

COASTAL CONSERVANCY

Staff Recommendation
November 30, 2023

COASTAL RESILIENCE PLANNING FOR FRONTLINE COMMUNITIES ON HUMBOLDT BAY

Project No. 23-079-01
Project Manager: Fanny Yang

RECOMMENDED ACTION: Authorization to disburse up to \$693,700 to the County of Humboldt to develop a coastal resilience planning framework, conduct community and tribal engagement, complete a sea level rise and flood vulnerability assessment and an adaptation feasibility analysis, and prepare conceptual designs and preliminary engineering plans for sea level rise adaptation projects for the communities of King Salmon and Fields Landing in Humboldt County.

LOCATION: King Salmon and Fields Landing, Humboldt County

EXHIBITS

Exhibit 1: [Project Maps](#)

Exhibit 2: [Project Photos](#)

Exhibit 3: [Project Letters](#)

RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed six hundred ninety three thousand seven hundred dollars (\$693,700) to the County of Humboldt ("the grantee") to develop a coastal resilience planning framework, conduct community and tribal engagement, complete a sea level rise and flood vulnerability assessment and an adaptation feasibility analysis, and prepare conceptual designs and preliminary engineering plans for sea level rise adaptation projects for the communities of King Salmon and Fields Landing in Humboldt County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.

Findings:

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

1. The proposed authorization is consistent with Section 31113 of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$693,700 grant to the County of Humboldt for coastal resilience planning work consisting of developing a planning framework, conducting community and tribal engagement, completing a sea level rise and flood vulnerability assessment and an adaptation feasibility analysis, and preparing conceptual designs and preliminary engineering plans for sea level rise adaptation projects for the communities of King Salmon and Fields Landing in Humboldt County (Exhibit 1).

The communities of King Salmon and Fields Landing, located on Humboldt Bay, experience some of the highest recorded rates of relative sea-level rise in California due to geological and tectonic factors that contribute to land subsidence. Their low-lying position along the Bay contributes to numerous nuisance flooding events during the highest tides of the year. King Salmon and Fields Landing are unincorporated, economically disadvantaged communities in Humboldt County and also meet the federal definition of economically distressed communities. The two communities contain numerous residential, recreational, commercial, and cultural assets for the region including a substantial portion of the County's affordable housing stock. These two communities are particularly important in terms of port and waterfront infrastructure and activity. King Salmon has marinas, commercial fishing, charter boats, and the Fisherman's Channel which is maintained by the Humboldt Bay Harbor Recreation and Conservation District (Harbor District). Fields Landing has the Harbor District boat yard, two shipping terminals, a public boat ramp, and commercial fishing. These communities are part of the ancestral territory of the Wiyot People. Descendants of the Wiyot People are members of several area tribes including the Wiyot Tribe, the Bear River Band of the Rohnerville Rancheria Tribe, and Blue Lake Rancheria Tribe. All three tribes play a stewardship role with respect to the resources of Humboldt Bay (known as *Wigi* in Soulatluk, the Wiyot language) and have vested interests in coastal resilience planning outcomes. King Salmon and Fields Landing are home to cultural sites and public infrastructure of importance to Wiyot descendants including gathering areas and boat launch sites. Additionally, members of the tribes may also be residents of these communities.

In 2018, the County completed a preliminary sea level rise (SLR) assessment for these two communities and presented findings to the residents. Findings from this work highlighted the need to (1) better engage with residents of the communities and support their capacity to interact with coastal planning processes; (2) develop more refined vulnerability assessments related to flood and SLR risks; and (3) develop and assess the feasibility of potential adaptation strategies to address both current nuisance flooding and future long-term effects from SLR. The proposed project will build on approaches and methods developed in an adaptation planning effort for the Eureka Slough hydrographic area of Humboldt Bay carried out by the County in 2021 and will facilitate the protection of disadvantaged communities around the Bay from disproportionate impacts due to flooding hazards associated with SLR.

The goal of the proposed project is to support community-based coastal resilience planning in the underserved communities of King Salmon and Fields Landing. The project will use community input to develop feasible adaptation actions to address short- and long-term concerns related to flooding and SLR. The proposed project includes five broad tasks: project management, development of a planning framework, community and tribal engagement, SLR and flood vulnerability assessment, and adaptation feasibility analysis. The planning framework will consist of a planning study to understand existing plans, land use zoning, and applicable regulations that may affect the implementation of future sea level rise adaptation measures, and a final report summarizing these findings. The vulnerability assessment will provide a robust understanding of flood risk based on geomorphic and hydraulic analysis of the two communities. The adaptation feasibility analysis will identify and characterize a range of potential adaptation measures, develop a framework for considering short- and long-term strategies, and confirm suitability of candidate sites in the two communities for sea level rise adaptation projects. SLR adaptation project concepts will emphasize consideration of living shoreline (nature-based) adaptation measures. The project will develop conceptual designs for sea level rise adaptation at eight priority sites and preliminary engineering plans for two of those sites within the communities of King Salmon and Fields Landing for future design and implementation. The two sites will be selected based on community and tribal engagement and consideration of adaptation feasibility analysis findings.

Site Description:

King Salmon is a small unincorporated coastal community and is among the lowest-lying and southernmost residential communities on Humboldt Bay. It is located on the shore of Buhne Point directly across from the entrance to Humboldt Bay. A former fishing village, the community has experienced a tumultuous history of flooding and erosion now compounded by sea level rise. King Salmon consists of a network of tidal canals, which increases the coastal community's exposure to shoreline erosion and tidal-influenced flooding. There are an estimated 190 residential and commercial parcels covering 176 acres. The homes and community members of King Salmon regularly face flooding from rising groundwater.

The community of Fields Landing is located on Humboldt Bay, just south of King Salmon and about 6 miles south of downtown Eureka. The small town had a population of 577 in 2020. It is bordered by three miles of the Humboldt Bay shoreline, of which 1.5 miles are rated highly

vulnerable to sea level rise and flooding. Residential parcels are located inland from the shoreline; a low-lying former salt marsh area connects with the shoreline to the north and south. Fields Landing has an elevated waterfront consisting of mostly abandoned coastal-dependent industrial lands, a bulk cargo dock, a public boat launch facility and a marine repair dry dock. The residential and commercial portion of the community resides on low-elevation former salt marsh, behind the waterfront and railroad grade. During king tides, salt water intrudes through storm drains, flooding surface streets and intersections.

Grant Applicant Qualifications: The County is partnering with Cal Poly Humboldt to work collaboratively on the proposed project. Both the County and Cal Poly Humboldt have extensive experience in administering grant funds and this project will coincide with other projects related to updating the Humboldt Bay Area Plan. The County's Planning and Building Department has a \$20 million grant-funded loan portfolio and has spearheaded similar grant-funded planning projects through a grant from the California Coastal Commission, and various grants from the Coastal Conservancy. Currently, the County's Public Works Department is administering two Conservancy grants, one for the Humboldt Bay Trail South Project and one for the Humboldt Bay Living Shoreline Planning Project. The Cal Poly Humboldt project team will be led by Dr. Laurie Richmond. Dr. Richmond is co-chair of the Cal Poly Humboldt Sea Level Rise Institute and has been Principal Investigator or co-Principal Investigator on over eight grants totaling over \$3.6 million. She has expertise related to engaging communities in conversations related to marine and coastal planning. The project sites are not owned by the County and property ownership will be assessed during the adaptation feasibility analysis process with the aim of identifying critical property owners whose agreement may be needed for future implementation of priority actions.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the "Consistency with Conservancy's Strategic Plan" section below.

2. Project is a good investment of state resources.

The proposed project is a good investment of state resources as it enables a partnership between the County and Cal Poly Humboldt to complete much needed coastal resilience planning for the underserved communities of King Salmon and Fields Landing. The proposed project will increase equity and environmental justice by benefiting underserved frontline communities while facilitating increased community-preparedness and coastal resiliency to future flooding and sea level rise. In addition, the feasibility analysis and vulnerability assessment to be completed under the proposed project will inform future Local Coastal

Program updates in the coastal zone in Humboldt County. The proposed project is feasible and the budget is reasonable.

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

Since completing the preliminary sea level rise assessment in 2018, the County has continued to communicate with the three Tribes whose ancestral territories are within the project area. Informal conversations with Tribal staff members who are part of a network of SLR professionals in the area highlighted continued interest in participating in coastal adaptation efforts and the importance of tribal perspectives of the project areas. The proposed project will include working with and informing the Tribes of the work and progress of the project activities. Tribal concerns will be respected, and ancestral cultural resources within the project area will be protected. The project will be developed with the consideration of tribal perspectives and traditional ecological knowledge. The proposed project includes funding to compensate Tribal representatives for their contributions to the coastal resilience planning process.

4. Project benefits will be sustainable or resilient over the project lifespan.

The proposed project will enhance the viability of future adaptation projects to address flooding and SLR in the communities of King Salmon and Fields Landing through the development of preliminary sea level rise adaptation designs for two sites. The project will have a lifespan of approximately three years, and will include educating these communities about potential future impacts to the area from SLR and promoting community preparedness. This project will not make future climate adaptation more difficult and may allow for other future adaptation actions. The project aligns with statewide sea-level guidance and regulatory agency policies, including the State Agency Sea Level Rise Action Plan, which calls for planning, implementing, and funding nature-based solutions, strategies, and actions to increase coastal resiliency through flood reduction, habitat restoration, and protection of cultural resources and public access infrastructure, especially at the most vulnerable coastal recreational facilities. (Key Action 6.3.) Project objectives will include building coastal resilience partnerships, supporting local leadership and addressing local conditions, strengthening alignment around coastal resiliency, and integrating and prioritizing equity and social justice.

5. Project delivers multiple benefits and significant positive impact.

The proposed project will increase equity and environmental justice by benefiting underserved and frontline communities in King Salmon and Fields Landing. The proposed project will enhance community preparedness and resilience by providing workshops and educational sessions on future flooding events and risks of SLR. The project will focus on building trust and developing strong relationships between the community members and coastal planning agencies. This will improve the quality of future implementation projects. The proposed project provides community benefits such as support for increased civic engagement while benefiting underserved communities by encouraging community-led coastal resilience planning and promoting knowledge-sharing with residents. The engagement-focused portion of the proposed project will increase communication and trust between King Salmon and Fields Landing community members with county government.

6. Project planned with meaningful community engagement and broad community support.

A key aim of the proposed project is to support knowledge-sharing with community members regarding flooding and SLR risk, and to understand and incorporate community values and priorities into flood mitigation and sea-level rise adaptation planning. The project team will seek to design and implement an engagement strategy that is relevant to the unique context of the communities of King Salmon and Fields Landing, and that supports sustained engagement throughout the project and beyond. The goal of the engagement process is to foster the development of clear communication pathways between community members and responsible government entities and support the building of trust.

The project team will work with residents, landowners, business owners, and others connected to the communities of King Salmon and Fields Landing to gather their experiences, concerns, needs, and priorities related to flooding, SLR, and coastal resilience. Approaches to gathering community perspectives could include interviews, surveys, and/or focus groups with residents; providing mailers to residents where they can send in photographs, stories, and feedback; and hosting interactive, knowledge-sharing workshops or events.

The project team will conduct activities to ensure that residents of King Salmon and Fields Landing have the opportunity to provide input on vulnerability assessments and on the development and prioritization of potential adaptation/mitigation responses. This will include the design and implementation of interactive workshops or meetings related to communicating vulnerability assessment findings and seeking input on adaptation planning alternatives.

PROJECT FINANCING

Coastal Conservancy	\$693,700
Cal Poly Humboldt National Science Foundation Grant	\$75,000
Project Total	\$768,700

Conservancy funding for the project is anticipated to come from a Fiscal Year 2022/23 appropriation from the Greenhouse Gas Reduction Fund (GGRF) to the Conservancy for “urgent sea-level rise adaptation and coastal resilience needs” (Budget Act of 2022, SB 154 as amended by AB 178, Chapter 45 and AB 179, Chapter 249, Statutes of 2022, and the Budget Act of 2023, SB 101).

The Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act (Health and Safety Code (“HSC”) Sections 39710 – 39723) requires that GGRF funds be used to (1) facilitate the achievement of reductions of greenhouse gas emissions consistent with the Global Warming Solutions Act of 2006 (HSC Sections 38500 et seq), and (2) to the extent feasible, achieve other co-benefits, such as maximizing economic, environmental and public health benefits and directing investment to disadvantaged communities (HSC Section 39712(b)). The Global Warming Solutions Act of 2006 sets forth certain GGRF funding priorities

(HSC Section 38590.1). The California Air Resources Board (“CARB”) has adopted guidelines that establish program goals that agencies must achieve with their GGRF funds.

Consistent with the CARB 2018 Funding Guidelines, the proposed project will help the Conservancy meet its GGRF program goals because the project will:

- Facilitate greenhouse gas emission reductions (which includes carbon sequestration) and further the purposes of AB 32 and related statutes;
- Benefit Priority Populations (disadvantaged communities, low-income communities, or low-income households);
- Maximize economic, environmental, and public health co-benefits to the State;
- Leverage funds to provide multiple benefits and to maximize benefits; and
- Avoid substantial burdens to disadvantaged communities and low-income communities.

The proposed project will meet these objectives by promoting future nature-based solutions, such as living shorelines, as adaptation measures to sea-level rise and coastal flooding, thereby increasing carbon sequestration and reducing flooding and infrastructure damage resulting in reduced greenhouse gas emissions from remediation and rebuilding. In addition, the project will benefit the communities of King Salmon and Fields Landing, which are economically disadvantaged communities. The project will seek input from the community regarding planning of future coastal resilience adaptation measures, which will reduce potential burdens on these communities. The project will also maximize economic, environmental, and public health co-benefits to the State by increasing community preparedness and resiliency to future flooding and sea level rise and facilitating adaptation measures that contribute to the protection of property and assets, habitats, ecosystem health, and community well-being.

The project will also leverage a \$75,000 grant from the Cal Poly Humboldt National Science Foundation to provide multiple benefits and to maximize benefits. The grant funding is awarded for 5 years and provides financial support for Cal Poly Humboldt students and faculty to engage in coastal hazards research. The funding will support a graduate student researcher and faculty to assist with proposed project activities, particularly those related to developing the coastal resilience planning framework and conducting community and tribal engagement.

Lastly, the proposed project is also consistent with this funding source because it addresses urgent sea level rise adaptation needs to protect communities and natural resources from sea level rise. As discussed above, the communities of King Salmon and Fields Landing experience some of the highest recorded rates of relative sea-level rise in California due to geological and tectonic factors that contribute to land subsidence. Their low-lying position along the Bay contributes to numerous nuisance flooding events during the highest tides of the year and urgent action is needed to enhance the resilience of these coastal communities to sea-level rise and storm surge. Further, as described in this staff recommendation, in selecting this project for a grant, the Conservancy has considered its Strategic Plan, the State Agency Sea Level Rise Action Plan, geographic areas of vulnerability, disadvantaged communities, and opportunities for federal financial support.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The project is consistent with Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which establishes the Climate Ready Program and authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy’s jurisdiction (Section 31113(a)). Sections 31113(b) and 31113(c) authorize the Conservancy to award grants to nonprofit organizations and public agencies to undertake projects that reduce greenhouse gas emissions, address extreme weather events, sea level rise, flooding, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources. The Conservancy, must, to the extent allowed, prioritize projects that maximize public benefits and accomplish one of several purposes, including reducing hazards to harbors and ports.

Consistent with these requirements, the proposed project will develop a coastal resilience planning framework for actions to reduce flood risk and hazards in the communities of King Salmon and Fields Landing, which are both located within the coastal zone and therefore within the Conservancy’s jurisdiction.

Section 31113(d)(1) requires the Conservancy to prioritize projects that use natural infrastructure in coastal communities to help adapt to climate change and projects that provide multiple public benefits, including, but not limited to, protection of communities, natural resources, and recreational opportunities. The proposed project will help develop feasible coastal resilience and adaptation actions to address short- and long-term concerns related to flooding and sea level rise. The proposed project will complete a vulnerability assessment and an adaptation feasibility analysis that will emphasize consideration of living shoreline and other nature-based adaptation measures to protect the King Salmon and Fields Landing communities from flooding hazards. Finally, as discussed in this staff recommendation, the project will provide multiple public benefits including enhancing community preparedness and resilience to future flooding and sea level rise, building trust and developing strong relationships between community members and coastal planning agencies, and helping to inform future coastal resilience planning in the coastal zone for Humboldt County.

CONSISTENCY WITH CONSERVANCY’S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 1.1 Commit Funding to Benefit Systemically Excluded Communities**, the proposed project will fund coastal resilience planning for two economically disadvantaged communities to develop suitable adaptation measures for reducing flood risk and sea level rise impacts.

Consistent with **Goal 1.3 Support Meaningful Engagement by Systemically Excluded Communities**, the proposed project will conduct meaningful engagement with the communities

of King Salmon and Fields Landing, and California Native American Tribes, in the planning and design of future adaptation measures by working with residents, landowners, business owners, and Tribal representatives to understand their concerns, needs, and priorities related to flooding, sea level rise, and coastal resilience.

Consistent with **Goal 4.1 Sea Level Rise Adaptation Projects**, the proposed project will support community-based coastal resilience planning that will lead to the development of feasible adaptation actions to address short- and long-term impacts related to sea level rise and flooding.

Consistent with **Goal 4.3 Multi-benefit Nature-Based Climate Adaptation**, the proposed project will develop nature-based flood mitigation and sea level rise adaptation measures to protect property/assets, habitats and ecosystems, and community well-being.

CEQA COMPLIANCE:

The proposed project consists of coastal resilience planning that includes developing a planning framework, completing a vulnerability assessment and an adaptation feasibility analysis, conducting community and tribal engagement, and preparing conceptual designs and preliminary engineering plans for shoreline adaptation projects. Thus, the proposed project is statutorily exempt from review under CEQA pursuant to Title 14 of the California Code of Regulations Section 15262, which exempts planning and feasibility studies for possible future actions that have not yet been approved, adopted, or funded. Consistent with section 15262, the project will consider environmental factors. The proposed project is also categorically exempt from CEQA under Title 14 of the California Code Regulations Section 15306 for information collection because the data collection and resource evaluation activities will not result in a serious or major disturbance to an environmental resource.

Upon approval of the project, Conservancy staff will file a Notice of Exemption.