trail and associated facilities providing access from the existing Hikshari’ Trail south for one mile along Humboldt Bay. As also required by this section, the development of public access on that property will serve more than local needs, as detailed in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section, below, under “Required Criteria”, subsection “6. Greater-than-local interest”.

Section 31400.2 states that the amount of funding provided by the Conservancy shall be determined by the total amount of funding available for coastal public accessway projects, the fiscal resources of the applicant, the urgency of the project relative to other eligible projects, and the application of factors prescribed by the Conservancy for the purpose of determining project eligibility and priority in order to more effectively carry out the provisions of the division. Consistent with Section 31400.2, the amount of funding to be provided by the Conservancy was determined based on the project’s high public benefit and the limited resources of the applicant, as well as the high degree of leveraging of Conservancy funds by other funds secured for the project by the applicant.

Section 31400.3 states that the Conservancy may provide such assistance as is required to aid public agencies in establishing a system of public accessways. Consistent with this section, the Conservancy would provide funds to the City, a public agency, required to provide public access to Humboldt Bay in the project area by means of a trail and associated facilities.

Above all, this project carries out the requirements of sections 31408 and 31409, which mandate that the Conservancy coordinate the development of the California Coastal Trail and authorizes the award of grants to carry out that purpose.

This project is also consistent with Section 31113, which provides that the Conservancy may undertake projects and award grants for projects that “reduce greenhouse gas emissions, address extreme weather events, sea level rise, storm surge, beach and bluff erosion, salt water intrusion, flooding and other coastal hazards that threaten coastal communities, infrastructure and natural resources.” This project would protect coastal wetlands by allowing for sediment accretion and provide protection for the stretch of Highway 101 and other critical infrastructure adjacent to the project area from erosion, sea level rise and storm surge impacts.

CONSISTENCY WITH CONSERVANCY’S ACCESS PROGRAM STANDARDS:

The project will construct one mile of California Coastal Trail. The coastal trail segment will be consistent with the Conservancy's Access Program Standards.

Standard No. 1, Protect Public and Coastal Resources: The coastal trail segment is located where it can safely accommodate public use. The segment links to the existing Hikshari' Trail, a part of the Eureka Waterfront Trail, with available parking at the Pond Road Park and Ride. The trail construction will be consistent with the tidal wetlands restoration, minimizing the alteration of natural landforms. It will be located adjacent to the abandoned railroad berm and on the tidal ridge to be constructed as part of the project. This location will provide sufficient elevation to minimize danger from flooding and storms. There are no private residences in the immediate vicinity of the trail, so there will be no impact to privacy. The trail is designed to avoid impacts to environmentally sensitive habitats and agricultural areas, as it is located in the existing railroad alignment and along an existing maintenance road in Area 2, both of which are already disturbed.

Standard No. 2, Correct Hazards: The trail will not increase hazards to public safety, as discussed above.

Standard No. 3, Access Easements: Construction and Location: The trail will be located primarily (0.8 miles of one mile) on City property. A portion of the trail will be located on property owned by the North Coast Railroad Authority (NCRA). The City has permission to construct and operate the trail on NCRA property under the terms of a license agreement between the City and NCRA with a term extending until 2040. The trail will be suitable for wheelchair access.

Standard No. 4, Privacy: The accessway is located in an open space area and will not intrude on the privacy of any residences.

Standard No. 5, Environmentally Sensitive Areas: The trail will be constructed on disturbed areas adjacent to the railroad berm and along an existing access road. Trail construction will avoid environmentally sensitive areas.

Standard No. 8, Trails: The project will construct a 12-foot wide trail on property owned by the City or where the City holds an easement from the North Coast Railroad Authority. There are no residences within 1,000 ft. of the trail. The trail will connect the Hikshari' Trail at the Elk River Bridge with the Elk River Spit and with the Tooby Road exit of Highway 101. The Elk River Bridge surface will be modified to make it suitable as a multi-use trail.

Standard No. 10, Coastal Bikeways: The project will construct a multi-use path, which will meet the standards for a Class I Bikeway, or bike path. It will be 12-feet wide and for the exclusive use of cyclists and pedestrians.

Standard No. 12, Support Facilities: The project will include support facilities that make it easier for people to use and maintain the trail, including a paved parking lot, and trailhead at Tooby Road.

Standard No. 13, Barrier-Free Access: The trail will be wheelchair accessible.

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

Consistent with **Goal 1, Objective D** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will construct a new one-mile segment of the California Coastal Trail.

Consistent with **Goal 2, Objective A** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will expand opportunities for access for people with disabilities along the coast by constructing one mile of wheelchair accessible trail along Humboldt Bay.

Consistent with **Goal 2, Objective B** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will open a coastal area that is currently closed to public use.

Consistent with **Goal 6, Objective B** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will restore and enhance coastal habitats, including 92 acres of coastal wetlands and intertidal areas.

Consistent with **Goal 6, Objective D** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will enhance coastal floodplains, including 92 acres of coastal wetlands along the Elk River.

Consistent with **Goal 8, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project would implement a project to increase resilience to sea level rise and flooding using a nature-based approach.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed 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 will help implement two priority actions identified in the 2014 *California Water Action Plan* (CWAP):
Action 4: Protect and Restore Important Ecosystems. The project will implement this action by restoring tidal marsh in an estuary that provides valuable fish and wildlife habitat.
Action 8: Increase Flood Protection. The CWAP calls for action to address flooding threats due to aging levee infrastructure and sea level rise due to climate change. The project will implement this action by restoring tidal marsh in an area currently protected by severely eroded dikes, providing protection for a vulnerable stretch of Highway 101 from flooding and storm damage that will increase with sea level rise.

The project will implement a Management Measure identified in the *California Nonpoint Source Pollution Control Program* prepared by the State Water Resources Control Board in 2000: MM6B- Restoration of Wetlands and Riparian Areas.

The project will further the following statewide goals and conservation strategies of the *California Wildlife Action Plan* (Wildlife Plan), prepared by the California Department of Fish and Wildlife in 2015:

Goal 3.3 (Hydrological Regime): Maintain or improve hydrological regimes vital for sustaining ecosystems (including riverine, lacustrine, and estuarine hydrodynamics). (pg. 4-3)

The project will help implement the following conservation strategies identified by the Wildlife Plan for anadromous salmonids in coastal estuaries on the North Coast:

Restore and enhance estuary habitat, connectivity, and ecological processes essential for anadromous species; and

Establish estuary function and structure that will allow anadromous migration and be responsive to climate change. (pg. 6-19)

The project would help implement the following tasks identified in the *Recovery Strategy for California Coho Salmon*, prepared by CDFW in 2004:

- Eureka Plain Task 2: Work with agencies and landowners, to re-establish estuarine function.
- Eureka Plain Task 10: In cooperation with willing landowners, restore and maintain historical tidal areas, backwater channels and salt marsh.
- Rangewide-Estuaries Task 2: Restore estuarine and associated wetland ecosystems.

The project would help implement the following task identified in the 2018 Update of the *Safeguarding California Plan*, prepared by the California Natural Resources Agency in 2018:

- O-2: Design and implement nature-based projects to protect and enhance the adaptive capacity of coastal and marine ecosystems, including beaches and wetlands.

4. **Support of the public:** The project enjoys broad public support. See Exhibit 4 for Project Letters.
5. **Location:** The proposed project would be located within the coastal zone of the City of Eureka and Humboldt County.
6. **Need:** A project of this magnitude requires funding from multiple sources. The Conservancy's initial investment in project planning and design, and the USFWS grant which builds from those efforts, are serving as the catalyst to attract the remaining necessary construction funds.
7. **Greater-than-local interest:** The proposed project will lead to the restoration of tidal marsh in Humboldt Bay, which provides plant and wildlife habitat of regional and statewide importance for resident and migratory species. Humboldt Bay is a popular tourist destination, and the coastal trail segment will serve visitors as well as locals.

8. **Sea level rise vulnerability:** Project planning incorporates sea level rise modeling for Humboldt Bay conducted as part of the 2015 Humboldt Bay Sea Level Rise Adaptation Plan, funded by the Conservancy. The project will implement a restoration design that will increase resiliency to sea level rise by allowing tidal marshes to accrete sediment to keep pace with sea level rise, and by providing protection for Highway 101 and an important wastewater transmission line and electrical power line from inundation. In addition, the project designs include high elevation marsh and a gently sloping marsh plain, allowing for marsh migration to maximize the time period in which marshes will persist in the face of sea level rise.

Additional Criteria

9. **Urgency:** Restoration of the project area is urgent because some of the dikes protecting the project area are at high risk of failure. If sections of the dike fail, restoration of tidal prism could occur in a way that would be problematic, making the project more costly or infeasible.
10. **Resolution of more than one issue:** The project would facilitate the restoration of valuable fish and wildlife habitat and the protection of Highway 101 and other infrastructure from sea level rise.
11. **Leverage:** See the “Project Financing” section above.
12. **Innovation:** The project will employ nature-based solutions to create living shorelines as protective features rather than standard shoreline fortification practices.
13. **Readiness:** The City and its partners have completed 65% designs and submitted permit applications. They are ready to complete the final designs as soon as funds are available, and anticipate securing the necessary funds to proceed to implementation by summer 2019.
14. **Realization of prior Conservancy goals:** “See “Project History” above.”
15. **Return to Conservancy:** See the “Project Financing” section above.
16. **Cooperation:** Phase I of the project convened a stakeholder and technical advisory group including private landowners, non-profits, and local, state, and federal agencies. Phase II involved continued engagement with regulatory agencies and the public during the final design and permitting phase. The construction phase will involve monetary contributions from Humboldt Baykeeper, the USFWS, and the OPC, as well as in-kind contributions from the Humboldt Trail Stewards, Humboldt State University, California Conservation Corps, and Redwood Community Action Agency (see “Project Financing” section above.)
17. **Minimization of greenhouse gas emissions:** Project design will include measures to avoid or minimize greenhouse gas emissions to the extent feasible and consistent with the project objectives.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The planning area is located in the City’s Local Coastal Program (LCP) area. The City’s 1997 General Plan Policy Document (“GPPD”), which was certified by the Coastal Commission as an update to the City’s LCP in 1999, states that the City “shall maintain and, where feasible, restore

biological productivity and the quality of coastal waters, streams, wetlands, and estuaries...” (GPPD Section 6.A.1, pg. B-14). Restoration and enhancement of coastal wetlands in the planning area is consistent with the policy cited above.

**CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/
STATE WATER QUALITY CONTROL PLAN:**

The project is consistent with, and furthers the goals of, the *Humboldt Bay Management Plan* (HBMP), prepared in May 2007 by the Harbor District. The HBMP expresses support for the goals of the proposed project in the following statement:

Salt marshes in the Bay have been reduced substantially in area with respect to their pre-settlement extent, and they continue to be lost. In addition, the extant salt marshes are degraded by the dominant presence of dense-flowered cordgrass. The benefits of shoreline-protecting salt marshes for stabilizing sediment and protecting shoreline structures from wave impacts combine with a conservation focus on maintaining or restoring salt marshes to make the restoration or enhancement of salt marshes an important concern for the District. (HBMP, p.129)

The proposed project is consistent with Objective CAS-3: “Maintain and enhance habitat for sensitive species” (HBMP, p.204), in that it will lead to the restoration of habitat for Point Reyes bird’s beak and Humboldt Bay Owls Clover, both listed as endangered by the California Native Plant Society.

The project is consistent with, and furthers the goals of, the Humboldt Bay Watershed Salmon and Steelhead Conservation (HBSSC) Plan, prepared by the Humboldt Bay Watershed Advisory Committee in March 2005. The HBSSC Plan highlights the importance of the Bay’s tidal marshlands in supporting salmon populations, as well as diverse communities of fish and wildlife (p.11). The HBSSC Plan notes that estuarine habitat is necessary for the survival of salmon and that this habitat “has been significantly reduced by construction of levees and tidegates, and placement of fill” (HBSSC Plan, p.viii). One of the stated goals of the HBSSC Plan is to “Maintain and restore estuary processes that benefit salmonids” (HBSSC Plan, p.ix). The proposed project would further this goal by restoring tidal marshes, as discussed above in the “Project Summary” section.

The proposed project is consistent with the Water Quality Control Plan for the North Coast (adopted by the Regional Water Quality Control Board North Coast Region in 1988 and last updated in 2007) in that it will enhance wildlife habitat, habitat for rare, threatened and endangered species, and estuarine habitat in Humboldt Bay. The Water Quality Control Plan for the North Coast designates wildlife habitat, rare, threatened, and endangered species habitat, and estuarine habitat as beneficial uses of Humboldt Bay (Water Quality Control Plan for the North Coast, Table 2-1, pp. 2-8 to 2-12).

COMPLIANCE WITH CEQA:

The City of Eureka, as lead agency for the project under the California Environmental Quality Act (CEQA), adopted the *Initial Study/Mitigated Negative Declaration - Elk River Estuary/Inter-tidal Wetlands Enhancement and Coastal Access Project* (“IS/MND”) and a Mitigation Monitoring and Reporting Plan (“MMRP”) on November 13, 2017. At its November

30, 2017 meeting, the Conservancy reviewed the IS/MND and MMRP, and found that the project, as modified by incorporation of the mitigation measures identified in the IS/MND, will avoid, reduce, or mitigate all of the possible significant environmental effects of the project to a level that is less than significant (Exhibit 3). The Conservancy found that, based on the record as a whole, there is no substantial evidence that the project, as mitigated, will have a significant effect on the environment. Conservancy staff filed a Notice of Determination on December 1, 2017. There have been no changes or new information since November 30, 2017 that trigger the need for additional CEQA review of the project pursuant to 14 Cal. Code Regs. Section 15162. Accordingly, no further environmental review is required.