



APPLICATION FORM


APPLICANT INFORMATION

Applicant name (agency): County of Humboldt Planning and Building Department	
Address: 3015 H Street, Eureka CA 95501	
Primary Contact name: Michael Richardson	Title: Supervising Planner
Telephone: 707-268-3723	Fax: 707-268-3792
Email: MRichardson@co.humboldt.ca.us	
Federal Tax ID#: 94-6000513	

Person authorized to sign grant agreement, amendments, and Request for Funds:	
Name: John H. Ford	Title: Director
Telephone: 707-445-7541	Email: JFord@co.humboldt.ca.us

PROJECT INFORMATION

Project Title: Humboldt Bay Regional Sea Level Rise Adaptation Strategy	
LCP/LCP Segment: Humboldt Bay Area Plan	
Project Location	
City/Geographic area: Humboldt Bay Region	
County: Humboldt	
Project Timeline	
Start date: 1/01/2023	End date: 12/31/2026

Signature: 
John H. Ford

Date: 9/16/2022

1. **Project Description.** Humboldt Bay Regional Sea Level Rise Adaptation Strategy

The goal of this grant funded project is to develop a regional sea level rise adaptation strategy for Humboldt Bay. The Humboldt Bay Area includes a mix of uses including agricultural land, critical utility and transportation infrastructure, cultural resources, sensitive wetlands, and habitats, and is the primary urban and employment center for the County. Developing a regional strategy needs the participation of Humboldt County, City of Eureka, City of Arcata, Wiyot Tribe, property owners, Caltrans, Humboldt Community Services District, PG&E and Coastal Commission. The outcomes of this project will be incorporated into the applicable parts of the Humboldt County, City of Eureka, and City of Arcata Local Coastal Programs (LCPs) and other planning mechanisms.

Thousands of acres of diked former tidelands around Humboldt Bay are currently at-risk from tidal inundation if the shorelines in 24 hydrologic sub-units are breached or overtopped. There is only a small window of opportunity to adapt these diked shoreline structures to future conditions. With 2.0 ft of sea level rise (SLR) approximately 11.4 miles (28%) of the 41 miles of diked shoreline are vulnerable to being overtopped by the mean monthly maximum tide, and the high projection for relative sea level rise on Humboldt Bay for 2030 is 0.9 feet, which means our annual maximum, or “King Tides” could begin to overtop these vulnerable dikes in this decade.

The diked agricultural areas of the Bay will become increasingly difficult to sustain with emerging groundwater and rising low tides reducing the efficiency of tide gates to drain stormwater runoff. Longer-term relocation and accommodation strategies must be considered while shorter-term protection actions are implemented. The urgent need for this planning work to prepare the public for the environmental and social changes that will be driven by on-going sea-level rise on these diked former tidelands can't be overstated. Short term policies to address the SLR by 2030. What areas will be protected and what areas will require a managed retreat in the longer term?

This Project goes beyond focusing on the diked shorelines which is County centered approach and does not address the whole of the Humboldt Bay, particularly the urban areas of the Bay. The development of a regional strategy demands a mutual gains approach where all agencies involved realize benefits and alternatively, impacts are dispersed equitably and understood by all stakeholders.

The proposed project will be implemented over three years, and consists of three major components to help build resiliency and pragmatic adaptation of the lands around Humboldt Bay to the impacts of SLR and climate change in Humboldt County:

Part 1: Building the Framework: Building upon local LCP efforts this project will refine, select, and implement organizational and regulatory frameworks to structure a regional SLR adaptation pathway for the areas that could be inundated by SLR in the future around Humboldt Bay. Part 1 will begin with developing a phased approach to diked shoreline adaptation with thresholds, informed by Part 2 below, that trigger future policy, planning reviews, LCP updates and projects emphasizing regional planning and identifying adaptation

opportunities across jurisdictions. The preliminary goal will be to build an integrated regional strategy of actions for diked shorelines that work together towards shared management objectives and resolving those that are at cross-purposes. This will be followed by expanding the regional strategy into the urban areas in a stepwise manner first addressing the assets most immediately at risk.

The organizational framework could include options such as the creation of a new entity, utilization of an existing entity, or one or more cross-jurisdictional agreements such as a memorandum of understanding, for regional management of sea level rise. Currently there is no cross-jurisdictional organization or agreement created for the purpose of regional sea level rise management in the county. Creation of an organizational framework will be supported by a facilitated process coordinating participation in the land use planning process by staff from the County, Wiyot Tribe, Coastal Commission, cities, Humboldt Bay Harbor, Recreation, and Conservation District, special districts, property owners and representatives of stakeholder groups who are critical to adaptation planning and whose participation is needed to achieve successful project outcomes and plan updates that ultimately will facilitate coastal resiliency for the region.

The organization formed/empowered through this process will be encouraged to foster a cooperative and coordinated regional approach to the identification, funding, and implementation of various SLR adaptation policies, strategies, and projects with a preliminary focus on adapting the diked shorelines around Humboldt Bay to projected SLR. Emphasis will be placed on developing a shared community vision and set of management objectives for the immediate and longer-term futures of the diked former tidelands on Humboldt Bay. The organization will consider not only what needs to be done for protection (living shorelines, bulkheads etc.), but also what needs to be done associated with retreat (removal of development and associated impacts).

With the diked shoreline assets as a starting point, the organization will proceed to develop an adaptation strategy for the important assets in the urban areas around Humboldt Bay. What will be protected? From where will retreat happen? What are the appropriate trigger events, and what are the economic, social, and environmental costs? The organization will also define limits of sea level rise being planned for in the short, mid, and long term. It will need to discuss costs and source of funding and determine long-term deliverables. What will be monitored, and what defined thresholds need to be developed for further long-term actions? Rigorous public participation will occur throughout this process.

The effectiveness of the organizational framework will be enhanced by development of a regulatory framework which will be a collaborative effort between all the jurisdictions to update the LCP's of each jurisdiction on Humboldt Bay consistent with the guidance adopted by the California Coastal Commission. A focus of this work among jurisdictions will consider other relevant regulatory and resource management programs that may be leveraged in plan implementation.

The regulatory framework will explore and implement mechanisms to maximize the certainty that the desired LCP policies and project outcomes are feasible and achievable in the context of the Commission's coastal development permit authority in the diked

shoreline areas and where LCPs inform but do not decide the Commission's decisions on proposed development related to sea level rise adaptation. On-going engagement between regional planning staff and Coastal Commission staff will be critical to the integration of regional needs and statewide guidance. The goal is to develop a trusted partnership with the Coastal Commission, so the guidance developed locally is regularly incorporated into their decision-making.

Part 2: Technical Studies: This Part will proceed concurrently with Part 1 and will involve completion of technical, economic, biological, and cultural resource analyses to assist in adapting the diked shorelines and former tidelands to sea level rise and increasing coastal resiliency. The focus of this work will be to inform the appropriate thresholds that trigger the different adaptation strategies applied to the diked shorelines. It will also define and describe high priority projects to implement the adaptation strategies so they are "shovel-ready".

The intent is a collaborative effort between the County, cities, regulatory agencies, Coastal Commission, special districts, asset owners and the public to develop a project-specific roadmap to streamline implementation of projects over the next ten years that will protect the region's critical infrastructure and other assets for the next 30 years, providing time to plan for and fund its relocation to less vulnerable areas. This task will consider former industrial areas that may become subject to inundation, where contamination levels are acceptable under current hydrologic conditions but may need additional management or remediation as SLR occurs. Included in the shovel-ready project list will be saltwater marsh restoration projects developed and implemented in partnership with local Tribes that will also provide on-going resource protection and enhancement of the critical wetland functions and values of the Bay while the phased protection program is implemented. As with Part 1, a rigorous public participation will occur throughout this regulatory process as well.

Part 3: Regional Climate Action: Building on the draft Regional Climate Action Plan, the project will support regional Climate Action planning efforts by incorporating the relevant Regional Climate Action Plan measures into the LCPs. For example, the draft Regional CAP includes in the list of implementation actions aimed at reducing greenhouse gas emissions an effort to focus the region's development into areas served by multiple modes of transportation infrastructure including bike trails and pedestrian facilities. As with the regional SLR adaptation work described above, the LCP language will be developed in collaboration with all the cities on Humboldt Bay. While the primary goal is focused outreach efforts to increase public awareness and participation in climate action planning activities, this work will also compliment the regional SLR adaptation work described above by leveraging the successes the County and all the cities have had in cooperating and coordinating a regional approach to the identification, funding, and implementation of greenhouse gas emission reduction measures. This work will ensure that LCP SLR policies are consistent with and complementary to our region's efforts to turn the tide on climate change.

Humboldt County and cooperating entities are well poised to accomplish the project in an effective and efficient way. With the creation of a staff working group overseeing and collaborating on the draft Regional Climate Action Plan, the County and all the cities within the County have demonstrated a long-term commitment to a culture of inter-agency and public-private coordination. This nascent collaborative culture is poised to transform the response to SLR in the Humboldt Bay Region.

2. Task Descriptions and Schedule.

Task Description: Refer to Project Description for more details.

Proposed Start/End Dates:

Task 1. Building the Framework	Projected start/end dates:
1.1 Engage and Convene Stakeholders, Wiyot Tribe, Cities, Special Districts, Landowners	1/1/2023 – 12/31/2026
1.2 Draft Structure and Agreements for Regional SLR adaptation entity	4/1/2023 – 8/31/2023
1.3 Implement Structure and Agreements for Regional SLR adaptation entity	9/1/2023 – 12/31/2023
1.4 Convene and operate Regional SLR entity	1/1/2024 – 12/31/2026
Outcome/Deliverables: <ul style="list-style-type: none"> a. Stakeholder/Organizational Involvement plan b. Draft organizational framework for SLR Adaptation c. Organizational values, bylaws, and agreements d. Implemented organizational framework for SLR Adaptation e. Agendas and Minutes for Regional SLR adaptation entity meetings 	<ul style="list-style-type: none"> a. Completion: 4/1/2023 b. Completion: 8/31/2023 c. Completion: 8/31/2023 d. Completion: 12/31/2023 e. 1/1/2024 – 12/31/2026
Task 2. Illuminating the Path	Projected start end dates:
2.1 Procure and Manage Consultants	a. 1/1/2023 – 6/31/2026
2.2 Shoreline Vulnerability/Resilience Analysis	Projected start/end dates: 4/1/2023 – 6/31/2026
2.3 Biological/Ecosystem studies	Projected start/end dates: 4/1/2023– 6/1/2026
2.4 Economic Impacts Analysis	Projected start/end dates: 4/1/2023– 6/1/2026
Outcome/Deliverables <ul style="list-style-type: none"> a. RFP/RFQ documents b. Contracts and subrecipient agreements c. Draft Shoreline 	<ul style="list-style-type: none"> a. Completion date 4/1/2023 b. Completion date 6/1/2023 – 6/1/2024 c. 9/1/2023 – 12/1/2023

<ul style="list-style-type: none"> Vulnerability/Resilience Analysis d. Draft Biological/Ecosystem Analysis studies e. Draft Cultural and Economic Impacts Analysis f. Final Shoreline Vulnerability/Resilience Analysis g. Final Biological/Ecosystem Analysis and Studies h. Final Cultural and Economic Impacts Analysis and Studies 	<ul style="list-style-type: none"> d. 9/1/2023 – 12/1/2023 e. 9/1/2023 – 12/1/2023 f. 6/31/2024 – 9/1/2024 g. 6/31/2024 – 9/1/2024 h. 6/31/2024 – 9/1/2024
Task 3. Regional Climate Action Plan and SLR Adaptation Strategy Integration	Projected start end dates:
Sea Level Rise Adaptation Strategy Implementation Guide	9/1/2024 – 1/1/2025
Integration of Seal Level Rise Adaptation Strategy with Climate Action Plan	1/1/2025 – 9/1/2026

f. **Benchmark Schedule:** Please list (1) all significant and pertinent project benchmarks related to the project for which funds are being requested, (2) expected dates for reaching or completing those steps. These dates will be used in monitoring grant progress and in grant reporting under approved grant agreements.

ACTIVITY	COMPLETION DATE
Implemented organizational framework for SLR Adaptation	12/31/2023
Shoreline Vulnerability/Resilience Analysis	6/1/2026
Biological/Ecosystem studies	9/1/2024
Economic and Cultural Impact Analysis	9/1/2024
Sea Level Rise Adaptation Strategy Implementation Guide	1/1/2025
Integration of Seal Level Rise Adaptation Strategy with Climate Action Plan	9/1/2026

Application Budget Information

Funding Request: \$ 1,400,000

Total Project Cost: \$ 1,400,000

County of Humboldt	CCC Grant Total	Match/Other Funds	Total (LCP Grant Funds + Match /Other Funds)
<u>LABOR COSTS[1]</u>			
County/City Staff Labor			
Task 1: <i>Building the Framework</i>	250,000.00		250,000.00
Task 2 – <i>Technical Studies</i>	50,000.00		50,000.00
Task 3 – <i>SLR and Climate Action Plan</i>	150,000.00		150,000.00
Total Labor Costs	450,000.00		450,000.00
DIRECT COSTS			
County/City Staff Project Supplies			
Copies of Studies	1,000.00		1,000.00
Mail	250.00		250.00
Total	1,250.00		1,250.00
<u>County/City Staff Travel In State[2]</u>			
Mileage	375.00		375.00
Hotel, Perdiem	-		-
Total	375.00		375.00
<u>Consultants[3]/Partners</u>			
Engineering Consultant			-
Task 2 – <i>Shoreline Vulnerability/ Resilience Assessment</i>	\$ 305,000.00		305,000.00
Economic Consultant			-
Task 2 - <i>Cost/Benefit of Changes</i>	\$ 250,000.00		250,000.00
Biological Consultant			-
Task 2 – <i>Biological Assessments</i>	\$ 200,000.00		200,000.00
Cultural Resource Consultant			-
Task 2 – <i>Cultural Resource Analysis</i>	\$ 150,000.00		150,000.00
Consultants Total	\$ 905,000.00		905,000.00
Total Direct Costs	\$ 906,625.00		\$ 906,625.00
<u>OVERHEAD/INDIRECT COSTS[4]</u>			
Total County/City Staff Overhead/Indirect Costs	\$ 43,375.00		\$ 43,375.00
TOTAL PROJECT COST	1,400,000.00		1,400,000.00

3. **Supplementary Information**

1. Letter of Support from the City of Eureka
2. Letter of Support from Cal Poly Humboldt Sea Level Rise Institute

4. **Resolution from the Applicant's Governing Body.** Draft, scheduled to be heard 10-18-2022

Please submit the completed application form, including all attachments, via email to LCPGrantProgram@coastal.ca.gov. Submit all application materials combined in a single PDF file, AND submit the Project Proposal (including project description, task descriptions, schedule, and budget) as a Word document. See Attachment B for an application checklist.



Attachment B: Application Checklist

A complete Grant Application Packet includes the following components. Please submit all documents in a single PDF file as well as a Word Document of the Project Proposal details, as noted below. **It is very important to receive the PDF file and a Word document for efficiency in preparing grant agreement documents.** Thank you for your attention to these important components of the application.

- Signed LCP Grant Application Form (.pdf)

- Project Proposal (.docx)
 - Project Description, Task Descriptions, Schedule, Budget, and Supplemental Information

- Signed Resolution (.pdf) DRAFT ONLY Scheduled for 10/28/22
- All documents combined into a single PDF file (.pdf)

Michael Richardson, Supervising Planner
Humboldt County Department of Planning & Building
3015 H Street
Eureka, CA 95501

Re: 2022 Regional Sea Level Rise LCP Local Assistance Grant Application


Dear Mr. Richardson:

I am writing this letter in support of Humboldt County's proposed 2022 Regional Sea Level Rise LCP Local Assistance Grant Application. I appreciate the project highlights regional coordination and cooperation in developing a shared vision for sea level rise planning and adaptation of the diked shoreline around Humboldt Bay. We recognize the complexity involved in this work and the increased public awareness of the benefits of a regional effort toward finding and implementing solutions to protect our communities and coastal resources into the future.

The vision of this planning work is to provide a roadmap for streamlining implementation of adaptation projects over the next ten years to protect the region's critical infrastructure for the next 30 years. This would be an enormous benefit to the community. Developing draft policy language to incorporate the Regional Climate Action Plan measures into the city's LCP will help move that work forward as well.

I support this proposal and will support these efforts, which carry the vision of a healthy, well planned, and sustainable Humboldt County region.

Sincerely,


Cristin Kenyon, AICP
Principal Planner, City of Eureka



September 9, 2022

Michael Richardson, Supervising Planner
Humboldt County Department of Planning & Building
3015 H Street
Eureka, CA 95501

Re: 2022 Regional Sea Level Rise LCP Local Assistance Grant Application

Dear Mr. Richardson:

We are writing on behalf of the Cal Poly Humboldt Sea Level Rise Institute (SLRI) in support of Humboldt County's proposed 2022 Regional Sea Level Rise LCP Local Assistance Grant Application. The SLRI was formed in 2018 and became a formal Institute in 2022 with a vision to develop "a diverse network of collaborators working together across disciplines, sectors, and ways of knowing to develop sea-level rise research and planning that informs equitable, sustainable, and community-centered local climate action." The SLRI is envisioned as a partnership between Cal Poly Humboldt and the broader California North Coast community. The group has over 30 members including representatives from academic institutions, Tribes, government agencies, NGOs, the private sector, and civic and community groups in the region. Undergraduate and graduate students play a key role in the governance and activities of the initiative. Membership includes individuals with expertise in engineering, planning, policy, social science, geosciences, coastal & marine ecology, botany, Indigenous knowledge and leadership, and more. A key value of the SLRI is related to maintaining indigenous leadership in SLR research and planning activities in the region

Due to tectonic factors, Humboldt Bay is experiencing the fastest rate of relative sea-level rise (SLR) in California. Given the transboundary nature of SLR, several research and government reports have identified regional coordination as a critical need to address sea-level rise in Humboldt Bay. We are excited that Humboldt County has been taking a leadership role in develop a strategy or forum for effective SLR coordination across Humboldt Bay. We appreciate that the proposed project highlights regional coordination and cooperation in developing a shared vision for sea level rise planning and adaptation of the diked shoreline around Humboldt Bay. Addressing the long-term management and adaptation of the diked shoreline is a crucial issue with important environmental, economic, and cultural implications. Increased public awareness of this issue as well as engagement with landowners, Tribes, and other stakeholders – as addressed in this proposal – is essential.

We believe that this project has the potential to deliver many tangible benefits to this region as we face rising seas. We believe in the benefits of a regionally coordinated effort toward finding

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and implementing solutions that will protect our community assets and coastal resources into the future. Outcomes from this project can provide a roadmap for streamlining implementation of projects over the next ten years that will protect the region's critical infrastructure for the next 30 years or more. We also support the outcomes that involve implementation of saltwater marsh restoration plans in partnership with the Tribes.

The SLRI also commits to lend expertise and support to the project as needed should it be funded. We have cultivated a large network of SLR researchers and practitioners working in the region who could lend their variety of expertise and experiences to assist with the successful completion of the project. The SLRI supports this proposal and will support these efforts, which carry the vision of a healthy, well planned, and sustainable Humboldt County region.

Sincerely,



Laurie Richmond
Co-Chair Humboldt State University Sea Level Rise Initiative
Professor, Department of Environmental Science and Management
Cal Poly Humboldt
laurie.richmond@humboldt.edu



Adam Canter
Co-Chair Humboldt State University Sea Level Rise Initiative
Natural Resources Director
Wiyot Natural Resources Department
Table Bluff Reservation
adam@wiyot.us

DRAFT RESOLUTION, Scheduled for 10/18/2022

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF HUMBOLDT HEREBY AUTHORIZES THE SUBMITTAL OF AN APPLICATION TO THE CALIFORNIA COASTAL COMMISSION; THE EXECUTION OF A STANDARD AGREEMENT IF SELECTED FOR SUCH FUNDING AND ANY AMENDMENTS THERETO, AND ANY RELATED DOCUMENTS NECESSARY TO PARTICIPATE IN THE LCP LOCAL ASSISTANCE GRANT PROGRAM.

WHEREAS, the Budget Act of 2021 provides up to \$31 million to support the Coastal Commission's LCP Local Assistance Grant Program which awards grants to local governments to support coastal resiliency and updates to Local Coastal Programs (LCPs); and

WHEREAS, the California Coastal Commission, under the authority of the California Coastal Act, may provide financial assistance to support coastal planning and has approved a grant program to provide such financial assistance for LCP planning; and

WHEREAS, the goal of the grant program is to develop new or updated LCPs in conformance with the California Coastal Act and to promote coastal resiliency and address the effects of climate change; and

WHEREAS, grant proposals submitted under this grant program must complete Local Coastal Program (LCP) planning work with special emphasis on coastal resiliency and addressing the effects of climate change and sea-level rise; and

WHEREAS, The County of Humboldt, has an effectively certified LCP; and

WHEREAS, the County of Humboldt, desires to pursue a project that would result in the completion and submittal for certification by the California Coastal Commission of an Amendment to the LCP [in whole or in part]; and

WHEREAS, the County of Humboldt commits to and agrees to fully support a planning effort intended to [complete or] amend a certified LCP pursuant to the provisions of the California Coastal Act, with full public participation and coordination with the Coastal Commission staff.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Humboldt County Board of Supervisors as follows:

1. Directs Humboldt County Planning and Building staff to submit the grant application package attached hereto as Attachment 1 to the California Coastal Commission to provide financial and planning assistance, under authority of the California Coastal Act, in the amount of \$ 1,400,000 to fund the project more particularly described in the grant application package.
2. Authorizes the Director of the Humboldt County Planning and Building Department to execute, in the name of the Humboldt County, all necessary applications, contracts and agreements and amendments thereto to implement and carry out the grant application package attached hereto and any project approved through approval of the grant application.

The foregoing Resolution is hereby passed and adopted by the Board of Supervisors on _____, by the following vote:

Adopted on motion by Supervisor
and the following vote:

, seconded by Supervisor

AYES: Supervisors:

ABSENT: Supervisors:

NAYS: Supervisors:

ABSTAIN: Supervisors:

Virginia Bass, Chair
Humboldt County Board of Supervisors

STATE OF CALIFORNIA)
) ss.
County of Humboldt)

I, KATHY HAYES, Clerk of the Board of Supervisors, County of Humboldt, State of California, do hereby certify the foregoing to be a full, true and correct copy of the original made in the above-entitled matter by said Board of Supervisors at a meeting held in Eureka, California as the same now appears of record in my office, and which has not been altered, amended or repealed.

IN WITNESS WHEREOF, I have hereunto
set my hand and affixed the Seal of
said Board of Supervisors

KATHY HAYES
Clerk of the Board of Supervisors of
the County of Humboldt, State of
California

By _____