



**SAN FRANCISCO BAY RESTORATION AUTHORITY MEASURE AA
GRANT APPLICATION – COVER PAGES**

CONTACT INFORMATION	
Organization	City of Berkeley
<input checked="" type="checkbox"/> Public Agency <input type="checkbox"/> Nonprofit Organization <input type="checkbox"/> Private For-Profit Entity <input type="checkbox"/> Public-Private Partnership <input type="checkbox"/> Multi-Agency Partnership or Joint Powers Authority <input type="checkbox"/> Other	
Contact Name	Nelson Lam / Roger Miller
Contact Title	Civil Engineer / Senior Management Analyst
Email	NeLam@cityofberkeley.info / RMiller@cityofberkeley.info
Mailing Address	2180 Milvia St, third floor, Berkeley, CA 94704
Phone	510-981-6704
Partner Entities	Waterside Workshops; San Francisco Estuary Institute

PROJECT INFORMATION			
Project Name	The West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project.		
Summary	Complete the preliminary design and CEQA environmental document for a list of habitat restoration projects at Aquatic Park, including hydrology improvements (tide tube renovations), habitat improvements (wetland and upland), and stormwater treatment improvements (remove contaminants). In addition, run a program – the Aquatic Park Habitat Restoration Vocational Internship Program (paid) – that will enroll 15 students from disadvantaged communities to work on the planning and implementation of wetland and upland habitat restoration projects over a six-week period for two summers.		
Funding Request	\$894,700	Total Project Cost	\$938,404
Project Start Date	June 2022	Project End Date	December 2024
Measure AA Program Area(s)	<input checked="" type="checkbox"/> Clean Water <input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Flood Protection <input checked="" type="checkbox"/> Public Access		
Project Phase(s)	<input type="checkbox"/> Acquisition Planning; <input checked="" type="checkbox"/> Design Permitting <input type="checkbox"/> Construction/Implementation <input type="checkbox"/> Monitoring; Maintenance <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/>		
California Environmental Quality Act	<input checked="" type="checkbox"/> Not a project under CEQA <input type="checkbox"/> Exempt from CEQA (statutorily or categorically) Neg <input type="checkbox"/> Dec <input type="checkbox"/> Mitigated Neg Dec <input type="checkbox"/> EIR If required, has the CEQA document been approved and filed? <input type="checkbox"/> Yes (Date filed: _____) <input type="checkbox"/> No (Expected filing date: _____)		

PERFORMANCE MEASURES (Enter data relevant to project - if not applicable, enter "0")

Species targeted for restoration (please list): Plants: salt marsh gum plant, Jaunea, pickleweed, Cattails, brass buttons, alkali bulrush, Birds: bufflehead, western grebes, lesser scaup, double-crested cormorant, Black-crowned night heron, great blue heron, snowy egret, and great egret.	
Acres of habitat to be constructed	
Beach Habitat	0 Acres
Managed Ponds	0 Acres
Tidal Marsh Complex	0 Acres
Other Bayland	0 Acres
Seasonal Wetland	0 Acres
Other Subtidal	0 Acres
Shellfish Habitat	0 Acres
Submerged Aquatic Vegetation Habitat	0 Acres
Upland Habitat	0.5 Acres
Miles of Levee to be constructed	0 Miles
Miles of Bay Trail to be designed	0 Miles
Miles of Bay Trail to be constructed	0 Miles
Miles of other trails to be designed (non-Bay Trail)	0.5 Miles
Miles of other trails to be constructed (non-Bay Trail)	0 Miles
Number of Water Trail sites to be designed	0 Sites
Number of Water Trail sites to be constructed	0 Sites
Number of public access facilities to be completed (non-trail facilities, such as piers, parking lots, groups of picnic tables)	0 Facilities
Number of youth to be engaged	15 People
Benefits economically disadvantaged communities (yes/no)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Number of volunteer hours to be contributed	Hours
Number of unique volunteers to participate in restoration	People

LOCATION INFORMATION			
SFBRA REGION	<input type="checkbox"/> North (Sonoma, Marin, Napa, Solano)	<input checked="" type="checkbox"/> East (Alameda, Contra Costa)	
	<input type="checkbox"/> West (San Francisco, San Mateo)	<input type="checkbox"/> South (Santa Clara)	
County	Alameda	Specific Location	Aquatic Park, Berkeley, CA
Latitude Format: 33.3333	37.858208	Longitude Format: -111.1111	-122.299833
Point represented by Lat/Long (e.g., parking lot, center of site, etc):	Center of site		
APNs (Acquisition Only)	NA		

ELECTED OFFICIALS

Districts	Number(s)	Name(s)
State Senate	9	Nancy Skinner
State Assembly	15	Buffy Wicks
Congressional	13	Barbara Lee



SAN FRANCISCO BAY RESTORATION AUTHORITY MEASURE AA

Organization	City of Berkeley
Project Name	West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project
Contact Person	Nelson Lam, Supervising Civil Engineer, Parks, Recreation and Waterfront Dept
Contact Email	NeLam@cityofberkeley.info RMiller@cityofberkeley.info

I. GRANT APPLICATION – PROJECT DESCRIPTION

1. Project Eligibility.

The City of Berkeley (City) will form a Community Technical Advisory Working Group, prepare an Urban Estuarine Habitat Restoration & Resilience Plan (preliminary design and CEQA document) and run a new program called the Aquatic Park Habitat Restoration Vocational Internship Program that will hire 15 young adults from disadvantaged communities to perform restoration planning and landscaping work. These activities address all three Restoration Act project types: **1) Restore urban estuarine aquatic habitat** with projects to improve water quality and connectivity between the Bay and the subtidal estuarine habitat within Aquatic Park (AP) Lagoon, with a new focus on resiliency to mid- and end of century sea-level rise projections by enhancing **2) flood protection measures**, and **3) preserve and enhance existing public access** to the habitat at the lagoon and adjacent shoreline with improvements to the existing trail system, and enhanced signage for wayfaring and interpretive education.

This project will identify project elements that will protect, restore, and enhance aquatic and potential upland habitat at Berkeley’s largest urban park – Aquatic Park in West Berkeley, an area comprised historically of disadvantaged communities, and an area that was impacted by the historically unjust red-lining practices of the national banking industry.

This project will also involve a collaboration with the California Department of Transportation (Caltrans) regarding their upcoming project to renovate the Ashby/I-80 Intersection adjacent to Aquatic Park. Their project will relinquish an existing road (Bay Street) and certain roadway shoulders back to the City of Berkeley to reprogram into new parkland and enhanced habitat.

The **community engagement** element in this project will involve two activities. First, with community partner Waterside Workshops, the project will run a new Aquatic Park Habitat Restoration Vocational Internship Program with youth from disadvantaged communities to perform restoration planning and landscaping work. Second, the project will sponsor volunteer events to involve the community in habitat restoration landscaping special events. The community engagement activities will follow the methodologies established by State Coastal Conservancy, Tips for Meaningful Community Engagement:

<https://scc.ca.gov/files/2019/04/Tips-for-Meaningful-Community-Engagement.pdf>

2. Project and Site Description

Need for the Project: Aquatic Park is a man-made inland lagoon located in West Berkeley with a direct connection to the waters of the San Francisco Bay. The eastern shoreline of Aquatic Park is part of the original shoreline of the Bay, one of the last remaining examples in the East Bay area. The neighborhoods on the north and south end of Aquatic Park have been extremely diverse, with over 50% of West Berkeley comprised of African-Americans peaking in 1970. According to the California FactFinder¹, there is a significant shortage of parks and open space in these neighborhoods, with approximately 0.90 acres of parkland per 1,000 residents. In these neighborhoods, approximately 18% of residents live in households below the federal Poverty threshold.

This project will preserve an existing valuable subtidal, tidal, and upland aquatic habitat resource that also provides extensive public recreational opportunities in the form of wildlife viewing, walking, cycling, and boating. In addition, Aquatic Park has two nonprofits that provide opportunities for local disadvantaged youth such as the employment and training opportunities created by Waterside Workshops² and the adaptive cycling for persons with limited mobility provided by the Bay Area Outreach and Recreation Program³.

Since 2007, Waterside Workshops, our proposed community partner for the habitat restoration vocational internship program, has provided job training programs, classes, and outdoor recreation programs for low-income and disconnected youth ages 8-24 from the East Bay. In their 14-year history, they have transformed the once abandoned park buildings into a bustling community center, helping revitalize Berkeley Aquatic Park. They recruit foster youth, homeless youth, youth who have been previously incarcerated, youth that are on probation, and youth who are at risk of dropping out of school. Of the youth they serve, 80 percent are low-income and 60 percent of those youth live below the poverty line. Over 80 percent are youth of color.

Aquatic Park is comprised of two lagoons fed by tidal action from the Bay via culverts (tide tubes) underneath Interstate 80 as well as upland areas with habitat and recreation (picnic areas, play structures, exercise stations, and a perimeter pedestrian/cycling trail). The Main Lagoon contains just over 60 acres of aquatic habitat over one mile in length with an average depth between four to eight feet, and the smaller lagoon, the Model Yacht Basin contains five acres. The decline in the urban estuarine habitat at Aquatic Park, originally built as a Works Progress Administration project in 1937, has been documented for over thirty years and has resulted in degraded water circulation and water quality, extensive sedimentation in the lagoons, and degraded wildlife habitat areas in the water and uplands. Until the recent cleanout of the main tide tubes in 2020, the tidal range inside Aquatic Park was reduced to less than six inches, as compared with the 6 to 8 foot range in the adjacent Bay. This was due to a major encrustation of tube worm casings over the last three decades, which reduced the functioning of the tide tubes to less than 5% of their capacity. Now that the tide tubes have been restored to full functioning, the tidal prism in the lagoon has returned to its original 2 feet range.

In the past twenty years, several fish kills due to algal blooms and rapid temperature increases have occurred. In addition, Highway I-80 has experienced spills from commercial vehicles that fall directly into Aquatic Park waters, notably the 1995 spill of 5,000 gallons of corn syrup and petroleum. Also, urban runoff from City streets along the eastern edge of the lagoon will occur

¹ <https://www.parksforcalifornia.org/communities/?overlays=parks>

² <https://watersideworkshops.org/>, last accessed 10/12/2020

³ <https://www.borp.org/>, last access 10/12/2020

after storms and results in the deposition of pollutants and fertilizers into park waters that result in processes that create strong putrefaction odors for extended periods. Finally, the average depth of the lagoon has decreased by 50% (from a range of 8-15 feet in 1970 to a range of 4-8 feet in 1990) in just two decades, highlighting a long-term concern that eutrophication could occur if water quality improvements are not made within the next decade.

The City has identified four main issues within the project area comprised of the following: degradation of the urban estuarine refugia habitat; stormwater flooding; lagoon water contamination that prohibits public access, and susceptibility to rising seas. The Aquatic Park Lagoon is a landlocked lagoon bounded by Interstate 80 to the west and the railroad track to the east, and has a shoreline and culvert system that is slowly eroding, which impedes the natural flow of water, fish and mammals. Periodic flooding of the lagoon perimeter trail and access road system limits public access and threatens the non-profit buildings along the shoreline at Aquatic Park Lagoon. Alternative flood management strategies are needed to improve habitat and reduce flood risk caused by the Bay and stormwater inflow.

Organization Structure: All components of the project will be managed by the City's project team and partners. A core team of seven City staff will support the Plan development, including the Supervising Civil Engineer (Waterfront Division), Watershed Manager, Environmental Health (Water Quality Division) Manager, Recreation Manager, Environmental Compliance Specialist, and the Parks, and Public Works Department Directors. The community engagement element of the project, called the Aquatic Park Habitat Restoration Vocational Internship Program for disadvantaged youth in this proposal, will be run by the staff at Waterside Workshops.

Project Phase Funded by this Grant: The community engagement element of the project involves the running of a new summer program, the Aquatic Park Habitat Restoration Vocational Internship Program (paid), that will enroll 15 students from disadvantaged communities to work on the planning and implementation of the wetland and upland habitat elements of the project over six weeks each summer for two summers. The current phase of the project involves the development of the preliminary design of the habitat improvement projects (tide tube renovations, stormwater treatment methods, and enhanced wetland and enhanced upland landscaping) and the completed CEQA environmental document for these project elements.

History and Context: Berkeley Aquatic Park was created as an inland urban park lagoon during construction of the original East Shore Freeway. The eastern shoreline of Aquatic Park was formerly the original shoreline of the East Bay, one of the last remaining examples. The original hydrology design of the park involved the flushing of tidal Bay waters in and out of the park lagoons through a series of tide tube culverts installed underneath Interstate 80. Currently only one of those culvert systems is fully functional (the five main lagoon tide tubes). For the past three decades, since the 1980's, most of the tide tube culverts have been clogged and non-functional, leading to significantly degraded water quality and aquatic habitat. In 2020, the City performed a maintenance cleaning of the five main tide tubes which brought back almost 100% of their original functionality. The condition assessment of the maintenance project found, however, that the tide tubes are showing initial signs of structural failure, and so a re-sleeve of the tubes is critical in the next decade to preserve the subtidal and upland habitat at Aquatic Park.

For the past three decades, the City has been exploring ways to rehabilitate Aquatic Park Lagoon habitat with several planning efforts^{4,5,6,7}. Studies showed that restoring circulation would substantially improve water quality and urban estuarine habitat. Impaired circulation results in warmer temperatures that cause elevated bacteria levels, reduced dissolved oxygen, harmful algal blooms, and explosive growth of widgeon grass that chokes out key subtidal vegetation. Ensuring the full tidal circulation would counter these negative water quality effects and restore the aquatic habitat as well as the shoreline and upland habitats to their original conditions.

Effective, sustainable stormwater management will also help maximize habitat values at Aquatic Park. The City has developed a Watershed Management Plan⁸, supported in part by implementation funding from the City's Measure M bond program. The City's Watershed Management Plan supports a vision of stormwater management throughout the City using the best available techniques such as harvesting and re-using stormwater where possible via green stormwater infrastructure, providing multiple benefits such as aesthetic improvements, heat island mitigation, and traffic calming along with water quality treatment. Some of these methods will bring significant improvements to the treatment of urban stormwater before it drains into Aquatic Park during storms.

In 2020, the City performed a condition assessment and preliminary cleanout of the main Aquatic Park Lagoon tide tubes. Those assessments and cleanouts found that invasive tube worms (*Ficopomatus enigmaticus*) were significantly responsible for clogging the main tubes. At present, the five main tide tubes are fully functional, but are showing early signs of structural failure. The original culverts on the north and south side of the Lagoon are completely blocked, and the interior circulation structures between the Model Yacht Basin and the Lagoon are only partly functional. Re-opening the main tide tubes has been essential to restoring urban estuarine habitat, but the tide tubes are predicted to fail in the next decade or two, causing a major failure of the subtidal aquatic habitat at Aquatic Park, which will lead to increased flooding, and greatly diminished public access to the urban estuarine habitats at Aquatic Park.

The **project goals** will help the San Francisco Restoration Authority (Authority) show near-term success and support its long-term vision. The first goal, **achieve immediate improvements in habitat and water quality**, will build on the existing project design concepts and cost estimates and stakeholder interest to develop a permanent renovation of the hydrology system at Aquatic Park. The salt/brackish wetland projects, tidal circulation and stormwater treatment infrastructure, and public outreach will connect Measure AA funding to demonstrable habitat resource enhancements. The second goal, **prepare for the future**, will address resilience by designing projects to improve sustainability and the effects of sea-level rise. The full project will perform local dredging of the Lagoon at key locations to ensure sufficient depths that will ensure the functioning of the tide tubes, preserve the subtidal aquatic habitat, and preserve the public access recreation activities on the water (e.g., rowing, kayaking, etc).

Expected Outcomes: Measure AA funds in this phase will enable the City to complete a preliminary design and CEQA document for a project with significant sustainability and resiliency features, as well as implementing a vocational internship program with disadvantaged

⁴ Hydrology and Water Quality: Berkeley Aquatic Park. Phillip Williams Associates, 1990.

⁵ Aquatic Park Water Quality Improvement Study. CH2MHill and others, 1994.

⁶ Aquatic Park Natural Resources Management Study (NRMS). Laurel Marcus and Associates and others, 2003.

⁷ Aquatic Park Improvement Program Technical Report. Laurel Marcus and Associates and others, 2008.

⁸ Watershed Management Plan. Adopted by the City of Berkeley, October 30, 2012.

youth over two summers to engage them in the planning and implementation of the restoration projects in the wetland and upland habitats at Aquatic Park. This new program will bring more disadvantaged youth into the park to experience the shoreline habitat of Aquatic Park and develop a sense of stewardship for the resource. The new Technical Advisory Group (TAG) will provide guidance throughout the project, and will be comprised of the local Aquatic Park Stakeholders Group (of community residents and park users), as well as staff from the San Francisco Estuary Institute (SFEI).

Project Location

Aquatic Park is located in West Berkeley, bounded on the west by Interstate 80, on the east by the Union Pacific Railroad tracks and berm, on the north by land just south of University Ave, and on the south by Bay Street (which is the Caltrans on-ramp to Interstate 80 East).

Aquatic Park’s unique habitat value and accessibility to the community results from a confluence of natural and created features:

- **Urban Estuarine habitat** supported by tidal flushing and freshwater inflow has established unique refugia and pocket habitat areas in the lagoon and along its shoreline that should be protected and enhanced.
- **Tidally enhanced circulation** was designed to manage water quality and needs to be restored to fully support existing habitat and recreational uses.
- **Innovative stormwater treatment** can be achieved in smaller catchments adjacent to the park because the larger watershed has been mostly re-routed around the lagoon.
- **Connectivity to Bay Trail** and nearby urban amenities makes Aquatic Park’s habitat and recreational benefits accessible to the wider community, including nearby disadvantaged communities⁹.

Pedestrians and cyclists enjoying the main spine of the Bay Trail in Berkeley can currently take a side trip across the pedestrian overcrossing bridge at Interstate 80 to experience the diversity of Baylands habitat types at Aquatic Park. A perimeter two-mile loop at Aquatic Park takes visitors around the lagoon habitat that is interleaved with pockets of tidal flats, salt and brackish marsh, freshwater wetlands, and diked ponds and marshes. Along the edges of the Main Lagoon, plants such as the salt marsh gum plant, Jaunea, and pickleweed grow among rock. Cattails, brass buttons, and alkali bulrush grow in areas where freshwater enters the system. The San Francisco Bay Habitat Goals report notes lagoons found throughout the Bay support many of the same aquatic invertebrates and fish as adjacent shallow water shoreline habitats. Water birds who frequent Aquatic Park include bufflehead, western grebes, lesser scaup, and double-crested cormorant. Wading birds such as Black-crowned night heron, great blue heron, snowy egret, and great egret forage shallow areas of the lagoon for food. Pockets of delineated salt/brackish wetland currently total 0.76 acres in Aquatic Park.

3. Specific Tasks

#	Task Name	Description
1	Technical Advisory Group (TAG)	A Technical Advisory Group will be formed to include expert insight and community input on the proposed Habitat Improvement Plan.
2	The Aquatic Park Habitat Restoration Vocational Internship Program	A new program, the Aquatic Park Habitat Restoration Vocational Internship Program, will engage up to 15 youth from disadvantaged communities in the planning and implementation of restoration

⁹ Disadvantaged Communities – Tract and Block Group 2016 , per <https://gis.water.ca.gov/app/dacs/>

		projects in the wetland and upland habitats at Aquatic Park over two summers. Participants will receive a weekly stipend for six weeks.
3	Urban Estuarine Wetland Habitat Restoration and Resiliency Plan	Develop a comprehensive Urban Habitat Restoration & Resiliency Plan to complete the preliminary design and CEQA environmental documents for projects that improve habitat, reduce flooding, improve stormwater quality, increase public access, and increase resiliency to sea level rise at Aquatic Park. Project elements will include the tide tube and culvert renovations, stormwater treatment renovations, and enhanced wetland and upland habitat.
4	Monitoring Plan	The Monitoring Plan will identify appropriate monitoring strategies for each task identified in the Plan in accordance with Authority's requirements. The plan will outline recommended evaluation methods and suggest baseline and post-project measures. The Monitoring Plan will incorporate feedback from the TAC. Where appropriate, data will be made available to the public through online information resources, such as EcoAtlas (https://www.ecoatlas.org/)

4. Work Products and Schedule.

#	Task Name	Work Products	Estimated Completion Date
1	Technical Advisory Group (TAG)	Formation of TAG, develop communication protocol, and routine meeting schedule	June 2022
2	The Aquatic Park Habitat Restoration Vocational Internship Program	Community engagement plan Bi-Monthly Stakeholders Workshops Quarterly Community Meetings	September 2024
4	Preliminary Design & CEQA Clearance	60% level design plans and technical documents and a completed CEQA document	December 2024
5	Monitoring Plan	Progress reports, Baseline monitoring report	Quarterly, and Duration of Project

5. Project Partners. The City will partner with the community-based Aquatic Park Stakeholders Group and staff from the San Francisco Estuary Institute to discuss Aquatic Park habitat, recreation, water quality, and other planning issues. The stakeholders group includes representatives from environmental groups, the rowing club, and other park users and neighbors that have been involved at Aquatic Park for many years. The City will also partner with Waterside Workshops, a nonprofit at Aquatic Park, to run the Aquatic Park Habitat Restoration Vocational Internship Program.

6. Community Support, Involvement and Benefits. For the Community Engagement project element, the City will partner with Waterside Workshops, a local non-profit at Aquatic Park that has been providing vocational job training opportunities to local youth from disadvantaged communities (high school and middle school) in the areas of bicycle and boat repair, café service, and other volunteer activities since 2007. Waterside Workshops will recruit up to 15 youth from disadvantaged communities for the new Aquatic Park Habitat Restoration Vocational Internship program (paid) for a six-week summer program for two summers. Participants will be engaged in the planning and implementation of wetland and upland habitat restoration projects at Aquatic Park, including the monitoring and recording of the flora, fauna, and water quality throughout the program. In addition, the City will partner with other non-profits

that involve residents from disadvantaged communities to participate in volunteer habitat landscaping activities at Aquatic Park; a key partner also operating at Aquatic Park is the Bay Area Outreach and Recreation Program (BORP) that provides adaptive bicycles to a wide range of persons with mobility challenges, primarily with persons-of-color.

7. Measuring Success. For the preliminary designs and CEQA document for the proposed habitat improvement projects, the full completion of the documents will be the measure of success. The Aquatic Park Habitat Restoration Vocational Internship Program will have two measures of success. First, the program will engage youth in the measurement of the flora and fauna at Aquatic Park's wetland and upland habitats. This data will provide baseline measurements to be used for future evaluations when the restoration projects have been fully implemented in future years. Second, we will use the target of 70% of youth to complete the six week program each summer as a measure of program success.

8. Applicant History. The City has over eighty (80) years of experience in implementing major capital improvement projects at the Berkeley Waterfront area with federal, state and regional funding and collaboration provided by USEPA; USFEMA; USACE; USFWS; CDFW; EBRPD; RWQCB; California Coastal Conservancy; California Wildlife Conservation Board; California Department of Boating and Waterways (DBW); California Department of Parks and Recreation; the Land and Water Conservation Fund. Over the past thirty years, the City has completed several water-based capital projects using \$36 million in State-funded DBW Marina Improvement loans; projects included renovation of several Marina Docks and amenities and shoreline riprap erosion prevention. Over the past twenty years at Aquatic Park, the City restored habitat at the south end of the Main Lagoon in 2000 (including \$100,000 in Habitat Conservation Fund support); performed technical habitat and hydrology studies cited in this funding application (\$400,000 from 2003-2006); dredged the north end of the Main Lagoon in 2006 (\$571,000); and in October 2020, performed a thorough cleaning and assessment of the five main tide tubes that connect Aquatic Park (\$550,000).

In addition, the City has over forty years of experience running outdoor youth educational programs at the Berkeley Marina for disadvantaged communities throughout the Bay Area, at a current cost of approximately \$400,000 per year using City funds. Finally, the City of Berkeley operates the Berkeley Youth Works program in the Department of Health, Housing, and Community Services, to recruit disadvantaged youth into a variety of vocational opportunities. Since 2007, Waterside Workshops has been providing paid vocational training to youth from disadvantaged communities in the areas of bicycle and boating repair, café service, and other activities.

The City has a comprehensive financial system and experienced finance and auditing staff to manage the accounting and auditing of all capital and programming projects, and contracts for an independent audit of its federally funded capital projects (a single audit) on a yearly basis.

9. Barriers and Risks. There are several physical and social constraints that affect the long-term viability of the habitats and recreational opportunities at Aquatic Park. The main tide tube culverts that connect Aquatic Park to the Bay waters are fixed at set elevations with set gradients, and the stormwater culverts on the east side of the park are designed to bring local urban runoff directly into the lagoon whenever there is rainfall to prevent local street flooding just east of Aquatic Park. When the lagoon's tide tubes to the Bay become impaired (e.g., as was the case from the 1980's through 2020), the lagoon cannot drain the rush of stormwater quickly into the Bay and extensive flooding of the park's uplands occurs. As climate change brings sea-level rise and more storms over the next several decades, the City will need new methods to

pre-drain the lagoon in advance of storms using a renovated system of automatic flapgates on the tide tubes, along with sensors connected to live weather prediction data. By the end-of-century, the sea level might be too high for the tide tubes to function correctly, and the subsequent rising groundwater table will likely become a problem for the habitat and public access at the park. One possible adaptation would be to build up the elevation of the berms and uplands around the perimeter of the lagoons to contain rising lagoon water levels and groundwater levels over the coming decades; another adaptation will involve the much larger-scale solution to build up the levee that Interstate 80 occupies, and install a new set of tide tubes under the freeway at a higher elevation. Within the context of these physical dynamics, the stakeholders and general public in Berkeley will need to prioritize which habitat and recreation elements should be protected and enhanced over the coming decades as hydrologic conditions change.

10. Environmental Review. As a planning project, the proposed preliminary design and CEQA review phase will complete the environmental review of the full implementation project. The City of Berkeley, as the lead agency, will adopt the completed CEQA document and file it with the State CEQA Clearinghouse and the Alameda County Clerk-Recorders Office. At that point, the final design and construction implementation phase can commence as funding is obtained.

11. Bay Trail or Water Trail Public Access. Aquatic Park is currently connected to the main north-south spine of the Bay Trail in Berkeley via the pedestrian / bike bridge over I-80. The perimeter trail around Aquatic Park currently provide full public access to experience the aquatic and upland habitats at the park. The perimeter trail needs additional renovation to meet current ADA accessibility requirements as well as aesthetic improvements. The existing set of wayfaring and interpretive signage is minimal and in need of significant improvement.

12. Permitting and Mitigation. Prior to the construction implementation of the hydrologic system and habitat improvement projects (tide tube culverts, stormwater culverts, and wetland enhancements), permits will be needed from the following regulatory agencies: Caltrans, California Department of Fish and Wildlife, U.S. Army Corps of Engineer, East Bay Regional Park District, San Francisco Bay Regional Water Quality Control Board, and the San Francisco Bay Conservation and Development Commission (BCDC).

13. Acquisitions. Not applicable. The City owns all properties within the proposed project area.

GRANT APPLICATION – PRELIMINARY BUDGET

14. In Kind Services: City staff will cover the project management function and will host two volunteer landscaping events per year, and will cover the minor costs of the Technical Advisory Group, totaling \$43,704, as shown in the table below.

15. Contingency Costs: Not Applicable.

16. Operation and Maintenance. Not Applicable for this prelim design and CEQA phase of the project.

17. Uncertainties. The tide tubes need additional inspection and evaluation because current conditions are not fully understood. The existing sediments in the lagoons need to be evaluated for their chemical content and suitability for re-use in enhancing wetlands and building up the shoreline of Aquatic Park in the face of rising seas.

Task Name	Year 1	Year 2	SFRA Grant Request	In-Kind Match	Total Cost
Technical Advisory Group (TAG)	\$1,200	\$1,200	\$0	\$2,400	\$2,400
Vocational Internship Program	\$134,720	\$119,980	\$254,700	\$0	\$254,700
Urban Estuarine Hab Restoration Plan	\$320,000	\$320,000	\$640,000	\$0	\$640,000
Project Management (City staff)	\$19,500	\$19,500	\$0	\$39,000	\$39,000
Volunteer Landscaping Events (City staff)	\$1,152	\$1,152	\$0	\$2,304	\$2,304
Totals	\$476,572	\$461,832	\$894,700	\$43,704	\$938,404

18. GRANT APPLICATION - PRIORITIZATION CRITERIA

1. **Greatest positive impact.** The goal of the preliminary design and CEQA document is to plan the details of projects that will restore circulation, restore bathymetry for recreation and flood capacity, re-use sediments for wetland habitat enhancement and shoreline stabilization, and improve the quality of stormwater entering Aquatic Park Lagoon and the Bay. The goal of the Urban Habitat Vocational Internship Program is to engage youth from disadvantaged communities in the planning and implementation of habitat restoration projects at Aquatic Park (wetland and upland) and inculcate a sense of stewardship of the shoreline ecology of the Bay.
2. **Greatest long-term impact.** The planning process funded by this project is essential to not only optimize today's habitat and connectivity, but also to understand how this unique niche within the East Bay Baylands habitat mosaic will evolve over time as sea level rises.
 - a. The City needs to understand whether current uses will be sustainable in 50 years, when sea level rise is expected to exceed the current design elevations of the tide tubes. The preliminary design process will investigate the approach to re-use sediment over time to elevate various upland spots at Aquatic Park. The City will coordinate with the San Francisco Bay Joint Venture and enter the Aquatic Park sediment budget findings of the Habitat Resilience Plan into the San Francisco Estuary Institute's Sedimatch database.

- b. The City also needs to understand how rising groundwater may mobilize underground contaminant plumes known to exist along the East Bay shoreline. If this is a significant risk due to rising sea level, the City needs to know if future configurations of Aquatic Park could mitigate this problem, i.e. building raised sloped ecotones along Aquatic Park’s shoreline could provide an incremental solution that can be implemented numerous times in subsequent decades as groundwater table rises.
- 3. **Leveraging resources and partnerships.** The City will partner with Waterside Workshops, a nonprofit agency that provides vocational opportunities to youth from disadvantaged communities in the areas of bicycle and boat repair, among other activities (see Letter of Support attached). Waterside will run a new program – the Aquatic Park Habitat Restoration Vocational Intern Program – with 15 high school youth to do planning and implementation activities for habitat restoration projects at Aquatic Park (wetland and upland areas). The City will partner with the San Francisco Estuary Institute and the Aquatic Park Stakeholders Group comprised of Berkeley residents to run a Technical Advisory Group (TAG) throughout the project (see Letters of Support attached, SFEI and Berkeley Paddling and Rowing Club).
- 4. **Economically disadvantaged communities.** Since 2007, Waterside Workshops at Aquatic Park has provided job training programs, classes, and outdoor recreation programs for low-income and disconnected youth ages 8-24 from the East Bay. In their 14-year history, they have transformed the once abandoned park buildings into a bustling community center, helping revitalize Berkeley Aquatic Park. They recruit foster youth, homeless youth, youth who have been previously incarcerated, youth that are on probation, and youth who are at risk of dropping out of school. Of the youth they serve, 80 percent are low-income and 60 percent of those youth live below the poverty line. Over 80 percent are youth of color. Recruitment is done through their network of local schools and youth-serving organizations including: Acta Non Verba in Oakland, Oakland Unified School District Linked Learning, Beyond Emancipation, Berkeley Youth Alternatives, Berkeley YouthWorks, Berkeley High, MetWest High, Richmand Youthworks, La Cheim School in Richmond, the Native American Child Resource Center, King Middle School, and Berkeley Technology Academy.

The residential neighborhoods on the northeast and southeast ends of Aquatic Park historically have been extremely diverse, with over 50% of West Berkeley comprised of African-Americans peaking in 1970. According to the California FactFinder¹⁰, there is a significant shortage of parks and open space in these neighborhoods, with approximately 0.90 acres of parkland per 1,000 residents. In these neighborhoods, approximately 18% of residents live in households below the federal Poverty threshold.

- 5. **Benefits to economy.** A vibrant and restored Aquatic Park will draw visitors from throughout the East Bay region as follows:
 - a. The Berkeley Waterfront, the park areas at Eastshore State Park (Berkeley Meadow and the anticipated Brickyard Cove), and Berkeley’s Fourth Street commercial district currently draw many thousands of visitors from throughout the Bay Area, increasing local revenues. Aquatic Park can increasingly play a role in attracting visitors to the area.
 - b. Currently planned capital projects planned in the Berkeley Waterfront area will translate to nearly \$20 million in design and construction labor costs.

¹⁰ <https://www.parksforcalifornia.org/communities/?overlays=parks>

- c. The proposed Aquatic Park Habitat Restoration Vocational Internship Program that will be run by Waterside Workshops will engage youth from disadvantaged communities directly in the fields of landscaping and ecological restoration and can lead directly to potential future employment opportunities.
- 6. **Engage youth and young adults.** The proposed Vocational Internship Program with Waterside Workshops will engage directly with youth and young adults in habitat restoration activities. In addition, the Berkeley Outreach and Recreation Program (BORP) provides adaptive cycling for youth and adults with disabilities that will benefit greatly from the proposed restoration activities.
- 7. **Monitoring, maintenance, and stewardship.** The proposed Monitoring Plan will establish baseline conditions of the flora, fauna, and water quality of Aquatic Park. Monitoring will document circulation, hydraulics, water quality, habitat, wildlife, bathymetry, geomorphology, and public / park user perceptions. Water Quality monitoring will follow the state’s Surface Water Ambient Monitoring Program (SWAMP) guidance. Habitat assessments will follow established protocols such as the California Rapid Assessment methodology (CRAM). The Vocational Internship Program will engage youth in these activities to both monitor the conditions at the park as well as inculcate a sense of environmental stewardship for the area. The City will prepare operations and maintenance plans to ensure the ongoing success of the proposed restoration projects.
- 8. **Coastal Conservancy’s San Francisco Bay Area Conservancy Program.**
 - a. The project is supported by regional plans including: *Restoring the Estuary, The Baylands and Climate Change, Recovery Plan for Tidal Marsh Ecosystems for Northern and Central California, Comprehensive Conservation and Management Plan for the San Francisco Estuary, Surviving the Storm, San Francisco Bay Trail Plan, Water Quality Control Plan for the San Francisco Bay Basin.*
 - b. The proposed project serves a regional constituency. The results of the feasibility studies will inform future implementation phases that will have benefits beyond the immediate project site.
 - c. The proposed project can be implemented in a timely way. The project can begin as soon as funding is secured through the propose authorization and is projected to be completed by 2024.
 - d. The proposed project provides opportunities for benefits that could be lost if the project is not quickly implemented. The Plan will address several urgent issues including flooding, habitat degradation, water contamination, limited public access, and sea level rise.
- 9. **San Francisco Bay Conservation and Development Commission’s Coastal Management Program.** The feasibility studies address several policies of BCDC’s San Francisco Bay Plan, part of its Coastal Management Program:
 - a. Water Quality Policy 1: Feasibility studies for stormwater improvements will support projects to reduce pollutants entering the Bay.
 - b. Water Quality Policy 2: Restoring tidal circulation will more fully support beneficial uses of Aquatic Park Lagoon.
 - c. Water Surface Area and Volume Policy 1: Restoring Aquatic Park Lagoon bathymetry will increase water volume. Restoring circulation will maximize active oxygen exchange through tidal action.

- d. Public Access Policy 3: The project will consult with appropriate agencies as a part of the involvement of the Technical Advisory Group (TAG) to determine the potential improvements for public access;
- e. Public Access Policy 4: Public access will be reviewed to identify potential changes needed to prevent significant adverse effects on wildlife;
- f. Public Access Policy 5: Project plans include outreach to a diverse group of community members and specify plans to enhance the existing inclusive public access;
- g. Environmental Justice and Social Equity Policy 3: Equitable community outreach and engagement will be conducted;
- h. Public Access Policy 8: The public access improvements will be designed to encourage diverse Bay-related activities and will provide barrier-free access for persons with disabilities;
- i. Public Access Policy 14: Review of public access is being integrated early into the planning and design of habitat restoration projects;
- j. Climate Change Policy 2: The project will include a risk assessment accounting for future sea level rise;
- k. Climate Change Policy 3: The project designs will assume useful life through mid-century and include adaptive management guidance for Aquatic Park beyond that time frame.
- l. Climate Change Policy 4: The project will give special consideration to the preservation and habitat enhancement of areas vulnerable to future flooding (i.e., the shoreline and uplands of Aquatic Park Lagoon);
- m. Climate Change Policy 5: The project will incorporate sea level rise adaptation approaches where feasible and appropriate for Aquatic Park Lagoon;
- n. Climate Change Policy 8: The project planning for resilience will include coordination with the California Department of Transportation and Union Pacific Railroad, who own transportation corridors on the east and west boundaries of Aquatic Park;
- o. Recreation Policy 1: The project will enhance and increase existing opportunities for accessible water-oriented recreation;
- p. Recreation Policy 3: Aquatic Park currently conforms to the standard for waterfront recreational facilities. The project will review and improve the balance between public access and wildlife disturbance as necessary and preserve site features compatible with water recreation;
- q. Recreation Policy 4. Protecting properties within the park from flooding will help continue to use of existing buildings for compatible new uses;
- r. Public Access Policy 6: The project will evaluate management and maintenance of public access to avoid significant adverse impacts from sea level rise;
- s. Public Access Policy 8: The project will maintain and enhance public access in a manner consistent with the culture of the local community and provide for the public's safety and convenience.

10. **San Francisco Bay Joint Venture's Implementation Strategy.** The City is currently in the process of entering the proposed project on the Joint Venture's list. The results of the preliminary design studies will contribute to the Joint Venture's goal of protecting, restoring, and enhancing Bay habitat of lagoon type. The project will contribute directly toward The Joint Venture's goal for enhancing 1,500 acres of lagoon habitat and controlling pollutants to improve water quality.

GRANT APPLICATION CHECKLIST

A complete application will consist of the following files:

- Grant application:
 - PDF cover pages
 - Project description section I
 - Preliminary budget section II
 - Prioritization criteria section III
- Project maps and design plans (in one pdf file, 10 MB maximum size)
- Project photos (in jpg format)
- Optional: Support letters from community representatives

Project Maps and Graphics. Provide the following project graphics with your application. Project maps and design plans should be combined into one pdf file with a maximum size of 10 MB. Project photos should be provided in jpg format.

- Regional Map – Clearly identify the project's location in relation to prominent area features and significant natural and recreational resources, including regional trails and protected lands.
- Site-Scale Map – Show the location of project elements in relation to natural and man-made features on-site or nearby. Any key features discussed in project description should be shown.
- Design Plan – Construction projects should include one or more design drawings or graphics indicating the intended site improvements.
- Site Photos – One or more clear photos of the project site

I have reviewed the **Grant Agreement Provisions** listed in the Request for Proposals and understand the likely requirements for receiving and administering Measure AA Funds.

Applications should be emailed to grants@sfbayrestore.org. If you are unable to email your application, you may mail your application materials to the following address:

San Francisco Bay Restoration Authority
c/o State Coastal Conservancy
1515 Clay Street, 10th Floor
Oakland, CA 94612

Grant applications must be received by the San Francisco Bay Restoration Authority by 5pm on October 7, 2021.



Project Map



Regional Map

Existing Conditions

-  **Project Boundary: Estuarine Habitat Restoration, Resilience, and Public Access Plan**
-  **Model Yacht Basin to Main Lagoon Connection**
-  **Main Lagoon to Bay Connection**
-  **Model Yacht Basin to Bay Connection**
-  **Stormwater Inflow**
-  **San Francisco Bay Trail**

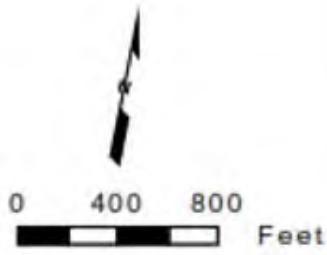


Figure 2. Project Goals and Approach Addressing Baylands Habitat Types Found in Aquatic Park

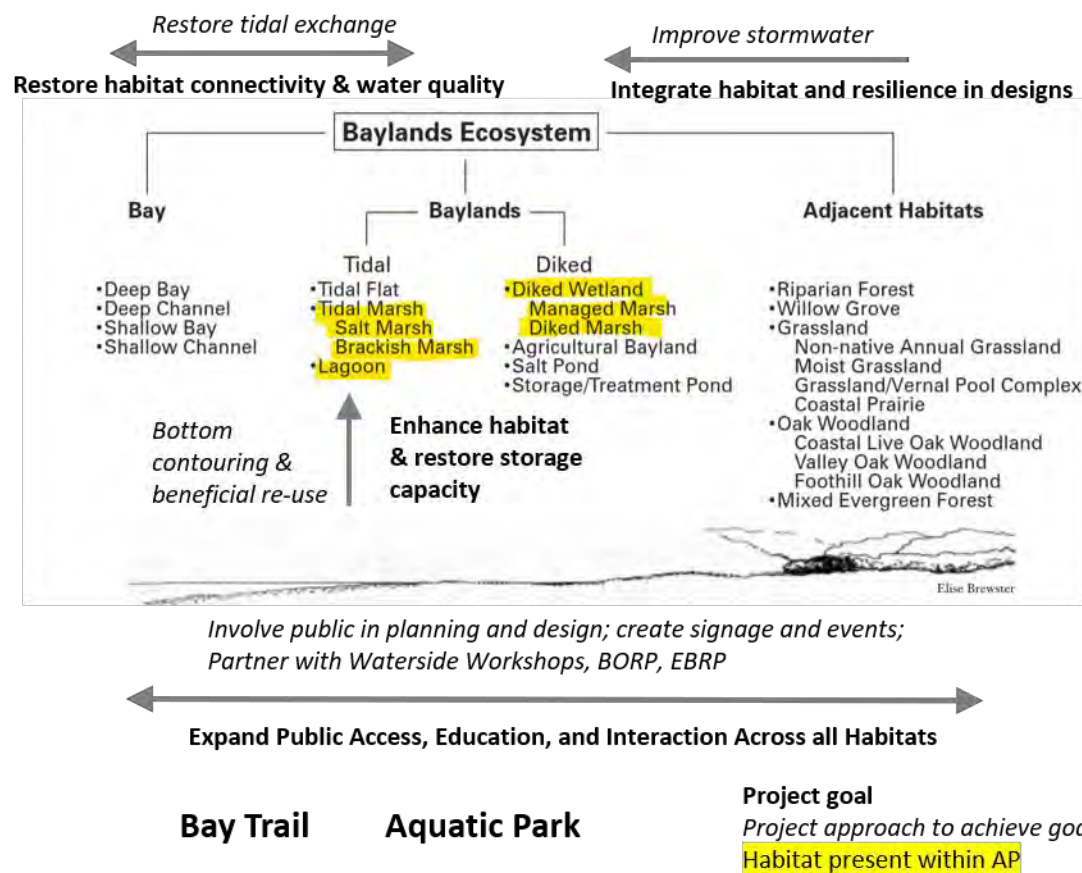
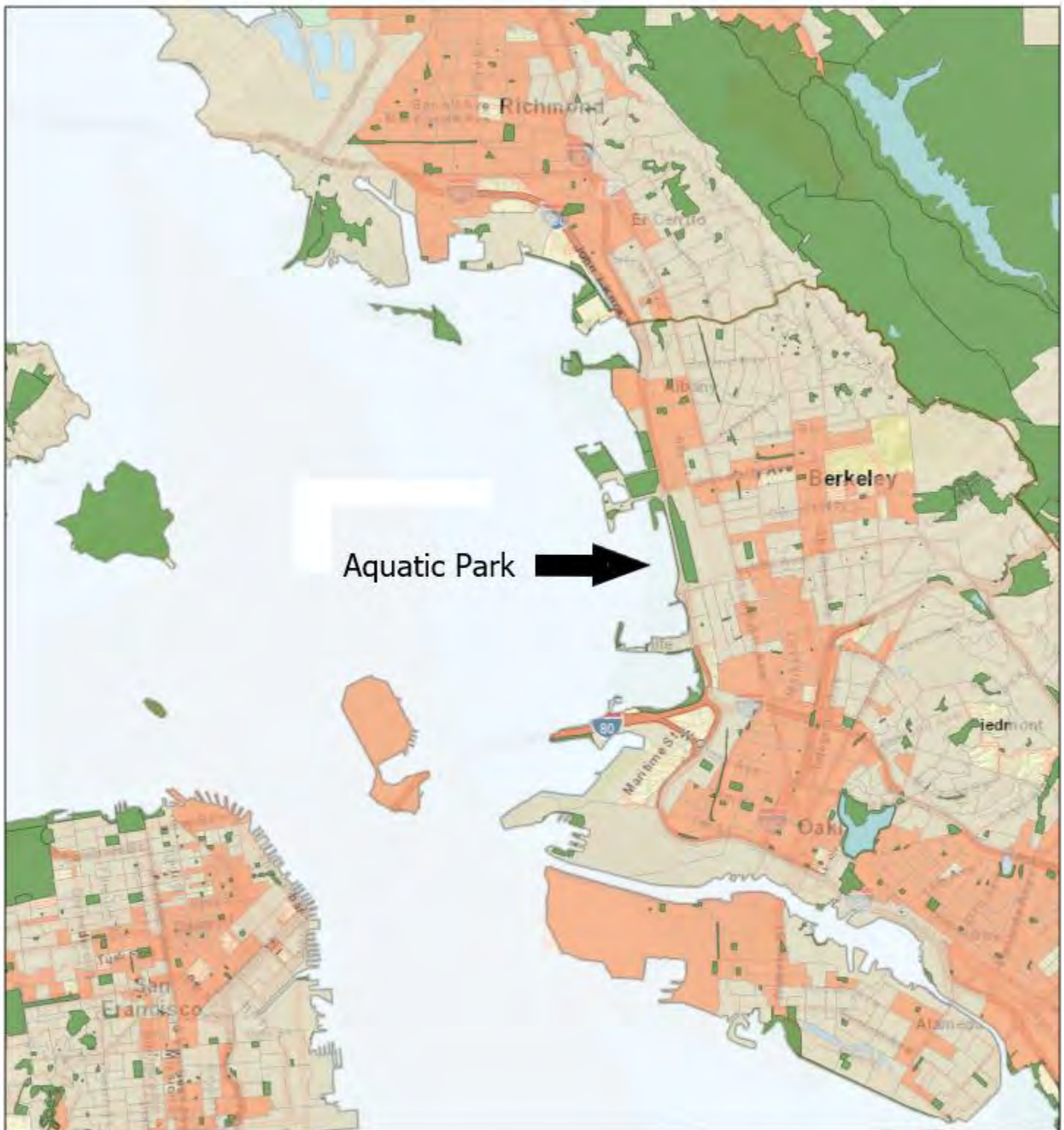
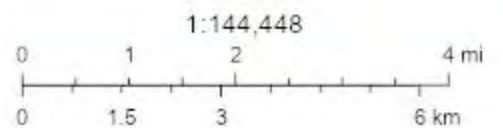


Figure 3. Proximity of Low-Income Communities to Aquatic Park



October 23, 2020

- Protected Areas
- Economically Disadvantaged Communities Block Group
 - Not a Low-Income Community
 - Low-Income Community
 - No Data - MHI Data Missing
 - No Data - Household Size Data Missing



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



84 Bolivar Drive
Berkeley, CA 94710
510-644-2577
watersideworkshops.org
Tax ID#: 26-0200654

October 6, 2021

Nelson Lam, Supervising Civil Engineer
Department of Parks, Recreation & Waterfront
City of Berkeley
1947 Center St, 5th floor
Berkeley, CA 94704

RE: Letter of Support for the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project**

Dear Mr. Lam:

We are writing in support of the City of Berkeley's grant application to the SF Restoration Authority to fund the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project**. We believe this is an important first step in improving the water quality at Aquatic Park and community engagement programming for disadvantaged communities in Berkeley, Oakland, and Richmond, will provide the foundation for developing the next steps for implementation projects.

Located at the Berkeley Aquatic Park, Waterside Workshops engages youth and the community through hands-on learning in bicycle mechanics, wooden boatbuilding, and outdoor education. Waterside is a safe place for youth to feel heard, gain confidence, develop work skills, and access the tools and resources needed to lead healthy, sustainable lives. Since 2007, Waterside has provided job training programs, classes, and outdoor recreation programs for low-income and disconnected youth ages 8-24 from the East Bay. In our 14-year history, we have transformed once abandoned park buildings into a bustling community center, helping revitalize the Berkeley Aquatic Park.

We look forward to supporting the City's efforts for future projects that are determined feasible by this proposed project by attending planning workshops, advertising workshops on our website, and providing advice and comments as needed.

Sincerely,

Neil Larsen, Executive Director
Waterside Workshops

October 5, 2021

Nelson Lam, Supervising Civil Engineer
Department of Parks, Recreation & Waterfront
City of Berkeley
1947 Center St, 5th floor
Berkeley, CA 94704

RE: Letter of Support for the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration, Resilience, and Public Education and Access Plan**

Dear Mr. Lam:

We are writing in support of the City of Berkeley's grant application to the SF Restoration Authority to fund the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration, Resilience, and Public Education and Access Plan**. We believe this is an important first step in improving the water quality at Aquatic Park and outdoor educational programming for disadvantaged communities in West Berkeley and Oakland, will provide the foundation for developing the next steps for implementation projects.

The San Francisco Estuary Institute (SFEI) is one of California's premier aquatic and ecosystem science institutes. Our mission: provide scientific support and tools for decision-making and communication through collaborative efforts. We provide independent science to assess and improve the health of the waters, wetlands, wildlife and landscapes of San Francisco Bay, the California Delta and beyond.

We will support the City's efforts by providing scientific advice and guidance as requested.

Sincerely,

Warner Chabot

Warner Chabot
Executive Director
San Francisco Estuary Institute



ADAPTIVESPORTS

ACCESSIBLERECREATION INCLUSIVEFITNESS

OUTDOORADVENTURES

GOALBALL POWERSOCCER

ADAPTIVECYCLING

WHEELCHAIRBASKETBALL

Leo Siecienski
Program Manager
Bay Area Outreach and Recreation Program
80 Bolivar Drive
Berkeley, CA 94710
leo@borp.org
510-848-2930

10/06/2021

Nelson Lam, Supervising Civil Engineer
Department of Parks, Recreation & Waterfront
City of Berkeley
1947 Center St, 5th floor
Berkeley, CA 94704

RE: Letter of Support for the West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project.

Dear Mr. Lam:

We are writing in support of the City of Berkeley's grant application to the SF Restoration Authority to fund the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project**.

We believe this is an important first step in improving the water quality at Aquatic Park and will provide the foundation for developing the next steps for implementation projects.

The mission of our organization is to provide recreational opportunities to people with physical disabilities. This proposal will directly impact our adaptive kayaking program.

We will support the City's efforts for future projects that are determined feasible by this proposed project by attending planning workshops, advertising workshops on our website, and providing advice and comments as needed.

Sincerely,

Leo Siecienski



Berkeley Paddling & Rowing Club
2851 W Bolivar Drive
Berkeley, CA 94710

October 06, 2021

Nelson Lam, Supervising Civil Engineer
Department of Parks, Recreation & Waterfront
City of Berkeley
1947 Center St, 5th floor
Berkeley, CA 94704

RE: Letter of Support for the West Berkeley Aquatic Park Urban Estuarine
Habitat Restoration and Community Engagement Project

Dear Mr. Lam:

We are writing in support of the City of Berkeley's grant application to the SF Restoration Authority to fund the **West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project**. We believe this is an important first step in improving the water quality at Aquatic Park and will provide the foundation for developing the next steps for implementation projects.

The Berkeley Paddling and Rowing Club (BPRC) is a recognized non-profit organization, which aims to support, promote and educate the public about the amateur sports of rowing and paddling and to train paddlers and rowers of all ages for local and national competition. BPRC is home to scullers and paddlers who represent a variety of skill levels and experience, from novices to Olympians, including former national team members from around the world.

We will support the City's efforts for future projects that are determined feasible by this proposed project by attending planning workshops, advertising workshops on our website, and providing advice and comments as needed.

Sincerely,

Elaine Baden

Elaine Baden
BPRC President



Figure 42: Algae Blooms in Main Lagoon





Black-crowned night heron



Great egret



Great blue heron



Snowy egret

Figure 31: Wading Birds of Aquatic Park



Figure 49: Mixed Flock of Shorebirds at Mudflat Area in Main Lagoon



Figure 53: Rock Wall Falling off Shoreline Trail on East Shore of Main Lagoon



Figure 10: Rocky Shoreline of Main Lagoon

Figure 2-23. Alkali Bulrush (*Scirpus robustus*) on the Eastern Shoreline of the Main Lagoon



Figure 2-24. Marsh Gumplant (*Grindelia stricta* var. *angustifolia*) along the Eastern Shoreline of the Main Lagoon



Figure 2-37. Pickleweed (*Salicornia virginica*)



**Figure 2-46. English Ivy in Trees along Railroad Berm
in Freshwater Wetland #8**



**Figure 2-47. Freshwater Wetland #9 -
Narrow Drainage to Main Lagoon**











Bufflehead



Lesser scaup



Western grebes



Double-crested cormorant



Double-crested cormorant

Figure 30: Water Birds of Aquatic Park







February 4, 2022

Nelson Lam / Roger Miller
City of Berkeley
nelam@cityofberkeley.info / rmiller@cityofberkeley.info

RE: San Francisco Bay Restoration Authority Grant Application 2021-22
The West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community
Engagement Project

Dear Nelson Lam and Roger Miller:

Thank you for applying to the San Francisco Bay Restoration Authority's 2021-22 competitive grant round for Measure AA funding. Unfortunately, your application for "The West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project" will not be recommended for funding.

The San Francisco Bay Restoration Authority received many qualified grant applications but does not have enough funding to meet the demand for these grants, and we regret not being able to fund so many proposals. We received requests for over \$56 million, and only had approximately \$10 million available in this grant round. We hope that we will be able to work with your organization in the future.

If you have any questions, or would like to discuss, please email Jessica Davenport, Deputy Program Manager, at jessica.davenport@scc.ca.gov, and Linda Tong, Grant Program Coordinator, at linda.tong@scc.ca.gov.

Sincerely,

DocuSigned by:

7C9576795DC74E4...
Amy Hutzel
Executive Officer

Miller, Roger

From: Tong, Linda@SCC <Linda.Tong@scc.ca.gov>
Sent: Wednesday, March 2, 2022 4:51 PM
To: Ferris, Scott
Cc: Miller, Roger; Davenport, Jessica@SCC
Subject: Re: Round 5 Grant Review- City of Berkeley
Attachments: West Berkeley Aquatic Park feedback.docx

Hi Scott,

Please see attached document with comments from the proposal reviewers.

We are still working with our governing board to decide if we'll have another open grant round later this year, or if we'll just reevaluate the previous applications based on updated project status and funding needs - we received many good applications this past round and will still have limited funding for the next fiscal year.

Jessica please chime in if needed.

Best,
Linda

Linda Tong
Project Manager, San Francisco Bay Program
State Coastal Conservancy | San Francisco Bay Restoration Authority
linda.tong@scc.ca.gov

From: Ferris, Scott <SFerris@cityofberkeley.info>
Sent: Tuesday, March 1, 2022 4:01 PM
To: Tong, Linda@SCC <Linda.Tong@scc.ca.gov>
Cc: Miller, Roger <RMiller@cityofberkeley.info>
Subject: RE: Round 5 Grant Review- City of Berkeley

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Linda

We appreciate you taking the time to do this. Will you be accepting another round of grants next year?

Scott

March 2, 2022

Feedback on SFBRA grant application 2021:

**West Berkeley Aquatic Park Urban Estuarine Habitat Restoration and Community Engagement Project
– City of Berkeley**

Strengths:

- The project involves planning for the implementation that will enhance existing habitat by maintaining tidal exchange by resleeving the tide tubes that connect the lagoon to bay, improving circulation by dredging to increase lagoon depth, reusing sediment to build habitat features, and improving the quality of stormwater entering the lagoon.
- Drastic water quality improvement can be achieved which will improve subtidal habitat / habitat value for fish, birds, and the invertebrate community in a public shoreline park.
- The project would assess sea level rise adaptation options to address flooding and deal with possible mobilization contaminant plumes as groundwater levels rise.
- Seems like there is a strong need to implement this project soon to prevent climate related issues for roads and neighboring communities. potential habitat adaptation options and/or updated stormwater system need to be explored
- The likelihood of success for the project is high with the management from City of Berkeley staff, the scientific expertise of SFEI as part of the Technical Advisory Group, and the established community connection from the collaboration with Waterside Workshops and the Bay Area Outreach and Recreation Program. Good that Caltrans is involved and willing to relinquish road and shoulders to City of Berkeley for park planning.
- Community engagement model is strong. Already identified a partner for workforce development and community engagement around landscaping the upland areas.
- The City has developed partnerships with onsite nonprofit groups to support the involvement of youth from disadvantaged communities (including paid planning and landscaping internships), people with disabilities, and rowers who use the lagoon for recreation.
- The project brilliantly creates a partnership between the City of Berkeley and Waterside Workshops to engage youth from diverse backgrounds with an emphasis on economically disadvantaged communities.

Drawbacks:

- Largely a stormwater project and is due for maintenance. Primarily stormwater/SLR benefits but also water quality will continue to be impacted by pollution from expressway.
- The area is low lying and already floods when intense rainfall results in high flows of stormwater into the lagoon. Public access enhancements may not be sustainable. Many aspects of the project involve maintenance of infrastructure, which is the responsibility of the City, e.g., tide tube resleeving, stormwater quality management, and flood management.
- The flood control benefits are not clearly defined.
- Primarily an enhancement project with limited potential for expanding wildlife habitat – the project does not create new habitat or trails. The project is not on SFBJV's list.

- Small acreage of habitat benefit is certain, mostly exploratory in terms of nature based approaches for addressing SLR and circulation.
- Long-term maintenance is in question - how will they address long term management of an aquatic habitat (invasive species control, continued dredging, etc.)? What partnerships can be leveraged? Any considerations for how to control invasive species (will that issue improve as water quality improves)?
- The project would engage youth from disadvantaged communities, but the area around the lagoon is not mapped as an EDC.

Questions:

- Will this project be presented to the Joint Venture for adoption to their project list?