



COUNTY OF HUMBOLDT

For the meeting of: 1/9/2024

File #: 23-1613

To: Board of Supervisors

From: Public Works

Agenda Section: Consent

Vote Requirement: Majority

SUBJECT:

Grant Agreement for the Humboldt Bay Living Shoreline Planning Project and Request for Proposals Regarding Professional Planning and Technical Services

RECOMMENDATION(S):

That the Board of Supervisors:

1. Approve the attached resolution authorizing acceptance of grant funding from the State Coastal Conservancy for the Humboldt Bay Living Shoreline Planning Project;
2. Approve, and authorize the Department of Public Works - Environmental Services Division to issue, the attached request for proposals regarding professional planning and technical services to support the Humboldt Bay Living Shoreline Planning Project; and
3. Direct the Department of Public Works - Environmental Services Division to return to the Board with a professional services agreement regarding the provision of professional planning and technical services to support the Humboldt Bay Living Shoreline Planning Project once the review, evaluation, contract negotiation and approval processes set forth in the attached request for proposals have been completed.

SOURCE OF FUNDING:

Water Management (1100251)

DISCUSSION:

In September 2022, the Department of Public Works completed an initial study evaluating the feasibility of restoring salt marsh along the Humboldt Bay shoreline adjacent to a vulnerable segment of Highway 101 and the future Humboldt Bay Trail between Eureka and Arcata. The purpose of the study was to develop the preliminary design for a multi-objective project that would utilize natural landforms and ecological processes to improve resilience to flooding hazards along the Eureka-Arcata transportation corridor. Funding for this initial study was provided by the National Fish and Wildlife Foundation and Ocean Protection Council. The final report is available here:

<https://humboldt.gov/2487/Sea-Level-Rise>.

Salt marsh is a type of coastal wetland that is covered with a thick mat of vegetation and becomes inundated with water on a regular basis at higher tides. Salt marsh occupies a relatively narrow band of elevation in the upper intertidal zone in areas where there is sufficient sediment supply and a relatively low energy environment. Salt marsh has high ecological value by providing habitat for sensitive plant species, invertebrates, larval stages of fish species, and roosting and foraging areas for birds. Salt marsh also provides protection to shoreline resources by reducing wave energy and providing protection from flooding and erosion. Restoring salt marsh has been identified as a potential adaptation strategy for using “natural shoreline infrastructure” (also known as living shorelines or nature-based solutions) to respond to the hazards associated with sea level rise.

Prior to development of the railroad and Highway 101, salt marsh was more abundant along the Humboldt Bay shoreline between the Brainard mill site and the Bracut Industrial Park. Currently, salt marsh exists along this shoreline segment only in small, isolated patches. The shoreline has received significant erosion associated with wind waves and tidal currents because salt marsh is largely absent, so it does not provide a natural buffer. The Humboldt Bay Trail South project will repair some of the erosion damage and raise the elevation of the rail prism to stabilize the shoreline and buy time for consideration of further adaptation measures. The California Department of Transportation (Caltrans) is currently developing a Comprehensive Adaptation and Implementation Plan for the Eureka-Arcata Highway 101 corridor which may include living shoreline elements.

The initial feasibility study completed by Public Works in September 2022 concluded that the project concept along the study area is technically feasible. However, further design and analysis of the two (2) basic options, active or passive salt marsh creation, are needed before a complete project description can be developed for environmental review and to inform the decision whether or not to proceed with project implementation. Hydrodynamic and sediment transport modeling, geotechnical evaluation, and sediment sampling are needed to fill data gaps. Issues such as identifying a suitable source of materials, material handling and transport, the potential for using dredged sediment, construction phasing, ensuring effective vegetation management, and expectations for ongoing stewardship and maintenance need to be investigated. In addition, further discussions are needed with permitting agencies and stakeholders regarding the benefits, tradeoffs, and risks of potential conversion of existing mudflats to salt marsh.

In April 2023, the State Coastal Conservancy authorized a disbursement of up to \$750,000 to Humboldt County for the Humboldt Bay Living Shoreline Planning Project which would include completing technical analyses, preliminary designs, environmental review under the California Environmental Quality Act, intermediate design plans, and permit applications. Attachment 1 provides the grant agreement and Attachment 2 contains a resolution authorizing acceptance of grant funding for the project.

Professional planning and technical services are needed to assist with implementing the planning project. Attachment 3 contains a request for proposals in accordance with the Humboldt County Purchasing Policy. Public Works will bring a proposed professional services agreement with the selected firm to the Board for review and approval once the staff review, evaluation, selection, contract

negotiation, and approval processes set forth in the attached request for proposals have been completed.

Therefore, Public Works recommends that the Board approve the attached resolution authorizing execution of the grant agreement. In addition, Public Works recommends that the Board approve, and authorize issuance of, the attached request for proposals.

FINANCIAL IMPACT:

Expenditures (Fund, Budget Unit)	FY23-24	FY24-25 Projected	FY25-26 Projected
Budgeted Expenses	\$150,000	\$450,000	\$150,000
Total Expenditures	\$150,000	\$450,000	\$150,000
Funding Sources (Fund, Budget Unit)	FY23-24 Adopted	FY24-25 Projected*	FY25-26 Projected*
State/Federal Funds	\$150,000	\$450,000	\$150,000
Total Funding Sources	\$150,000	\$450,000	\$150,000

**Projected amounts are estimates and are subject to change.*

Narrative Explanation of Financial Impact:

The grant from the State Coastal Conservancy will provide up to \$750,000 for the project. These funds have been incorporated into the adopted fiscal year (FY) 2023-24 in the Water Management budget, revenue 1100251-525084 and expenditure 1100251-2118. The grant will reimburse Public Works for actual expenditures with invoicing on a quarterly basis. No match or cost-share is required. The project will begin in FY 2023-24 and extend through FY 2024-25 and 2025-26. The project is a planning study only and does not involve construction or the incurrence of maintenance responsibilities. There is no impact to the General Fund.

STAFFING IMPACT:

Narrative Explanation of Staffing Impact:

Approving the grant agreement with the State Coastal Conservancy and agreeing to conduct the planning study will neither require nor result in the addition or deletion of staff positions. Existing staff will administer the grant agreement, direct and coordinate the work to be performed by the selected consultant, and be actively involved with stakeholder engagement. The project is a significant commitment of staff time but is not expected to impact other commitments and duties.

STRATEGIC FRAMEWORK:

This action supports the following areas of your Board’s Strategic Framework.

Core Roles: Strengthen climate change resiliency

New Initiatives: Manage our resources to ensure sustainability of services

Strategic Plan: 2.4 - Foster healthy forests, wildlife, and watersheds, thereby creating healthy fish population, through responsible management of our forest lands and watersheds

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OTHER AGENCY INVOLVEMENT:

State Coastal Conservancy

ALTERNATIVES TO STAFF RECOMMENDATIONS:

Board discretion.

ATTACHMENTS:

- 1 Grant Agreement No. 23-069
- 2 Resolution
- 3 Request for Proposals No. 2023-251011

PREVIOUS ACTION/REFERRAL:

Board Order No.: C-15

Meeting of: June 16, 2020

File No.: 20-663