

SAN FRANCISCO BAY RESTORATION AUTHORITY

Staff Recommendation
December 4, 2020

Long Beach Restoration Design Project

Project No. RA-021
Project Manager: Erica Johnson

RECOMMENDED ACTION: Authorization to disburse up to \$514,500 to the City of San Leandro to conduct environmental studies and community engagement, prepare a 35% complete conceptual design, identify permitting needs and estimate cost for the restoration of Long Beach located in Alameda County.

LOCATION: Long Beach, San Leandro, Alameda County; East Bay Region

MEASURE AA PROGRAM CATEGORY: Vital Fish, Bird and Wildlife Habitat Program; Integrated Flood Protection Program; Shoreline Public Access Program.

EXHIBITS

- Exhibit 1: [Project Location](#)
- Exhibit 2: [Project Area Images](#)
- Exhibit 3: [Long Beach Erosion and Levee Breach](#)
- Exhibit 4: [Project Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution pursuant to The San Francisco Bay Restoration Authority Act, Gov. Code Sections 66700-66706:

“The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed five hundred fourteen thousand and five hundred dollars (\$514,500) to the City of San Leandro to conduct environmental studies and community engagement, prepare a 35% complete conceptual design of the preferred alternative, develop a cost estimate, and identify permitting needs for the restoration of Long Beach, located in the City of San Leandro in Alameda County. Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Authority the following:

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

3. A plan for acknowledgement of Authority funding.”

Staff further recommends that the Authority adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the San Francisco Bay Restoration Authority hereby finds that:

1. The proposed authorization is consistent with The San Francisco Bay Restoration Authority Act, Gov. Code Sections 66700-66706.
2. The proposed authorization is consistent with The San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure (Measure AA).”

PROJECT SUMMARY:

Staff recommends the disbursement of up to \$514,500 to the City of San Leandro (the City) to conduct the Long Beach Restoration Design Project (the project) located in Alameda County along the City of San Leandro’s shoreline (Exhibit 1). The project consists of conducting environmental studies and community engagement, developing a 35% complete conceptual design, developing a cost estimate and identifying permitting needs for a future construction project that will restore habitat and improve public access at Long Beach. The project will allow the City to appropriately plan for the restoration of Long Beach, a sandspit that provides wildlife habitat for California least tern fledglings, spawning grunion, wintering snowy plovers, and native oysters in the subtidal area. The subtidal area along Long Beach is predominantly soft substrate (e.g. silt, mud, and/or clay), although there is one area at the south end of the beach that sustains a native oyster population (*Ostrea lurida*). Observations of wildlife at Long Beach have generally declined over the past decade.

Long Beach also protects the San Leandro Shoreline Marshes (marshes) behind it from erosion by dampening wave energy and preventing inundation of Bay water into the marshes. A natural levee was constructed along Long Beach to enhance the protection of the marshes, particularly Bunker Marsh and Robert’s Landing marsh, adjacent to Long Beach (Exhibit 2). In the past decade, a portion of the natural levee eroded from just over 14 feet wide to a mere 5.5 feet wide, and the levee breached in 2018 causing uncontrolled intrusion of Bay waters into Bunker Marsh (Exhibit 3). Failure to restore and protect Long Beach from erosion and breaches may result in the loss of favorable habitat (sandspit and marsh) for endangered and threatened species.

The proposed project will prepare the City to implement a future construction project that will restore habitat and improve public access at Long Beach. In addition, the implementation phase of the project would protect the previous investment made to restore the marshes adjacent to Long Beach and the ongoing work by the Invasive Spartina Project to eradicate the invasive cordgrass in the area. The City is interested in studying and comparing the benefits, longevity, and feasibility of nature-based living shorelines strategies, such as sand or gravel nourishment, and levee stabilization. The project includes the following components:

1. **Technical Advisory Group (TAG):** The City will form a TAG and provide incentive and scope of work for their participation in the project. TAG members will be comprised

of environmental scientists and environmental planners or managers who have expertise in shoreline resilience and or ecological restoration in the San Francisco Bay. Their scope of work may include helping to define the scope of the studies, reviewing the outcomes of the studies and/or the conceptual alternatives, helping to select the preferred alternative, and/or reviewing the 35% complete design before it is finalized.

2. **Hiring contractor(s):** The City will hire one or more contractors appropriate for conducting the environmental studies and preparing the 35% complete design through an open bid process and with guidance from the TAG.
3. **Stakeholder/community engagement:** At least three community meetings will be held to provide an introduction to the project and seek input on desired outcomes, review conceptual alternatives and seek input for the preferred alternative, and a final presentation on the preferred conceptual design. There will also be at least three additional meetings with stakeholder groups such as the local neighborhood and homeowners association, community groups, volunteer groups, as well as schools to provide input. The City will develop a project website to host information such as the project description, meeting announcements, summaries of these stakeholder engagement meetings, data and reports from the studies, and information on future project developments. In addition, the City will engage the community youth by soliciting their participation in the planning and decision making processes during public meetings. The City will also provide volunteer opportunities in the marsh and job training and/or mentorship opportunities to them.
4. **Studies:** The contractor will conduct field surveys to analyze the conditions of the sandspit and marsh in relation to storm events. The contractor will also conduct geomorphological studies to understand landform history and wave dynamics of the area. The contractor will synthesize information on shoreline protection/stabilization options which include but are not limited to sand or gravel nourishment, other living shorelines strategies, and rehabilitation of the existing natural levee. The contractor will conduct a feasibility analysis based on this information. Deliverables from the studies will be data and reports that can be publicly accessed.
5. **Conceptual Design:** The contractor will provide 2-3 conceptual alternatives and corresponding cost estimates over a timeframe of 20 years, then produce a 35% complete conceptual design for the preferred alternative. These will be prepared in a manner that can be shared with the public at one of the stakeholder engagement meetings and on the City's website.

The City is qualified to carry out this project because it maintains a significant internal capacity to manage grants and contracts and to oversee engineering projects of this scale. The project area is City property, making the City the most suitable entity to implement the project. The City also has extensive experience in the project area and with overseeing coastal projects in general. It has maintained Long Beach and other shoreline landforms in its jurisdiction since approximately 1958. The City regularly maintains, repairs, and constructs both flood management and habitat restoration projects, such as a recently completed riprap repair near this project site along the

Bay Trail. In addition, from the mid-1990s to the mid-2000s, the City was the lead in overseeing the restoration of 28 acres of marshlands as part of a mitigation requirement for the Heron Bay subdivision development, and the City is now performing ongoing maintenance of the marshlands which includes working with the Invasive Spartina Project to eradicate invasive Spartina in the area.

Community support: Recreation at Long Beach has been in the context of access to the wildlife there, however the access point to the sandspit which is via the natural levee has a “Closed” sign due to levee instability. Some community members have expressed their wanting to be able to recreate there as they had once before. Local residents of the City, including the neighborhoods (e.g., Mission Bay Mobile Home Park, Heron Bay-Marina Vista, and Washington Manor) adjacent to the project area, will be given the opportunity to provide input during public meetings and will be invited to contact the project coordinator throughout the project. In addition, the Heron Bay Homeowner’s Association adjacent to the project area unanimously supports the project and believes the area contributes to the quality of life of those who visit (Exhibit 4). In addition, the City’s public primary and secondary schools and UC Berkeley, are in support of this project because they utilize the site for its unique teaching and research opportunities. Such opportunities include pilot programs, observations, and experiments implemented by institutions of higher learning, such as UC Berkeley.

Barriers: In this project a barrier is the proximity of the natural levee to the sandspit. The need to preserve one of the only remaining natural sandspits in the bay prevents normal reinforcement techniques for supporting the levee and will require the design team to create an innovative approach to erosion control that is sensitive to the surrounding landforms.

Public Access: Access to Long Beach is limited to pedestrians and bikers via the Bay Trail along the San Leandro shoreline park, Marina Park. The Bay Trail is a paved public trail that is atop of a riprap levee. The southern point of the trail, before it continues away from the shoreline, is the access point to Long Beach. The access point to the sandspit which is via the natural levee has a “Closed” sign due to levee instability. The study will identify the appropriate measures to restore access to the public.

Site Description:

The marshes and settlements along San Leandro shoreline were named after Robert Thompson, who purchased the area and built a ship landing using the large tidal slough which is known today as Robert’s Landing Slough. The sandspit along the shoreline of the marshes is referred to as Long Beach. A sandspit is an accumulation of sand that is created when wind and wave action transports and deposits the sand parallel to the shoreline over time. Long Beach is about 1000 linear feet long and is one of the largest natural sandspits remaining in the San Francisco Estuary.

In the early 1900’s, the marshes were diked and used by the Trojan Powder Company. When the company closed, a portion of the marshes were filled in for housing development. As a condition of the housing development, 315 acres of marshland were restored, including Bunker Marsh and Robert’s Landing marsh, which have been opened to tidal influence and are immediately adjacent to Long Beach. Bunker Marsh is separated from the other marshes in the area by

excavated channels and tidal gates. The beach is separated from Bunker Marsh by a natural levee that runs parallel to the beach and a channel that was excavated as part of the marsh restoration projects. The southern half of Long Beach is adjacent to a marsh referred to in this document as Robert's Landing. Robert's Landing marsh is separated from other marshes to the east by Robert's Landing slough. These areas are being affected by the increasing frequency and severity of storms, and sea level rise, which has eroded the beach and compromised the levee. The habitat is showing major signs of decline.

The marshes are home to common, threatened, and endangered species such as the California Ridgway's rail, least tern, burrowing owl, salt marsh harvest mouse, and Western snowy plover. In addition, a pilot reintroduction program led by Dr. Peter Baye identified the marsh in the San Leandro Shoreline Marshes as a suitable site for the re-introduction of the endangered plant species Suaeda Californica. The salt marsh and sandspit are remote from the public roads though accessible by bike and foot via the Bay Trail. This creates a wildlife area that would be more valuable if it were restored to a better condition. The sandspit, natural levee, and marshes are owned and maintained by the City.

PROJECT FINANCING

San Francisco Bay Restoration Authority	\$514,500
Others	\$0
Project Total	\$514,500

The City is prepared to provide staff time as an in-kind contribution to manage the contractor(s) and community engagement.

CONSISTENCY WITH AUTHORITY'S ENABLING LEGISLATION, THE SAN FRANCISCO BAY RESTORATION AUTHORITY ACT:

Consistent with Section 66704.5, the City of San Leandro is a public entity and the project will prepare plans to 1) restore, protect, or enhance tidal wetlands, managed ponds, or natural habitats on the shoreline in the San Francisco Bay area; (2) build or enhance shoreline levees or other flood management features that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats; and (3) provide or improve public access or recreational amenities that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats. The project will conduct the studies and planning necessary to protect a natural sandspit that provides ideal habitat for birds and fish, and also protects the salt marsh habitat behind it. The project includes planning to improve public access through rehabilitating the natural levee and/or enhancing natural shoreline features for long term erosion protection. By planning to restore the sandspit and rehabilitate the levee, the project will enable improvement of public access via the Bay Trail, and also recreation value for visitors viewing wildlife on the sandspit and marsh.

Consistent with Section 66704(e), this award would be used to support planning.

CONSISTENCY WITH MEASURE AA PROGRAMS AND ACTIVITIES:

This authorization is consistent with Measure AA's *Vital Fish, Bird and Wildlife Habitat Program's* since it will protect marsh habitat from sea level rise and salt marsh edge erosion to benefit wildlife such as the salt marsh harvest mouse, Ridgway's rail, least terns, snowy plover, burrowing owl, grunion, and endangered plant species *Suaeda Californica*. The project will also improve access to the project area and provide opportunities for stewardship with ongoing educational programs and provide benefit to people via recreational opportunities which are consistent with this program. This authorization is consistent with Measure AA's *Shoreline Public Access Program's* purpose to repair and/or replace deteriorating public access trails because it will rehabilitate the levee and/or implement nature-based solutions such that the levee is protected and can be accessed by the full potential of users to enjoy.

CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:

1. **Greatest positive impact.** The project will provide options for restoration of the sandspit and protection of the salt marsh such that it would have a major positive impact for the wildlife that use the sandspit and inhabit the salt marsh. The selected approach will aim to protect crucial habitat for these species, and for biodiversity that is not restricted to the immediate project location but will spread throughout the Bay area as at-risk populations recover. In addition, residents and visitors all over the Bay could observe and learn about the wildlife during their recreational activities and educational visits to the project area.
2. **Greatest long-term impact.** Long Beach has naturally oscillated between periods of accretion and erosion. The city is concerned about the acceleration of erosion due to continued sea level rise, the increased intensity and frequency of storm wave action, and reduced sediment deposition from its historical sources. The project will allow the City to better understand if restoration at the site is feasible, if the habitat can persist and for how long. Should the habitat persist, it would have a positive long term impact on the endangered or threatened species and other wildlife that inhabit the area.
3. **Economically disadvantaged communities.** Due to its relative isolation, the recreational users are primarily from the surrounding neighborhoods, which include two economically disadvantaged communities less than two miles away (the Mission Bay Mobile Home Park and Washington Manor neighborhoods). The future benefit to the disadvantaged communities are the recreational opportunities provided by the unique sandspit and the wildlife, as well as the volunteer opportunities in the marsh, and the job training and/or mentorship opportunities to be provided by the City.
4. **Engage youth and young adults.** The project site is a resource for teaching youth about natural resources and environmental stewardship. It is common for elementary and secondary schools to bring students to the project site for educational field trips. In addition, institutions of higher learning such as UC Berkeley, have hosted pilot programs, observations, and

experiments. Most notably to date, a pilot program in the marsh evaluated the effectiveness of student-designed nesting boxes meant to improve the safety of Ridgeway's rail during hatching.

5. **Monitoring, maintenance, and stewardship.** The studies from the project will help identify monitoring, maintenance and stewardship opportunities in the area for future projects. Ongoing routine maintenance will continue as indicated in the City's maintenance plan and funded by the Heron Bay Assessment District. It is anticipated that resiliency built into the project will help to minimize future maintenance costs to the City.

6. **Coastal Conservancy's San Francisco Bay Area Conservancy Program.** The project is consistent with the Conservancy Program's criteria because it is supported by local and regional plans (listed below) and supports Bay-wide interest to protect crucial habitat for wildlife populations that we hope to increase across the baylands. The project can be implemented immediately by the City and the City is determined to do so because it is the first step in a longer process to protect vulnerable habitat and adjacent neighborhoods from sea level rise. The project is urgently needed because the opportunities and benefits of restoring habitat and improving public access to Long Beach will diminish over time as the site continues to erode.
 - a. **California Water Action Plan (2016 update):** The project directly implements California Water Action Plan Action 4 – Protect and Restore Important Ecosystems; Restore Coastal Wetlands – by protecting marsh habitat and species from sea water inundation and restoring Long Beach, which also provides important habitat.
 - b. **Baylands Ecosystem Habitat Goals Report (1999):** The goals report presents goals and recommendations to restore vital habitat in the Bay area. The project will support the Central Bay region goal “to protect and restore tidal marsh, seasonal wetlands, beaches, dunes, and islands”, in particular its emphasis on protecting and restoring tidal salt marsh adjacent to urban areas such as San Leandro.
 - c. **USFWS Recovery Plan for Tidal Marsh Ecosystems of Northern and Central CA (2013):** The plan addresses the federally endangered Ridgeway's rail and salt marsh harvest mouse, as well as several plant species present in the Estuary. The proposed project supports objectives to delist species by protecting tidal salt marsh habitat that is crucial for their survival.
 - d. **Baylands Goals Science Update (2015):** The update documents the progress made toward achieving the 1999 Baylands Goals and outlines strategies for continuing restoration progress in face of climate change and sea-level rise. The project is consistent with the update's recommendations to protect tidal marsh from inundation and salinity during periods of time that the marsh plants require low salinity for reproductive success and avoid flooding of habitat for wildlife.
 - e. **State Coastal Conservancy's 2018-2022 Strategic Plan:** The project is consistent with Objectives 12A, and 12B which calls for the protection of tidal wetlands and

subtidal habitat, and protection of wildlife. This project protects tidal marsh from inundation and erosion due to sea level rise.

7. **San Francisco Bay Conservation and Development Commission's Coastal Management Program.** The Project is consistent with the San Francisco Bay Conservation and Development Commission's "San Francisco Bay Plan", including the Fish, Other Aquatic Organisms and Wildlife policy and Tidal Marshes and Tidal Flats policy, by protecting a native tidal marsh. In doing so, the project protects habitat for fish, birds, and other wildlife, including endangered species.
8. **San Francisco Bay Joint Venture's Implementation Strategy.** This project's goals are consistent with the SFBJV's work to protect, restore, increase and enhance all types of wetlands throughout the SF Bay region to benefit birds, fish and other wildlife. The project is located entirely within SFBJV's boundary and the project site is included as a key habitat project in the implementation plan identified as project CB21 Oyster Bay (the project area goes by many names, including Oyster Bay).

COMPLIANCE WITH CEQA:

The proposed project is categorically exempt from CEQA under 14 Cal. Code Regulation Section 15306 for information collection because it consists of basic data collection and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. The proposed project is a part of a study leading to an action which a public agency has not yet approved, adopted, or funded. The project is also statutorily exempt under 14 Cal. Code Regulation Section 15262 in that the proposed project will prepare technical studies for future actions that have not yet been approved, adopted, or funded.

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