

File No. 211134

Committee Item No. 3

Board Item No. 20

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget and Finance Committee Date December 1, 2021

Board of Supervisors Meeting Date December 7, 2021

Cmte Board

<input type="checkbox"/>	<input type="checkbox"/>	Motion
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Resolution
<input type="checkbox"/>	<input type="checkbox"/>	Ordinance
<input type="checkbox"/>	<input type="checkbox"/>	Legislative Digest
<input type="checkbox"/>	<input type="checkbox"/>	Budget and Legislative Analyst Report
<input type="checkbox"/>	<input type="checkbox"/>	Youth Commission Report
<input type="checkbox"/>	<input type="checkbox"/>	Introduction Form
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Department/Agency Cover Letter and/or Report
<input type="checkbox"/>	<input type="checkbox"/>	MOU
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Grant Information Form
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Grant Budget
<input type="checkbox"/>	<input type="checkbox"/>	Subcontract Budget
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Contract/Agreement
<input type="checkbox"/>	<input type="checkbox"/>	Form 126 – Ethics Commission
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Award Letter
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Application
<input type="checkbox"/>	<input type="checkbox"/>	Public Correspondence

OTHER (Use back side if additional space is needed)

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Port Resolution No. 21-38 - 9/14/21</u>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Powerpoint Presentation 12/1/21</u>
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Completed by: Brent Jalipa Date November 22, 2021

Completed by: Brent Jalipa Date December 2, 2021

1 [Accept and Expend Grant - California Department of Fish and Wildlife - Heron's Head Park
2 Shoreline Resilience Project - \$1,493,000]

3 **Resolution authorizing the Port of San Francisco to accept and expend a grant in the**
4 **amount of \$1,493,000 from the California Department of Fish and Wildlife to fund the**
5 **Heron's Head Park Shoreline Resilience Project from January 1, 2022, through**
6 **December 31, 2024.**

7
8 WHEREAS, The Port manages the San Francisco waterfront within its jurisdictional
9 boundaries as the gateway to a world-class city, and advances environmentally and financially
10 sustainable maritime, recreational and economic opportunities to serve the City, Bay Area,
11 and California; and

12 WHEREAS, The Port delivers vibrant and diverse waterfront experiences that enrich
13 the City and San Francisco Bay Area; and

14 WHEREAS, Heron's Head Park is a 22-acre open space and thriving wildlife habitat
15 located on Port property in the City's Southeast Sector; and

16 WHEREAS, Since its creation over 20 years ago the park has evolved, with the
17 addition of the EcoCenter in 2010 and additional expansion and improvements of the park in
18 2012; and

19 WHEREAS, Heron's Head Park has also experienced significant erosion and invasion
20 by non-native plants, resulting in decreased acreage and ecological value of the tidal wetland;
21 and

22 WHEREAS, The Port has developed the Heron's Head Park Shoreline Resilience
23 Project to construct a living shoreline and restore wetland habitat in order to mitigate negative
24 impacts to the tidal wetland; and

1 WHEREAS, Proposition 1, the Water Quality, Supply, and Infrastructure Improvement
2 Act of 2014 was authorized by the California Legislature to appropriate funds to the California
3 Department of Fish and Wildlife ("CDFW") to fund multi-benefit ecosystem and watershed
4 restoration and protection projects; and

5 WHEREAS, On February 17, 2021, the Port applied for grant funds from the CDFW to
6 construct a natural infrastructure-based shoreline to prevent erosion and enable sea level rise
7 adaptation at Heron's Head Park; and

8 WHEREAS, On June 15, 2021, the CDFW recommended an award of \$1,493,000 for
9 the Heron's Head Park Shoreline Resilience Project; and

10 WHEREAS, The CDFW grant agreement provides approximately 42% of the
11 estimated cost to construct the Heron's Head Park shoreline stabilization and living shoreline
12 elements of the project; and

13 WHEREAS, The CDFW grant does not require matching funds fund from the Port; and

14 WHEREAS, The Heron's Head Park Shoreline Resilience Project work to be funded
15 by the Grant Agreement is exempt from the California Environmental Quality Act; and

16 WHEREAS, On September 14, 2021, the San Francisco Port Commission through
17 Resolution No. 21-38, authorized the Port to accept and expend the grant and the Port
18 Executive Director or her designee to negotiate and execute the Grant Agreement and all
19 other instruments necessary to obtain and expend the grant monies on behalf of the Port;
20 now, therefore, be it

21 RESOLVED, That the Board of Supervisors authorizes the Port to accept and expend a
22 grant in the amount of \$1,493,000 from the CDFW to fund Heron's Head Park Shoreline
23 Resilience Project and, be it

24 FURTHER RESOLVED, That, pursuant to Charter, Section 9.118, the Board of
25 Supervisors approves the Grant Agreement in substantially the form as on file with the Clerk

1 of the Board of Supervisors in File No. _____ and authorizes the Port Executive Director
2 or her designee to conduct all negotiations, and execute and submit all documents, including
3 but not limited to applications, agreements, amendments, payment requests, and so on, that
4 may be necessary for acceptance and expenditure of the grant and fulfillment of the grant
5 terms that the Port Executive Director determines, in consultation with the City Attorney, are in
6 the best interests of the City and do not materially increase the obligations or liabilities of the
7 City, are necessary or advisable to effectuate the purposes of the grant or this Resolution, and
8 are in compliance with all applicable laws, including the City's Charter; and, be it

9 FURTHER RESOLVED, That the Board of Supervisors hereby waives inclusion of
10 indirect costs as part of this Grant budget; and, be it,

11 FURTHER RESOLVED, That within thirty (30) days of the Grant Agreement being fully
12 executed by all parties, the Port Executive Director shall provide the final agreement to the
13 Clerk of the Board of Supervisors for inclusion into the official file.

14
15
16
17
18 Recommended:

19
20
21 _____ /s/
22 Executive Director, Port of San Francisco
23
24
25

1	Approved:	Approved:
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3		
4		
5	<u> /s/ </u>	<u> /s/ </u>
6	Mayor	Controller
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File Number: 211134
(Provided by Clerk of Board of Supervisors)

Grant Resolution Information Form

(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: Heron's Head Park Shoreline Resilience Project
2. Department: Port
3. Contact Person: Carol Bach Telephone: 415-274-0568
4. Grant Approval Status (check one):
☒ Approved by funding agency ☐ Not yet approved
5. Amount of Grant Funding Approved or Applied for: \$1,493,000
6. a. Matching Funds Required: None
b. Source(s) of matching funds (if applicable):
7. a. Grant Source Agency: California Department of Fish and Wildlife
b. Grant Pass-Through Agency (if applicable): NA
8. Proposed Grant Project Summary:

Heron's Head Park has experienced significant erosion and invasion by non-native plants, resulting in decreased size and ecological value of the tidal wetland. The Port has developed plans for a living shoreline construction and wetland habitat restoration project, the Heron's Head Park Shoreline Resilience Project (the Project), to mitigate these impacts. This grant will provide 42% of the funds needed to construct the shoreline stabilization and living shoreline elements of the project.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:
Start-Date: January 2022 End-Date: December 31, 2024
10. a. Amount budgeted for contractual services: \$1,493,000
b. Will contractual services be put out to bid? Yes
c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Yes
d. Is this likely to be a one-time or ongoing request for contracting out? One time
11. a. Does the budget include indirect costs?
☐ Yes ☒ No
b. 1. If yes, how much?
b. 2. How was the amount calculated?
c. 1. If no, why are indirect costs not included?
☐ Not allowed by granting agency ☒ To maximize use of grant funds on direct services
☐ Other (please explain):
c. 2. If no indirect costs are included, what would have been the indirect costs? Indirect costs would consist solely of Port staff time.
12. Any other significant grant requirements or comments:

****Disability Access Checklist** (Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Existing Site(s) | <input type="checkbox"/> Existing Structure(s) | <input type="checkbox"/> Existing Program(s) or Service(s) |
| <input type="checkbox"/> Rehabilitated Site(s) | <input type="checkbox"/> Rehabilitated Structure(s) | <input type="checkbox"/> New Program(s) or Service(s) |
| <input type="checkbox"/> New Site(s) | <input type="checkbox"/> New Structure(s) | |

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.

If such access would be technically infeasible, this is described in the comments section below:

Comments:

Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Wendy Proctor
(Name)

Port ADA Coordinator
(Title)

Date Reviewed: 9/30/2021

W. Proctor
(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Elaine Forbes
(Name)

Executive Director
(Title)

Date Reviewed: 9/30/2021


(Signature Required)

Heron Head's Park – California Department of Fish and Wildlife Grant Budget

Line Item Budget Detail	
A. PERSONNEL SERVICES	
No personnel services other than 3 rd -party contractors' are included in the grant budget.	
Subtotal Personnel Services	\$0
B. OPERATING EXPENSES: GENERAL	
No general operating expenses are included in the grant budget	
Subtotal Operating Expenses: General	\$0
C. OPERATING EXPENSES: SUBCONTRACTORS	
Subcontractor 1 – Construction Management Contractor, providing professional construction inspection and contract management services	\$322,000
Subcontractor 2 – Construction Contractor, providing labor and materials to construct stabilized shoreline and integrated habitat elements (oyster reef balls, intertidal woody debris)	\$1,171,000
Subtotal Operating Expenses: Subcontractors	\$1,493,000
D. OPERATING EXPENSES: EQUIPMENT	
No equipment other than 3 rd -party contractors' are included in the grant budget	
Subtotal Operating Expenses: Equipment	\$0
E. INDIRECT COSTS	
No indirect costs are included in the grant budget	\$0
F. GRAND TOTAL (A+B+C+D+E)	\$1,493,000



State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
P.O. Box 944209
Sacramento, CA 94244-2090
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



**PROPOSITION 1 WATERSHED RESTORATION GRANT PROGRAM
HERON'S HEAD PARK SHORELINE RESILIENCE
GRANT AGREEMENT NUMBER – Q2196007**

GRANTOR: State of California, acting by and through the
California Department of Fish and Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090

GRANTEE: Port of San Francisco
Pier 1 – The Embarcadero
San Francisco, CA 94111

SECTION 1 – LEGAL BASIS OF AWARD

The California Department of Fish and Wildlife (CDFW or Grantor) developed the Watershed Restoration Grant Program in response to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1). Proposition 1 amended the California Water Code (CWC) to add Section 79737, authorizing the Legislature to appropriate funds to CDFW to fund multi-benefit ecosystem and watershed restoration and protection projects.

Pursuant to Fish and Game Code Section 1501.5(b), Grantor is authorized to enter into this grant agreement (Agreement) and to make an award to the Port of San Francisco, a department of the City and County of San Francisco (Grantee) for the purposes set forth herein. Grantee accepts the grant on the terms and conditions of this Agreement. Accordingly, Grantor and Grantee (Parties) hereby agree as follows:

SECTION 2 – GRANT AWARD

2.01 Grant: In accordance with the terms and conditions of this Agreement, Grantor shall provide Grantee with a maximum of \$1,493,000 (Grant Funds) to financially support and assist Grantee's implementation of Heron's Head Park Shoreline Resilience (Project).

2.02 Term: The term of this Agreement is January 1, 2022 through December 31, 2024. (Agreement Term).

SECTION 3 – ELIGIBLE USES OF GRANT

Only Grantee expenditures that are necessary to implement the Project, comply with applicable federal and State of California law, and made in accordance with this

Agreement are eligible for reimbursement from the Grant Funds.

SECTION 4 – GRANTEE’S REPRESENTATIONS AND WARRANTIES

Grantee represents and warrants to Grantor as follows:

- 4.01 Existence and Power:** Grantee is a public entity validly existing and in good standing under the laws of California. Grantee has full power and authority to transact the business in which it is engaged and full power, authority, and legal right to execute and deliver this Agreement and incur and perform its obligations hereunder.
- 4.02 Binding Obligation:** This Agreement has been duly authorized, executed, and delivered on behalf of Grantee and constitutes the legal, valid, and binding obligation of Grantee, enforceable in accordance with the Agreement’s terms.

SECTION 5 – GENERAL TERMS

- 5.01 Purpose:** This Agreement is entered into by the Parties for the purpose of providing financial support to Grantee to complete the Project, specifically the activities identified within Section 6 - Project Statement.
- 5.02 Project:** Grantee shall complete the Project as set forth in Section 6 - Project Statement.
- 5.03 General Grant Provisions:** Public Entities General Grant Provisions (Exhibit 1.a), is attached hereto and made a part of this Agreement.
- 5.04 Amendments; Budget Revisions:** Grantee shall submit any request to amend any term of this Agreement in writing to the CDFW Grant Manager. Grantee must include an explanation of and justification for any such request. This Agreement may only be amended in accordance with Section 2 of Exhibit 1.a except that the CDFW Grant Manager may approve via email proposed revisions to the Budget (as defined in Section 9.01) to shift budgeted funds between existing line items or categories when those proposed revisions meet all of the following requirements:
- Are consistent with the purpose, objectives, and description of the Project as detailed in Section 6 - Project Statement;
 - Do not increase the total amount of Grant Funds;
 - Do not, in the aggregate, transfer more than 10% of the Grant Funds excluding Budget revisions previously approved by the CDFW Grant Manager;
 - Are not retroactive in effect.
- 5.05 Acknowledgement of Credit:** Grantee shall include signage, to the extent practicable, informing the public that the Project received funds through the

California Department of Fish and Wildlife from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, CWC § 79707) Further, Grantee shall include appropriate acknowledgement of credit to the Watershed Restoration Grant Program and its implementing agency, the California Department of Fish and Wildlife, for Grantor's financial support when using any data and/or information developed under this Agreement (e.g., in posters, reports, publications, presentations).

- 5.06 Notice to Proceed and Landowner Access:** Grantee must not proceed with on the ground implementation activities in Task 5 until it has received a Notice to Proceed from the CDFW Grant Manager. The CDFW Grant Manager will not issue a Notice to Proceed until Grantee has secured all required permits, provided copies of such permits to the CDFW Grant Manager, and secured Project Site Access (as defined in Section 6.03.2 of this Agreement) that the CDFW Grant Manager determines is adequate.

SECTION 6 – PROJECT STATEMENT

6.01 Introduction:

The purpose of this project is to create a living shoreline that will enhance and preserve the physical, biological, and community benefit functions at Heron's Head Park for a design life of 30 years. The coarse material shoreline will enable wetlands to migrate with rising sea level so that some wetland habitat and key public access features remain through mid-century. With the proposed monitoring and stewardship, including ongoing removal of non-native species and replanting with locally adapted native wetland/transition zone plants, the Project will combat a significant infestation by invasive Algerian sea lavender, employ local youth, and provide volunteer opportunities for visitors and students. The Project will engage the surrounding community in implementation and demonstrate how marsh-fringing beach and other living shoreline elements can be integrated to create a resilient shoreline, thereby contributing to statewide efforts to develop technical understanding and implementation of natural systems-based approaches to shoreline stabilization.

San Francisco Bay has lost more than 90% of its historic tidal wetlands and is one third smaller than it was 100 years ago due to decades of filling along the bay shoreline. This has resulted in substantial loss, degradation, and fragmentation of habitat and decreased ecological function for many species. The Bay now has reduced biomass from loss of wetland vegetation and shellfish beds that once provided habitat structure and food resources. The San Francisco Estuary is also one of the most invaded estuaries in the world, with resultant loss of ecological function and disruption of the food web for native species. Reduced concentrations of sediment in the Estuary and rising sea level contribute to projections of future habitat loss. On- going loss of tidal marsh due to erosion of marsh edges is one of

the most direct impacts of sea level rise on ecosystems in the Estuary (SFEI & Baye, 2020).

The original Heron's Head Park wetland enhancement project in winter 1998- 99 created approximately 10 acres of intertidal habitats, including tidal marsh, a tidal channel network, marsh ponds and transition/upland mounds. In the 20 years since, the Port expanded and enhanced the wetlands at Heron's Head Park while the shoreline has experienced subsidence of the fill soils, erosion from wind-waves and tidal flows, and a low supply of ambient suspended sediment. These forces have caused a loss of both habitat acreage and ecological functions and shoreline retreat.

The overall project objective is to integrate the biological and physical goals of shoreline protection and intertidal and shallow subtidal habitat restoration. The Project will create a resilient shoreline that prevents ongoing loss of wetlands and restores ecological function to a small but important area that is utilized by over 100 resident and migratory bird species and supports the endangered California seablite. The beach and oyster reef habitat will enhance the existing mosaic of tidal wetland, tidal pond, and transition zone habitat.

6.02 Objectives: Specific objectives of this Project are to:

1. Construct a dynamically stable beach along the marsh edge. The Port will competitively bid construction of a sand and gravel beach and groynes over 2.06 ac. along 1,600 linear feet of shoreline.
- 2.
3. Incorporate Living Shoreline elements, including subtidal oyster reef elements and high marsh plantings on the beach crest for habitat diversity and ecological function.
4. Restore native marsh and transition zone vegetation. The Port will contract with a local non-profit organization to propagate, plant, and maintain native salt marsh plants over a period of five years.
5. Remove critical mass of invasive species, reducing percent cover by invasive species in the tidal marsh to less than 30% by the end of the 5-year revegetation effort.
6. Monitor project outcomes to inform adaptive management. The Port will monitor physical and ecological outcomes of the Project for 10 years. Monitoring will inform the Port's adaptive management measures as warranted to achieve habitat restoration goals.

7. Contribute to understanding of living shoreline project implementation. Following construction during the grant term the project team will produce monitoring reports and present to Bay restoration agencies and practitioners and the general public.

6.03 Project Description:

6.03.1 Location: Grantee will implement the Project on approximately 22 acres of publicly owned land located at Cargo Way and Jennings Street in the City and County of San Francisco, California. The wetlands are located around latitude 37.44157, longitude -122.22206. in San Francisco County, California (Project Site).

6.03.2 Project Site Access: Grantee shall give Grantor, and its employees and agents written permission to access the Project Site at least once every 12 months from the date of Grantor's Notice to Proceed until 25 years after the end of the Agreement Term for purposes of inspections and monitoring (Project Site Access). Such access shall be reasonably acceptable to the Landowner(s) and the requester following written or verbal request to Grantee.

6.03.3 Materials and Equipment: All materials and equipment are included in subcontractor costs or will be provided as cost share by Grantee.

6.03.4 Project Implementation: Consistent with Grantee's proposal for the Project, Grantee will complete the following tasks in accordance with Section 6.03.6 – Schedule of Due Dates and Deliverables:

Task 1 – Project Management and Administration

Grantee will provide technical and administrative services associated with implementation of the Project, including managing this Agreement, assuring all permits are finalized, administering subcontracts, invoicing and payments, drafting and finalizing progress and final reports, and data management.

Deliverables: Progress and final reports and invoices will be delivered to the grant manager according to the terms in Section 8 Reports of this agreement.

Long-Term Maintenance: Grantee shall ensure that the Project and Project Site are properly operated, used, and maintained consistent with the purposes (as stated in Section 6.01 – Introduction) and objectives (as stated in Section 6.02 – Objectives) of the Project for 25 years after the end of the Agreement Term. Grantor will not fund long-term maintenance activities outside of the Agreement Term.

Task 2 – Stakeholder Engagement

Stakeholder engagement costs are not included in the budget for this grant agreement and are not reimbursable. This task is funded by the grantee.

Grantee will continue stakeholder engagement initiated in 2017 through construction and post- restoration monitoring. Public meetings will include but not be limited to the Port's citizen advisory committees (Southern Waterfront Advisory Committee, Waterfront Land Use Plan Sustainability Committee), local community groups in the Bayview Hunters Point neighborhood (EcoCenter Advisory Committee, Bayview Residents Improving their Environment) and the local chapter of the Audubon Society.

Project partner Literacy for Environmental Justice (LEJ) will initiate additional community outreach developed and presented by LEJ's EcoApprentices. The EcoApprentices will develop and deliver presentations about the Project (with technical support/supervision from the Port) to groups and venues of their choosing. The EcoApprentices' outreach is funded by the San Francisco Bay Restoration Authority Grant to the Port.

Project partner ESA will present the project to more technical audiences, including presenting at an on-line symposium on coarse grain beaches as habitat and shoreline resilience improvements hosted by the California Coastal Conservancy. More such presentations will be appropriate in the future as implementation experience yields lessons learned and results of post-restoration monitoring.

The Port will develop a robust Waterfront Resilience Program (WRP) Communications and Engagement Plan that provides additional capacity for community engagement about the Heron's Head Park Shoreline Resilience Project. Port staff will also continue to leverage its existing environmental education and public outreach programs at Heron's Head Park and other public meetings and events to engage community stakeholders and the public in the project.

The Deliverable for this task will consist of reporting on stakeholder engagement activities to CDFW in Quarterly Reports, to be submitted within 30 days after each quarter during which CDFW-funded construction occurs. The first CDFW-funded construction activities will occur during the July-Sept 2022 quarter, with first report submitted by 10/31/22.

Task 3 Salt Marsh Habitat Restoration

This task is funded by the Port's existing grant agreement with the San Francisco Bay Restoration Authority. Wetland plant and habitat restoration costs are not included in the budget for this grant agreement and are not reimbursable.

Phase 1 wetland plant restoration was initiated in November 2020 with invasive species removal and seed collection. Phase 2 wetland habitat restoration will follow completion of shoreline construction, anticipated January 2023 and include planting along new habitat features.

The Deliverable for this task will consist of reporting on salt marsh restoration activities to CDFW in each Quarterly Report, to be submitted within 30 days after each quarter during which CDFW construction occurs. The first CDFW-funded construction activities will occur during the July-Sept 2022 quarter, with first report submitted by 10/31/22.

Task 4 Pre-Construction Biological Monitoring, Surveys, and Training. Pre-construction surveys and training costs are not included in the budget for this grant agreement and are not reimbursable.

The Port will contract with qualified biologists to complete pre-construction surveys for potential presence of Ridgway's rail and eelgrass and locations of existing California seablite populations, which will be marked and protected. Biologists will also provide environmental awareness training regarding the environmental permit conditions, sensitive resources at the site, and the impact avoidance and minimization measures that must be implemented during construction to the Contractor's field management and construction personnel prior to commencement of work

Throughout the construction period, biologists and other qualified consultants under contract to the Port will continue to monitor presence of Ridgway's rail and compliance with species and habitat, water quality, air quality, noise reduction, and other requirements.

During construction, permits require the Port to provide Workers' Environmental Awareness Training to train Contractor's staff on environmental conditions at the site and required protection measures. Permits also require ongoing monitoring for Ridgway's rail during construction. This ongoing biological monitoring will be one of the elements of the overall construction budget paid for by Port.

Task 5. Shoreline Construction

Grantor funding from the CDFW Prop. 1 Watershed Restoration Grant Program will be used for this task.

Permits restrict on-site construction to occur only between August 1 and January 31 to protect nesting birds and special status species. To prevent erosion and habitat loss grantee will place material of the type, quantity, and location that, based on site-specific modelling of longshore sediment transport, will maintain a functional shoreline for the 30-year life of the project, create a foundation for future adaptive management opportunities, and provide the greatest habitat benefit with the least amount of impact.

Task 5.1. Bid Process. The Port will solicit three proposals for professional construction management services from a Construction Management subcontractor (Construction Management Contractor). The Construction Management Contractor will be selected from a pool of pre-qualified contractors based on qualifications and fee proposal.

Port staff will manage the bid process. The Port will initiate the bidding process for the Shoreline Construction subcontractor (Construction Contractor). Port staff will assemble bid documents, including construction drawings and administrative and technical specifications. The Port will advertise the bid opportunity, conduct a pre-bid site walk, and address questions from bidders.

The Port will retain the services of the design engineering firm, ESA, to provide construction support services (Construction Support) during the bid process and through completion of construction. Construction Support services will include assisting with response to questions on bid documents from bidders and requests for information from the Construction Contractor, reviewing Construction Contractor's submittals, and checking construction in progress as needed to verify conformance with project design. Construction Support is not included in the budget for this grant agreement and is not reimbursable.

At bid opening Port staff will determine the lowest bid from qualified bidders for the Construction Contractor.

Port staff will secure Port Commission and funders' approval of the recommended Construction Contractor and Construction Management Contractor. Prior to execution, the Port will obtain Contractors' insurance, bonding, licenses, and other qualifications. Contracts will be executed and a Notice to Proceed issued. The

Project Timeline will allow the Construction Management Contractor to begin work no later than June 30, 2022. The Construction Contractor will be allowed to proceed with its work no later than July 2022 to allow mobilization at the earliest permitted date of 8/1/22.

The Deliverable for this task will consist of documentation of the bid solicitation process to be submitted to CDFW upon receipt of bids by the end of May 2022; documentation of bids received and basis for determination of the lowest bid from responsive qualified bidders; and copies of the executed contracts between the Port and sub-Contractors to the grant agreement.

Task 5.2. Construction Management

The Construction Management Contractor will provide on-site inspection and contract administration services during the construction period. Construction management services will include daily site inspection to verify progress and compliance with contract specifications and permits, weekly progress meeting with the Construction Contractor, management of Contractor's submittals, requests for information, certified payroll documents, and field survey data to verify conformance with design plans.

Task 5.3 Construct Shoreline.

Before shoreline construction commences, the Construction Contractor will mobilize equipment and materials to the site and begin establishing temporary upland staging and construction access routes. The Construction Contractor will conduct pre-construction topographic surveys and obtain Port approval of the construction schedule, health and safety plan, stormwater pollution prevention plan and similar pre-construction submittals prior to commencement of construction activity.

To avoid disturbance to nesting birds during the August 1 and January 31 construction window, on September 1 the Construction Contractor may begin using construction access routes to the shoreline and deliver bulk materials (sand, gravel, cobble, rock) to the unloading area indicated in the construction plan. It is estimated that the Project will require several truck trips to deliver material to the site, including transporting donated coarse sand/gravel from a nearby sand processing facility.

The Construction Contractor will place rock groynes and drift sills, reinforced pond sills, coarse beach material, and natural wood habitat elements on the shoreline work site. Construction will be confined to the low tide period to place material in areas that are not inundated.

Shoreline habitat elements will be surveyed and inspected at specified milestones to ensure that design quantities and elevations are achieved.

Construction Contractor will remove all temporary construction materials and detail the site as specified by the constructions plans and specifications, including restoring vegetation in any impacted areas and reconstructing asphalt and decomposed granite paths.

Deliverables for this task will be documentation of construction activities in Quarterly Reports and invoices, and in the Draft Final and Final Reports.

Documentation of oyster reef installation will be provided in the context of Quarterly Reports and in the Draft Final and Final Reports.

6.03.5 Schedule of Due Dates and Deliverables:

<u>Task</u>	<u>Description</u>	<u>Deliverables</u>	<u>Estimated Completion Dates</u>
1	Project Management and Administration	Quarterly Progress Reports, including executed contracts, Contractors' invoices, photo-documentation.	Submitted within 30 days following each calendar quarter (March, June, September, December) following grant execution.
2	Stakeholder Engagement	Quarterly Progress Reports will include reporting on stakeholder engagement during the quarter.	Submitted within 30 days following each calendar quarter (March, June, September, December) following grant execution.
3	Salt Marsh Habitat Restoration	Quarterly Progress Reports will include reporting on habitat restoration during the quarter.	Submitted within 30 days following each calendar quarter (March, June, September, December) following grant execution.
4	Pre-construction Monitoring, Surveys, and Training	Only <i>Workers Environmental Awareness Training</i> will occur during the grant period.	Submitted within 30 days following each calendar quarter (March, June, September, December) following grant execution.

<u>Task</u>	<u>Description</u>	<u>Deliverables</u>	<u>Estimated Completion Dates</u>
		Quarterly Progress Reports will include reporting on training during the quarter.	
5	Shoreline Construction		August 1, 2022 through August 31, 2023
5.1	Bid Process	Quarterly Reports for the first two quarters of 2022 will document selection of Construction Management Contractor and Construction Contractor, including bid solicitation, bid summary, selected contractors, and executed contracts	<p>Construction Management Contractor will be selected and under contract by June 30, 2022.</p> <p>Construction Contractor will be selected by June 30, 2022</p> <p>Quarterly Reports documenting the contractor selection and bid process will be submitted in April and July 2022</p>
5.2	Construction Management	Quarterly Progress Reports will include reporting on construction management during the quarter, including Construction Management Contractor's invoices	Construction Management will begin prior to construction (estimated start by June 30, 2022), will continue through construction (substantial completion by August 31, 2023) and construction contract close-out process: (final completion by November 30, 2023)
5.3	Construct Shoreline	Quarterly Progress Reports will document construction completed each quarter, including Construction	Construction will occur August 1, 2022 through substantial completion by August 31, 2023 and final completion by November 30, 2023.

<u>Task</u>	<u>Description</u>	<u>Deliverables</u>	<u>Estimated Completion Dates</u>
		Contractor's invoices and photo-documentation,	
		Draft Final Report	November 30, 2023
		Final Report	December 31, 2023

SECTION 7 – CONTACTS

A point of contact may be changed at any time by either party by providing a 10 day advance written notice to the other party. The Parties hereby designate the following points of contact during the Agreement Term:

CDFW Grant Manager:		Grantee Project Manager:	
Name:		Name:	Carol Bach
Title:		Title:	Environmental Affairs Manager
Address:		Address:	Port of San Francisco, Pier 1 – The Embarcadero San Francisco, CA 94111
Phone:		Phone:	(415)274-0568, (415)819-8065
Email:		Email:	carol.bach@sfport.com

Direct all administrative inquiries to:

CDFW Grant Coordinator:		Grantee Project Coordinator:	
Name:		Name:	Jinan Liu
Title:		Title:	Compliance & Project Accountant
Address:		Address:	Port of San Francisco, Pier 1 – The Embarcadero San Francisco, CA 94111
Phone:		Phone:	(415)274-0421
Email:		Email:	

SECTION 8 – REPORTS

8.01 Progress Reports: Grantee shall submit quarterly progress reports that comply

with the requirements below to the CDFW Grant Manager. The CDFW Grant Manager will provide Grantee with progress report templates.

1. Grantee name, the Project title, this Agreement number, and dates progress report covers;
2. Activities and tasks performed and/or completed, a summary of progress to date including progress since the last report, and a brief outline of upcoming work scheduled for the subsequent quarter;
3. Documentation of all subcontractor activities;
4. Updates on progress towards meeting Project objectives, output and outcome performance measures;
5. Document delivery of any intermediate work products;
6. Costs incurred during the subject period, total of costs incurred to date, and the remaining balance;
7. Any problems encountered while performing the tasks and proposed solutions, timeline for resolution, and status of previously unresolved problems; and
8. Grantee must submit Quarterly Progress Reports electronically in PDF or Microsoft Word compatible format and conform to the templates provided by the CDFW Grant Manager.

8.02 Draft and Final Reports: Grantee must submit a draft final report and final report electronically in either PDF or Microsoft Word compatible format to the CDFW Grant Manager by the dates listed in Section 6.03.6 – Schedule of Due Dates and Deliverables (Draft Final Report and Final Report). The Draft Final Report and Final Report must summarize the life of the Agreement consistent with the Watershed Restoration Grants Program goals and describe the work and results pursuant to Section 6 - Project Statement. The CDFW Grant Manager will provide Grantee a sample Final Report template. Grantee shall include a Final Invoice (as defined in Section 9.02.2 of this Agreement) with the Final Report

8.03 Document Accessibility: Grantee must submit all documentation required as part of this agreement to the CDFW Grant Manager in a format that meets web content accessibility standards (<https://www.wildlife.ca.gov/Accessibility>).

SECTION 9 – BUDGET AND PAYMENT

9.01 Budget Details and Funding Summary: Grantor will provide an amount not to exceed \$1,493,000 as detailed in the Line Item Budget Detail (Budget) below. Grantee will provide \$171,000 in funds or in-kind services as cost share to complete the tasks described in Section 6 – Project Statement. Other funders will provide up to \$1,667,000 in funds or in-kind services as cost share to complete tasks described in Section 6 - Project Statement. Grantee will provide Grantor accurate records of all cost share with the Final Invoice.

Line Item Budget Detail	
A. PERSONNEL SERVICES	
Personnel	\$0
Subtotal Personnel Services	\$0
B. OPERATING EXPENSES: GENERAL	
	\$0
Subtotal Operating Expenses: General	\$0
C. OPERATING EXPENSES: SUBCONTRACTORS	
Construction Management Contractor,	\$322,000
Construction Contractor	\$1,171,000
Subtotal Operating Expenses: Subcontractors	\$1,493,000
D. OPERATING EXPENSES: EQUIPMENT	
	\$0
Subtotal Operating Expenses: Equipment	\$0
E. INDIRECT COSTS	
Indirect Costs (0%)	\$0
F. GRAND TOTAL (A+B+C+D+E)	\$1,493,000

9.02 Payment Provisions

9.02.1 Disbursements: Grantor will disburse Grant Funds to Grantee not more frequently than quarterly, annually in arrears, upon receipt of an original itemized invoice and any required mandatory documentation as identified in Section 6.03.6 – Schedule of Due Dates and Deliverables.

Disbursements will be mailed to the following Grantee address:

Grantee Name:	Port of San Francisco
Attention:	Jinan Lui
Address:	Port of San Francisco Pier 1 – The Embarcadero San Francisco, CA 94111

9.02.2 Invoice Documentation: Each invoice for payment must be accompanied by a written description, not to exceed two pages in length, of Grantee's performance under this Agreement since the time the previous such report was prepared. The report shall describe the types of activities and specific accomplishments during the period for which the payment is being made rather than merely listing the number of

hours worked during the reporting period. The report may be in the form of a Quarterly Progress Report. The final invoice must include a budget summary of all cost share expenditures by fund source, as applicable (Final Invoice). The CDFW Grant Manager will provide Grantee with a sample invoice template. The Final Invoice is due in accordance with Section 6.03.6 – Schedule of Due Dates and Deliverables. The invoice package must be submitted electronically to the CDFW Grant Manager.

Requirements: The invoice shall contain the following information:

1. The word “Invoice” should appear in a prominent location at the top of the page(s);
2. Printed name of Grantee on company letterhead;
3. Grantee’s business address, including P.O. Box, City, State, and Zip Code;
4. Name the CDFW Watershed Restoration Grants Branch as the entity being billed;
5. The invoice date and the time period covered; i.e., the term “from” and “to”;
6. This Agreement number and the sequential number of the invoice (i.e., Q2196007-Invoice 1);
7. The invoice must be itemized using the categories and following the format of the Budget;
8. The total amount due. This should be in a prominent location in the lower right-hand portion of the last page and clearly distinguished from other figures or computations appearing on the invoice. The total amount due shall include all costs incurred by Grantee under the terms of this Agreement;
9. The original signature of Grantee; and
10. Grantee must provide supporting documentation for the invoice and actual receipts.

Q219007
PORT OF SAN FRANCISCO

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of Grantor date set forth below the signature.

AUTHORIZED AGENT FOR GRANTEE

By:
Signature: _____
Printed Name: Elaine Forbes
Title: Executive Director, Port of San Francisco
Date: _____

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

By:
Signature: _____
Printed Name: Matt Wells
Title: Chief, Watershed Restoration Grants Branch
Date: _____

This Agreement is exempt from DGS-OLS approval, per SCM 4.06.

APPROVED AS TO FORM:

DENNIS J. HERRERA, City Attorney

By: _____

A. Mathai-Jackson
Deputy City Attorney


Port Commission Resolution: 21-17
Board of Supervisors Resolution: 342-21



MEMORANDUM

September 10, 2021

TO: MEMBERS, PORT COMMISSION
Hon. Kimberly Brandon, President
Hon. Willie Adams, Vice President
Hon. John Burton
Hon. Gail Gilman
Hon. Doreen Woo Ho

FROM: Elaine Forbes
Executive Director 

SUBJECT: Request authorization to accept and expend \$1,493,000 in grant funds from the California Department of Fish and Wildlife for the Heron's Head Park Shoreline Resilience Project and approve the grant agreement, subject to Board of Supervisors' approval.

DIRECTOR'S RECOMMENDATION: Approve Attached Resolution No. 21-38

Executive Summary

The Port of San Francisco created Heron's Head Park over 20 years ago. Over the past two decades, the park has evolved, with the addition of the EcoCenter in 2010 and expansion and improvement of the park in 2012. Heron's Head Park has also experienced significant erosion and invasion by non-native plants, resulting in decreased size and ecological value of the tidal wetland. In response, the Port has developed plans for a living shoreline and wetland habitat restoration project, known as the Heron's Head Park Shoreline Resilience Project (the "Project"), to mitigate these impacts.

The Project was presented for the Port Commission's information on [August 11, 2020](#). The Port Commission authorized Port staff to accept and expend \$297,000 of grant funds from the San Francisco Bay Authority ("SFBRA") to support the wetland plant habitat enhancement element of the Project on [August 25, 2020](#). The Port Commission authorized Port staff to accept and expend \$1,667,000 in grant funds from the Ocean

Protection Council (“OPC”), to support the shoreline stabilization element of the Project, on [April 13, 2021](#), and the Board of Supervisors authorized the Port to accept and expend the OPC grant on July 13, 2021.

The Port applied for a Proposition 1 Ecosystem Restoration Grant from the California Department of Fish & Wildlife (“CDFW”). In June 2021 the CDFW recommended an award of \$1,493,000 for the shoreline stabilization element of the Project. Port staff now requests the Port Commission’s authorization to accept and expend the \$1,493,000 in CDFW grant funds for construction of the Project, approve the grant agreement with CDFW, and authorize its Executive Director to seek Board of Supervisors’ approval of the grant agreement and authorization to accept and expend the grant funds.

Strategic Objectives

The Project supports the Port’s strategic objectives as follows:

Sustainability: *Implement nature-based shoreline stabilization and improvement projects and complete the Heron’s Head Park Shoreline Project by 2023.*

Acceptance of CDFW grant funds will substantially contribute to the Port’s achievement of this objective.

Engagement: *Partner with City departments and government agencies to align communication, engagement, and activities.* Port staff has presented the Project to the Port’s Southern Advisory Committee and the EcoCenter Advisory Committee (staffed by the San Francisco Recreation and Parks Department) on multiple occasions over the past four years. The Project has support from Committee members and members of the public attending those meetings.

Literacy for Environmental Justice (LEJ), a community-based organization and Project partner, will engage the neighboring Bayview Hunters Point community through informational presentations about the Heron’s Head Park Shoreline Resilience project and the potential for nature-based infrastructure to serve as shoreline protection and adaptation to sea level rise. These presentations will be community-driven; LEJ interns will develop content with technical support from the Port and deliver the presentations to organizations and stakeholders of their choice. LEJ staff and interns’ work to deliver up to four such presentations will be funded by the SFBRA grant to the Port.

Evolution: *Improve Port open spaces to provide publicly desired amenities and activities.* Protecting and enhancing the shoreline and wetland habitat at Heron’s Head Park will increase biodiversity and preserve a valuable public asset that is enjoyed by a diversity of users. In doing so, the Project preserves opportunities for healthy outdoor recreation and connection to nature in an area of the City where there is less access to such benefits.

Background

Heron's Head Park is an approximately 21-acre peninsula, comprised of seven acres of wetlands and tidal ponds, and 14 acres of public open space. It includes a 1/3-mile spur of the San Francisco Bay Trail, picnic areas, an off-leash dog play area and the EcoCenter. Heron's Head Park is a highly valued resource for both wildlife and people: it is home to or visited by over 100 species of migratory and resident birds, two endangered species, and serves thousands of visitors each year.

As detailed in an [August 11, 2020 Port Informational Memorandum](#) to the Port Commission, the shoreline at Heron's Head Park has experienced subsidence, erosion from wind-driven waves and tidal flows, and a low supply of suspended sediment in Bay waters that is needed to replenish the marsh. These forces have caused loss of both habitat acreage and ecological function. Without protection from erosion and capacity to adapt to sea level rise, Heron's Head Park is expected to lose an estimated additional 1.8 acres over the next 30 years.

To address these impacts, the Port has developed the proposed Project that will:

1. Place coarse sand and gravel, stabilized by rock and cobble groynes¹, along the southern shoreline to prevent erosion, improve habitat quality and diversity, and enable sea level rise adaptation.
2. Restore and maintain native plant vegetation over a five-year period to enhance biodiversity and ecological function of the existing wetlands.
3. Create youth employment and community engagement opportunities through hands-on involvement in park restoration activities.
4. Monitor project outcomes for 10 years.

Regulatory Approvals

The Project has been reviewed for compliance with CEQA by the San Francisco Planning Department and determined to be categorically exempt under Class 33 - CEQA Guidelines, Section 15333, Small Habitat Restoration Projects, (d)(2) for wetland restoration. The Port has obtained permits to construct the Project from the U.S. Army Corps of Engineers, the Bay Conservation and Development Commission, the San Francisco Bay Regional Water Quality Control Board, and the U.S. Fish & Wildlife Service.

Funding

SFBRA: Grant Secured. The SFBRA is a regional agency created to generate and allocate resources for the protection and enhancement of tidal wetlands and other wildlife habitat in San Francisco Bay and along its shoreline. It awards grants to achieve these purposes consistent with the San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure ("Measure AA"), passed by the voters in June 2016. As described in the Memorandum to the Port Commission on August 25, 2020, the SFBRA authorized disbursement of \$297,000 to the Port for the first phase of

¹ A groyne is a shoreline protection structure built perpendicular to the shoreline to reduce movement of material parallel to the shoreline (known as longshore drift) and trap sediments.

wetland habitat restoration at Heron's Head Park which consists of two years of wetland vegetation, youth employment, habitat stewardship, and community outreach. Through [Resolution 20-42](#), the Port Commission authorized acceptance of the grant and a sole-source contract with Literacy for Environmental Justice to use the grant funds for wetland habitat restoration at Heron's Head Park. The Board of Supervisors authorized the Port to accept and expend SFBRA grant funds in September 2020 by [Resolution 446-20](#). This wetland plant habitat restoration work is now underway. The \$297,000 disbursement will cover the first two years of the anticipated total of five years of marsh revegetation work. The total grant award is up to \$1.1M; the additional three years of marsh revegetation work and post-construction monitoring will be subject to future approval by the SFBRA and the Port.

OPC Grant: Grant Agreement approved, execution pending. Proposition 68, The "California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act" (Prop. 68), passed by the voters in 2018, generated funding for a wide variety of projects and initiatives, including projects that implement nature-based solutions and other sea level rise adaptation strategies to build coastal resiliency. In February 2021, the OPC voted to award \$1.667M from its Coastal Resilience Grant Program to the Port to support construction of the stabilized shoreline that will protect the marsh along Heron's Head Park's southern shoreline from erosion². Through [Resolution 21-17](#), the Port Commission authorized acceptance of the grant in April 2021. The Board of Supervisors authorized the Port to accept and expend the OPC grant funds in July 2021 by [Resolution 342-21](#). OPC approval of the detailed work plan and execution of the grant agreement are pending.

CDFW Grant: Requesting Authorization to Accept and Expend

The "Water Quality, Supply, and Infrastructure Improvement Act of 2014" (Proposition 1) authorized the California State Legislature to appropriate funds to CDFW to fund multi-benefit ecosystem restoration projects. CDFW's grant agreement specifies that the grantee will:

- Expend the grant funds and implement the Project in compliance with applicable federal and State of California law.
- Agree that if the Legislature does not appropriate sufficient funds during the fiscal year covered by the Agreement, CDFW may terminate the Agreement or amend it to reduce the amount of the award.
- Ensure that the Project and project site are properly operated, used, and maintained for the purpose stated in the grant agreement, which includes shoreline protection, habitat value, and public open space, for 25 years after the end of the grant agreement term.³

² The shoreline construction is described in detail in the "[Informational presentation on Heron's Head Park Living Shoreline Project, San Francisco Bay Restoration Authority grant, and sole-source contract with Literacy for Environmental Justice](#)", dated August 7, 2021.

³ The shoreline is designed to mitigate erosion and provide capacity to adapt to sea level rise for approximately 30 years, through 2050 based on moderate projections for level of sea level rise, without maintenance. Regulatory agency permits to construct the Project obligate the Port to monitor the

- Indemnify and hold the State harmless from liability connected with the project. Such requirement that the grantee indemnify the grantor is typical in grant agreements. Section 1.24 of the City's Administrative Code requires the City's Risk Manager's approval in order for the City to indemnify another party; the City's Risk Manager has approved these provisions of the Grant Agreement.
- Procure and maintain specified insurance and require the same of its contractors executing the grant-funded work.
- Include language in any contracts for execution of grant-funded work that establishes State auditors' rights to examine records related to performance of grant-funded services and submit such contracts to CDFW for inclusion in the grant file;
- Acknowledge the funding source, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, commonly referred to as Proposition 1, and the CDFW in signs, posters, reports, publications, presentations, and all other written, verbal, and digital communications about the Project.

All CDFW grant funds will be used to construct the resilient shoreline at Heron's Head Park. The CDFW grant does not require any matching funds from the Port, but existing Port resources will be allocated to project management, grant and contract administration, and construction support from the design engineer. Additional funding may be required to fully implement the Project. Port staff, City Attorney, and City Risk Manager have reviewed the grant agreement and found it to be consistent with other grants from the State of California as well as consistent with the scope and objectives of the Project.

Project Cost and Phasing

At the Port Commission's April 13, 2021 meeting, Port staff requested Commission authorization to accept and expend OPC grant funds. At that time, the total estimated cost to implement all elements of the Project was \$4.28 Million. This included restoration of wetland habitat behind the stabilized shoreline and five years of post-construction monitoring. The estimate was based on 100% engineering design and 3rd-party peer review and assumed use of donated sand and gravel.

Due to the unusual nature of the work (resulting in smaller pool of qualified and available contractors) and uncertainty related to seasonal, tidal, and environmental protection constraints on construction⁴ and competitive bidding environment in mid-2022, the cost estimate has been refined to include a 15% contingency. The current estimate to complete all elements of the Project is \$4.691M, of which \$1.1M is for marsh habitat restoration, maintenance, and monitoring, and \$3.591M is for shoreline construction.

The estimated cost and funding status for implementing the project in phases are

performance of the stabilized shoreline and implement adaptive management measures as needed to maintain the shoreline stabilization and habitat enhancement functions of the shoreline for 10 years.

⁴ Work must occur during wet weather season, work must pause if endangered species is seen in the work area, and some work can only occur during low tide.

summarized below.

Scope	Estimated Cost	Funding Status
Already Funded or Partially Funded Project Elements:		
Wetland revegetation, Phase 1	\$297,000	Funded by grant from SFBRA
Shoreline stabilization	\$3,591,000	Funded by \$1.667M grant from OPC and \$1.493M grant from CDFW, pending Port Commission and Board of Supervisors approval. Additional \$431,000 from Port capital or other source required to meet the total estimated construction cost.
Project Elements Still Requiring Funding:		
Wetland revegetation, Phase 2	\$495,000	Recommended for additional SFBRA grant funding, subject to task-specific approvals.
Post-Construction Monitoring	\$308,000	Same as above re. SFBRA grant funding.
Total Estimated Project Cost \$4,691,000		

Schedule for Shoreline Stabilization

The anticipated schedule for the shoreline construction element of the Project is:

Port Commission Authorization to Accept and Expend CDFW Grant.	September 14, 2021
Board of Supervisors Authorization to Accept and Expend CDFW Grant.	October 26, 2021
Execute Grant Agreement with CDFW	November 2021
Secure additional funding for construction	Ongoing through March 2022.
Advertise, bid, and award construction contract, subject to availability of funds for shoreline construction.	March – July 2022.
Construct shoreline	August 2022 – January 2023

Recommendation

Port staff requests the Port Commission approve the attached resolution authorizing staff to accept and expend \$1,493,000 in grant funds from the CDFW, subject to Board of Supervisors approval; approve the Grant Agreement; and, upon Board of Supervisors' approval, authorize the Executive Director to execute and implement the Grant Agreement with CDFW to partially fund construction of the shoreline stabilization element of the Heron's Head Park Shoreline Resilience Project.

Prepared by: Carol Bach
Environmental Affairs Manager

For: Ming Yeung
Acting Deputy Director, Planning
& Environment Division

**PORT COMMISSION
CITY AND COUNTY OF SAN FRANCISCO**

RESOLUTION NO. 21-38

- WHEREAS Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014 authorized the Legislature to appropriate funds to the California Department of Fish and Wildlife (CDFW) to fund multi-benefit ecosystem and watershed restoration and protection projects; and
- WHEREAS on February 17, 2021, the Port applied for grant funds from the CDFW to construct a natural infrastructure-based shoreline to prevent erosion and enable sea level rise adaptation at Heron's Head Park; and
- WHEREAS on June 15, 2021, the CDFW announced its award of \$1,493,000 for the Heron's Head Park Shoreline Resilience Project; and
- WHEREAS the CDFW requires execution of a grant agreement that includes terms and conditions customary for State grants as further described in the Memorandum to the Port Commission dated September 10, 2021 ("Grant Agreement"); and
- WHEREAS under the City Administrative Code Section 10.170-1, the Port must obtain Board of Supervisors' approval to accept and expend grant funds of \$100,000 or more; and the Grant Agreement is subject to Board of Supervisor's approval under Charter Section 9.118; and
- WHEREAS the shoreline stabilization to be funded by CDFW is categorically exempt from the California Environmental Quality Act; now therefore be it
- RESOLVED that the Port Commission authorizes the Executive Director to accept and expend \$1,493,000 in grant funds from the California Department of Fish & Wildlife for the Heron's Head Park Shoreline Resilience Project, approves the Grant Agreement, and authorizes its Executive Director to seek Board of Supervisors' approval to approve the request to accept and expend the grant and approve the Grant Agreement; and be it further
- RESOLVED that, upon Board of Supervisors' approval, the Port Commission authorizes the Executive Director or her designee to act as a representative of the Port and to negotiate and execute the Grant Agreement and all other agreements and instruments necessary to obtain and expend the grant monies on behalf of Port, in such form approved by the City Attorney.

***I hereby certify that the foregoing resolution was adopted by the
Port Commission at its meeting of September 14, 2021.***

DocuSigned by:

Carl Nauta

Secretary

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
P.O. Box 944209
Sacramento, CA 94244-2090
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



June 15, 2021

Carol Bach
Port of San Francisco
Port of San Francisco Pier 1 - The Embarcadero
San Francisco, CA 94111

NOTICE OF AWARD
2021 Proposition 1 Watershed Restoration Grant & Delta Water Quality and Ecosystem
Restoration Grant Programs

Dear Carol Bach:

We are pleased to inform you that your proposal, Heron's Head Park Shoreline Resilience Project, has been selected by the California Department of Fish and Wildlife (CDFW) for Proposition 1 funding through the 2021 Proposition 1 Watershed Restoration Grant & Delta Water Quality and Ecosystem Restoration Grant Program Proposal Solicitation Notice. This letter serves as CDFW's award of up to \$1493000 under the FY 2021-22 State Budget Act to support this important initiative to further watershed restoration and protection projects of statewide importance.

Please note: 1) you cannot incur any contract costs for work done prior to the execution date of the grant agreement – we anticipate grant agreements being executed no sooner than July 1, 2021; 2) your agreement is not a valid legal document until you receive a fully executed copy, signed by both parties; 3) this agreement may be subject to revision or suspension due to continuing budgetary uncertainties; and 4) grant agreements must be completed by March 15, 2025.

Your CDFW Grant Manager, Steve Rodriguez, will soon contact you to discuss the grant agreement development process and next steps.

To expedite the grant process, please also provide the following forms to CDFW as soon as possible.

1. Drug-Free Workplace Certification (STD. 21)
(<http://www.documents.dgs.ca.gov/dgs/fmc/pdf/std021.pdf>)
2. Payee Data Record form (STD. 204) and/or Payee Data Record Supplement (STD. 205)
<https://www.documents.dgs.ca.gov/dgs/fmc/pdf/std204.pdf>
<https://www.documents.dgs.ca.gov/dgs/fmc/pdf/std205.pdf>
3. 501(c)(3) Certification (for non-profit organizations)

4. An authorizing resolution from your governing body that confirms its approval of the projects and grant monies (if applicable¹).

Completed forms should be submitted to steven.rodriquez@wildlife.ca.gov or:

California Department of Fish and Wildlife
Attn: Steve Rodriguez, Watershed Restoration Grants Branch
PO Box 944209
Sacramento, CA 94244-2090

Information provided in your proposal as well as input from CDFW will be used to ensure programmatic compliance with CDFW policies and guidelines set forth by the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1). Your CDFW Grant Manager will soon contact you to discuss the process and next steps in implementing the project.

Finally, attached is a copy of CDFW's General Grant Provisions, which outlines our terms and conditions for entering into a grant agreement and will be attached to the final agreement.

Should you have questions regarding the process, you may contact Lauren Barva at (916) 247-8903 or at Lauren.Barva@wildlife.ca.gov.

Sincerely,



Matt Wells, Branch Chief
Watershed Restoration Grants Branch

Attachment:
CDFW General Grant Provisions

CC:
Gregg Erickson, Bay Delta Region

¹ If the applicant is a public entity, such as a Resource Conservation District, city, county, water agency, etc. that has a governing body, then a resolution of project approval from the governing body will be a requirement of entering into an agreement. It is suggested that the governing body be made aware of the proposal and be prepared to submit the resolution when returning the signed agreement. Nonprofit organizations do not fall into this category.



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE EXHIBIT 1a – PUBLIC ENTITIES GENERAL GRANT PROVISIONS

1. **APPROVAL**: This Agreement is of no force or effect until signed by both Parties and approved by CDFW or Grantor. Grantee may not commence performance until such approval has been obtained.
2. **AMENDMENT**: No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the Parties and approved as required. No oral understanding or Agreement not incorporated in this Agreement is binding on either of the Parties.
3. **ASSIGNMENT**: This Agreement is not assignable by Grantee, either in whole or in part, without the consent of CDFW in the form of a formal written amendment.
4. **AUDIT**: Grantee agrees that CDFW, the Department of General Services (DGS), the Bureau of State Audits, or their designated representative shall have the right to review and to copy any records and supporting documentation pertaining to the performance of this Agreement. Grantee agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated. Grantee agrees to allow the auditor(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, Grantee agrees to include a similar right of the State to audit records and interview staff in any subcontract related to performance of this Agreement. (Gov. Code §8546.7, Pub. Contract Code, CCR Title 2, Section 1896).
5. **INDEMNIFICATION**: Grantee agrees to indemnify, defend and save harmless the State of California, CDFW, its officers, agents and employees from any and all claims and losses accruing or resulting to any and all of Grantee's employees or agents, contractors, subcontractors, suppliers, laborers, and any other person, firm or corporation furnishing or supplying work services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by Grantee in the performance of this Agreement.

The State of California shall defend, indemnify and hold Grantee, its officers, employees and agents harmless from and against any and all liability, loss, expense, attorney's fees, or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorney's fees, or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the State of California, or its agencies, their respective officers, agents or employees.
6. **DISPUTES**: Grantee shall continue with the responsibilities under this Agreement during any dispute.
7. **INDEPENDENT CONTRACTOR**: Grantee, and the agents and employees of Grantee, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of CDFW. Grantee acknowledges and promises that CDFW is not acting as an employer to any individuals furnishing services or work pursuant to this Agreement.



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE EXHIBIT 1a – PUBLIC ENTITIES GENERAL GRANT PROVISIONS

8. **NON-DISCRIMINATION CLAUSE:** During the performance of this Agreement, Grantee and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. Grantee and subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Grantee and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Grantee and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

9. **UNENFORCEABLE PROVISION:** In the event that any provision of this Agreement is unenforceable or held to be unenforceable, then the parties agree that all other provisions of this Agreement have force and effect and shall not be affected thereby.
10. **LICENSES AND PERMITS (If Applicable):** Grantee is responsible for obtaining all licenses and permits required by law for accomplishing any work required in connection with this Agreement. Costs associated with permitting may be reimbursed under this Agreement only if approved in the budget detail and payment provisions section.
11. **RIGHTS IN DATA:** Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Agreement, are subject to the rights of the State as set forth in this section. The State shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so. If any such work is copyrightable, Grantee may copyright the same, except that, as to any work which is copyrighted by Grantee, the State reserves a royalty-free, nonexclusive and irrevocable license to reproduce, publish, and use such work, or any part thereof, and to authorize others to do so.
12. **CONTINGENT FUNDING:** It is mutually understood between the Parties that this Agreement may have been written before ascertaining the availability of State appropriation of funds for the mutual benefit of both Parties in order to avoid program and fiscal delays which would occur if the Agreement were executed after that determination was made.

This Agreement is valid and enforceable only if sufficient funds are made available pursuant to the California State Budget Act for the fiscal year(s) covered by this Agreement for the purposes



CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE EXHIBIT 1a – PUBLIC ENTITIES GENERAL GRANT PROVISIONS

of this program. In addition, this Agreement is subject to any additional restrictions, limitations, or conditions enacted by the Legislature of any statute enacted by the Legislature which may affect the provisions, terms or funding of this Agreement in any manner.

It is mutually agreed that if the Legislature does not appropriate sufficient funds for the Agreement, the State has the option to terminate the Agreement under the termination clause or to amend the Agreement to reflect any reduction of funds. CDFW has the option to invalidate the contract under the 30-day cancellation clause or to amend the Agreement to reflect any reduction in Grant Funds.

13. RIGHT TO TERMINATE:

- a. This agreement may be terminated by mutual consent of both parties or by any party upon thirty (30) days written notice and delivered by USPS First Class or in person.
- b. In the event of termination of this Agreement, Grantee shall immediately provide CDFW an accounting of all funds received under this Agreement and return to CDFW all Grant Funds received under this Agreement which have not been previously expended to provide the services outlined within this Agreement.
- c. Any such termination of this Agreement shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination. CDFW shall reimburse Grantee for all allowable and reasonable costs incurred by it for the Project, including foreseeable and uncancellable obligations. Upon notification of termination from CDFW, Grantee shall use its reasonable efforts to limit any outstanding financial commitments.

14. CONFIDENTIALITY OF DATA: Grantee shall protect from disclosure all information made available by CDFW. Grantee shall not be required to keep confidential any data or information which is publicly available, independently developed by Grantee, or lawfully obtained from third parties. Written consent of CDFW must be obtained prior to disclosing information under this Agreement.

15. DISCLOSURE REQUIREMENTS: Any document or written report prepared in whole or in part pursuant to this Agreement shall contain a disclosure statement indicating that the document or written report was prepared through an Agreement with CDFW. The disclosure statement shall include this Agreement number and dollar amount of all Agreements and subcontracts relating to the preparation of such documents or written reports. The disclosure statement shall be contained in a separate section of the document or written report.

If Grantee or any subcontractor(s) are required to prepare multiple documents or written reports, the disclosure statement may also contain a statement indicating that the total Agreement amount represents compensation for multiple documents or written reports. Grantee shall include in each of its subcontracts for work under this Agreement, a provision which incorporates the requirements stated within this section.



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16. USE OF SUBCONTRACTOR(S): If Grantee desires to accomplish part of the services through the use of one (1) or more subcontractors, the following conditions must be met:

- a. Grantee shall submit any subcontracts to CDFW for inclusion in the grant file;
- b. The Agreement between the primary Grantee and the subcontractor must be in writing;
- c. The subcontract must include specific language which establishes the rights of the auditors of the State to examine the records of the subcontractor relative to the services and materials provided under the Agreement; and
- d. Upon termination of any subcontract, CDFW Grant Manager shall be notified immediately, in writing.

Grantee shall ensure that any subcontract in excess of \$100,000 entered into as a result of this Agreement contains all applicable provisions stipulated in this Agreement.

17. POTENTIAL SUBCONTRACTOR(S): Nothing contained in this Agreement or otherwise shall create any contractual relation between CDFW, and any subcontractor(s) and no subcontract shall relieve Grantee of its responsibilities and obligations hereunder. Grantee agrees to be as fully responsible to CDFW for the acts and omissions of its subcontractor(s) and of persons directly employed or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Grantee. Grantee's obligation to pay its subcontractor(s) is an independent obligation from CDFW's obligation to make payments to Grantee. As a result, CDFW shall have no obligation to pay or to enforce the payment of any monies to any subcontractor.

18. TRAVEL AND PER DIEM (if applicable): Grantee agrees to pay reasonable travel and per diem to its employees under this Agreement. The reimbursement rates shall not exceed those amounts identified in the California Department of Human Resources travel reimbursement guidelines. No travel outside the State of California shall be reimbursed unless prior written authorization is obtained from CDFW.

19. LIABILITY INSURANCE (as applicable): Unless otherwise specified in the Agreement, when Grantee submits a signed Agreement to the State, Grantee shall also furnish to the State either proof of self-insurance or a certificate of insurance stating that there is liability insurance presently in effect for Grantee of not less than \$1,000,000 per occurrence for bodily injury and property damage liability combined. Grantee agrees to make the entire insurance policy available to the State upon request.

The certificate of insurance will include provisions a, b, and c, in their entirety:

- a. The insurer will not cancel the insured's coverage without thirty (30) days prior written notice to the State;
- b. The State of California, its officers, agents, employees, and servants are included as additional insured, by insofar as the operations under this Agreement are concerned; and
- c. The State will not be responsible for any premiums or assessments on the policy.



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Grantee agrees that the bodily injury liability insurance herein provided for, shall be in effect at all times during the term of this Agreement. In the event said insurance coverage expires at any time or times during the term of this Agreement, Grantee agrees to provide, prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of this Agreement, or for a period of not less than one (1) year. New certificates of insurance are subject to the approval of the (DGS), and Grantee agrees that no work or services shall be performed prior to giving of such approval. In the event Grantee fails to keep in effect, at all times, insurance coverage as herein provided, the State may, in addition to any other remedies it may have, terminate this Agreement upon occurrence of such event.

CDFW will not provide for, nor compensate Grantee for any insurance premiums or costs for any type or amount of insurance. The insurance required above, shall cover all Grantee supplied personnel and equipment used in the performance of this Agreement. When applicable, if subcontractors performing work under this Agreement do not have insurance equivalent to the above, Grantee's liability shall provide such coverage for the subcontractor, except for coverage for error, mistake, omissions, or malpractice, which shall be provided by the subcontractor if such insurance is required by the State.

- 20. GRANTEE STAFF REQUIREMENTS:** Grantee represents that it has or shall secure at its own expense, all staff required to perform the services described in this Agreement. Such personnel shall not be employees of or have any contractual relationship with CDFW.
- 21. PROPERTY ACQUISITIONS AND EQUIPMENT PURCHASES:** Property, exclusive of real property, as used in this exhibit shall include the following:
- a. Equipment – Tangible property (including furniture and electronics) with a unit cost of \$5,000 or more and a useful life of four (4) years or more. Actual cost includes the purchase price plus all costs to acquire, install, and prepare the equipment for its intended use.
 - b. Furniture, including standard office furnishings including desks, chairs, bookcases, credenzas, tables, etc.
 - c. Portable Assets, including items considered 'highly desirable' because of their portability and value, e.g., calculators, computers, printers, scanners, shredders, cameras, etc.
 - d. Electronic Data Processing (EDP) Equipment, including all computerized and auxiliary automated information handling, including system design and analysis; conversion of data; computer programming; information storage and retrieval; voice, video and data communications; requisite system controls; simulation and all related interactions between people and machines.

Grantee may purchase property under this Agreement only if specified in the Budget section. All property purchased by Grantee is owned by Grantee. CDFW does not claim title or ownership to



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the property but, requires Grantee to maintain accountability for all property purchased with grant funds.

Title or ownership to property with a unit cost of \$5,000 or more may be retained by Grantee or Grantor upon end of the grant cycle; final disposition will be coordinated by CDFW's Grant Manager.

Before property purchases made by Grantee are reimbursed by CDFW, Grantee shall submit paid Grantee receipts identifying the Grant Agreement Number, purchase price, description of the item(s), serial number(s), model number(s), and location, including street address where property will be used during the term of this Agreement. Said paid receipts shall be attached to Grantee's invoice(s).

Grantee shall keep, and make available to Grantor, adequate and appropriate records of all property purchased with the Grant Funds.

Prior written authorization by the CDFW Grant Manager shall be required before Grantee will be reimbursed for any property purchases not specified in the budget. Grantee shall provide to CDFW Grant Manager, all particulars regarding the necessity for such property and the reasonableness of the cost.

Property will only be considered for purchase approval if no other equipment owned by the applicant is available and suitable for the project.

Grant Funds cannot be used to reimburse the project for equipment obtained prior to the beginning of the grant term.

Grant Funds cannot be used for property if specifically prohibited in the authorizing Legislation or restricted in the terms of the program.

Should this Agreement be cancelled for any reason, any property purchased with Grant Funds shall be returned to Grantor.

State policies and procedures applicable to procurement with nonfederal funds, shall apply to procurement by Grantee under this Agreement, provided that procurements conform to applicable State law and the standards identified in this exhibit. These include but are not limited to: statutes applicable to State agencies; statutes applicable to State colleges and universities; public works projects; the California Constitution governing University of California contracting, the State Administrative Manual; statutes applicable to specific local agencies; applicable city and county charters and implementing ordinances including policies and procedures incorporated in local government manuals or operating memoranda.

Attachment 14. Project Narrative

Project Title

Heron's Head Park Shoreline Resilience

Applicant Name

Port of San Francisco

General Instructions

A. Project Description

Project Description

Heron's Head Park is owned and managed by the Port of San Francisco (Port) and located in the economically disadvantaged Bayview Hunters Point neighborhood of San Francisco (See **Form 8 – Attachments 3 & 4**). It is an approximately 21-acre peninsula comprised of approximately 14 acres of public open space and 7 acres of tidal wetlands, as well as tidal ponds, mudflats, and rocky intertidal shoreline. The eastern waterfront of San Francisco, where Heron's Head Park is located, and adjacent San Mateo county is highly urbanized, forming a lengthy shoreline with limited habitat for resident or migratory wildlife. Heron's Head Park is one of few remaining tidal marshes habitat in this area of San Francisco Bay.

In 1999, the Port expanded and enhanced wetlands at Heron's Head Park to provide a variety of habitat types, including high intertidal/transition zone vegetation, tidal salt marsh, refugial islands, and tidal ponds. Improvements in the adjacent uplands include a section of the San Francisco Bay Trail, native plant landscapes, and an environmental education center (The EcoCenter). Heron's Head Park provides valuable tidal marsh habitat for wildlife and equitable, convenient, and affordable access to natural coastal open space, education, and recreation in a neighborhood where such resources are scarce.

The proposed **Heron's Head Park Shoreline Resilience Project** ("the Project") is a multi-benefit project that will use a nature-based shoreline to protect and restore wetland habitat, improve ecological function of diverse intertidal habitats, and enable the shoreline to adapt to sea level rise. The Project consists of:

- Placing coarse sand and gravel stabilized by rock and cobble groynes along an existing tidal salt marsh to reverse coastal wetland loss to erosion, restore habitat quality and diversity, and enable sea level rise adaptation.
- Fabricating and installing subtidal oyster reef structures to support habitat for oysters, herring larvae, and other native epifauna.
- Restoring tidal salt marsh and transition zone plant habitat.
- Monitoring project outcomes, share findings, and take adaptive management measures.

Attachment 14. Project Narrative

Purpose and Need

Tidal wetlands are nationally recognized as habitat of unique value and at particular risk. San Francisco Bay has lost more than 90% of its historic tidal wetlands and is one third smaller than it was 100 years ago due to decades of filling along the bay shoreline. This has resulted in substantial loss, degradation, and fragmentation of habitat and decreased ecological function for many species. The Bay now has reduced biomass from loss of wetland vegetation and shellfish beds that once provided habitat structure and food resources. The San Francisco Estuary is also one of the most invaded estuaries in the world, with resultant loss of ecological function and disruption of the food web for native species. Reduced concentrations of sediment in the Estuary and rising sea level contribute to projections of future habitat loss. On-going loss of tidal marsh due to erosion of marsh edges is one of the most direct impacts of sea level rise on ecosystems in the Estuary (SFEI & Baye, 2020).

The original Heron's Head Park wetland enhancement project was constructed in winter 1998-99, and created approximately 10 acres of intertidal habitats, including tidal marsh, a tidal channel network, marsh ponds and transition/upland mounds. In the 20 years since the Port expanded and enhanced the wetlands at Heron's Head Park, the shoreline has experienced subsidence of the fill soils, erosion from wind-waves and tidal flows, and a low supply of ambient suspended sediment. These forces have caused a loss of both habitat acreage and ecological function. In the most impacted area, the shoreline has retreated up to 50 feet from its 1998 location, and one of the tidal ponds is consistently flooded rather than tidally flushed. Without protection from erosion and capacity to adapt to sea level rise the wetlands are expected to lose an estimated additional 80,000 sq. ft. over the next 30 years.

The Project purpose is to create a living shoreline that will enhance and preserve the physical, biological, and community benefit functions at Heron's Head Park for a design life of 30 years. The coarse material shoreline will enable wetlands to migrate with rising sea level so that some wetland habitat and key public access features remain through mid-century. With the proposed monitoring and stewardship, including ongoing removal of non-native species and replanting with locally adapted native wetland/transition zone plants, the Project will combat a significant infestation by invasive Algerian sea lavender, employ local youth, and provide volunteer opportunities for visitors and students. The Project will engage the surrounding community in implementation and demonstrate how marsh-fringing beach and other living shoreline elements can be integrated to create a resilient shoreline, thereby contributing to statewide efforts to develop technical understanding and implementation of natural systems-based approaches to shoreline stabilization.

In addition to improving ecological resilience, the Project serves another important purpose in protecting future access to coastal open space. Parks and natural areas improve public health and social well-being, provide space for outdoor recreation and places to bring neighbors together, and strengthen communities' social resilience. Due to its location in an urban area where direct public access to the Bay is limited and armored shorelines predominate, Heron's

Attachment 14. Project Narrative

Head Park is one of the few remaining areas of shoreline supporting tidal marsh habitats along the San Francisco waterfront. As one of the few locations providing public access to the Bay shoreline in the economically disadvantaged Bayview Hunter's Point community, Heron's Head Park is uniquely well-suited to provide access to natural shoreline habitat that many neighbors and Bay Area residents might not otherwise reach. It is within walking distance (approx. 0.3 miles) of the largest public housing complex in San Francisco and easily accessible by municipal transit. The park currently provides tidal marsh and shoreline habitats for native plant species and waterfowl, as well as a public trail commonly used for dog walking, bird watching, and fishing access to the bay.

The park hosts regular community events and offers other outreach and educational opportunities. Through a partnership between the Port and the San Francisco Recreation and Parks Department, the EcoCenter at Heron's Head Park offers free, culturally relevant, environmental education and recreation programs (many bilingual) for a diversity of participants. A significant part the Project site's value to habitat conservation is the opportunity for public education and engagement with the type of natural shoreline that once encircled San Francisco Bay.

Goals and objectives to achieve the project purpose, and approach to achieving them are:

1. Construct a dynamically stable beach along the marsh edge. **Approach:** The Port will competitively bid construction, with specifications for experience and expertise in restoration work, that includes importing and placing approximately 12,000 cu.yd. of natural sand and gravel from the Bay and 1,300 cu. yd. rock and cobble to construct an intertidal beach and groynes over **2.06 ac.** along **1,600 lf.** of shoreline (see **Form 8 – Attachment 4**). The beach and groynes will minimize habitat loss by preventing scarps at the marsh edge and restore tidal ponds that formerly existed at the site.

2. Enhance ecological function with physical structures that provide diverse and connected habitat that benefits a range of species. **Approach:** Construction of the intertidal beach and groynes will provide habitat structure and complexity that enhance biodiversity. Rock/earth sills placed along the high intertidal beach crest will provide substrate for high-intertidal plants. The gravel beach berm and rock groynes will provide foraging, roosting, and high tide refugial habitat for shorebirds. The physical structure of gravel beaches is more variable than the fine-grained mudflat substrate that currently dominates much of the shoreline. This structural variability offers invertebrates a greater array of microhabitats and a more sheltered microclimate, thus, the addition of coarse material could support a more diverse invertebrate population and potentially improve food resources for shorebirds. Increased habitat diversity would benefit invertebrates, fish, and birds, as described below (Expected Benefits). Similar projects constructed in the Bay have proven successful at stabilizing eroding marsh edges and improving abundance and diversity of wildlife (SFEI & Baye, 2020).

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3. Incorporate Living Shoreline elements for habitat diversity and ecological function.

Approach: Construction will include fabrication and placement of 66 oyster reef elements along the subtidal ends of the groynes, creating up to 0.02 ac. of subtidal surface area for oysters and other native epifauna, resulting in measurable recruitment and presence of adult native oysters and coverage of oyster reef elements predominantly by native species. Creating new habitat for native oysters and related epifauna, including mussels, crabs, shrimp, and seaweed, in turn may provide additional foraging opportunities for fish and birds and clean, hard substrate for herring spawning. The project design also includes placement of up to 20 cubic yards of large woody debris such as tree limbs and branches within the intertidal beach to provide additional high tide refugial habitat.

4. Restore native marsh and transition zone vegetation. Approach: The Port will contract with a local non-profit organization to propagate, plant, and maintain native salt marsh plants. The Project's revegetation workplan anticipates planting nearly 17,000 plants or propagules over 0.07 acres in the first two years and planting approximately 30,000 additional plants/propagules over the subsequent three years, restoring tidal salt marsh vegetation on up to 1.2 acres over the five-year project duration. Species will include marsh gumplant (*Grindelia stricta*), salt grass (*Distichlis spicata*), alkali heath (*Frankenia salina*), and the endangered California seablite (*Suaeda californica*). Marsh gumplant is an ecologically important native shrub that occurs in tidal marshes and provides food resources, vertical cover, and high tide refuge for multiple species. California seablite was extirpated from San Francisco Bay in the 1960s and is now found only in Morro Bay, California and a few reintroduction sites in the Bay. California seablite formerly existed at the Project site but the population has been significantly reduced due to loss of the coarse sand and shell substrate that it prefers due to erosion.

5. Remove critical mass of invasive species, reducing percent cover by invasive species in the tidal marsh to less than 30% by the end of the 5-year revegetation effort. **Approach:** The project includes 6-8 weeks/year of labor by trained habitat restoration crews comprised of local, transitional age youth to remove invasive species. This intensive mass removal of invasive species and replacement with native species will support the restoration of robust tidal marsh vegetation and related ecological function.

6. Monitor project outcomes to inform adaptive management. Approach: The Port will monitor physical and ecological outcomes of the Project for 10 years. Monitoring will evaluate the performance of the beach berm and groynes, assess success at reducing shoreline erosion and preserving the tidal wetlands, measure colonization of the reef structures and the restoration of former California seablite population, qualitatively evaluate habitat use by birds, and assess vegetation characteristics in the tidal marsh and native plant restoration areas. Monitoring will inform the Port's adaptive management measures as warranted to achieve habitat restoration goals. Monitoring methods, criteria, and adaptive management measures for the Project are described in the Monitoring and Adaptive Management Plan (Acta, 2020).

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7. Contribute to understanding of living shoreline project implementation. The Project will build on a growing body of knowledge emerging from living shoreline projects in San Francisco Bay, benefitting from lessons learned from other habitat enhancement project such as the California Coastal Conservancy's San Francisco Bay Living Shorelines projects and the Richardson Bay Audubon Center's habitat enhancement project at Aramburu Island. **Approach:** Following construction during the grant term the project team will produce monitoring reports and present to Bay restoration agencies and practitioners and the general public. Presentations and other outreach will maximize the value of information gained from the project and contribute to the restoration community's and the public's understanding of the role of living shorelines, including vegetated marsh-fringing beaches and connected habitats, as a feasible and ecologically functional approach to shoreline stabilization. This outreach will be accomplished through various venues as opportunities allow and will include at least at one conference regarding San Francisco Bay and Delta ecology, such as the Bay-Delta Science Conference or the State of the Estuary Conference. Port staff will also leverage its existing environmental education and public outreach programs at Heron's Head Park and other public meetings and events to engage the general public in learning about the Project.

Expected Benefits. The Project will have immediate positive impact by creating a resilient shoreline that prevents ongoing loss of wetlands and restores ecological function to a small but important area that is utilized by over 100 resident and migratory bird species and supports the endangered California seablite. The beach and oyster reef habitat will enhance the existing mosaic of tidal wetland, tidal pond, and transition zone habitat. Similar living shoreline projects that include oyster reef elements have improved habitat for fish, birds, and other aquatic species. The California Coastal Conservancy's larger scale living shorelines project in San Rafael found millions of native oysters settled on subtidal reef structures, and use of the project area by birds, native fishes, sharks, shrimp, crabs, and other species increased¹.

By integrating the biological and physical goals of shoreline protection and intertidal and shallow subtidal habitat restoration, we expect to achieve the following results and long-term benefits:

- **A stable and resilient shoreline.** There is no feasible sea level rise adaption measure that would maintain the existing tidal marsh beyond 2050 that does not first control shoreline erosion. The Project design balances the goals of preventing erosion and resultant habitat loss without over-building in the near term, while also minimizing the need for disruptive maintenance and related environmental impacts in the future. It will place material of the type, quantity, and location that, based on site-specific modelling of longshore sediment transport, will maintain a functional shoreline for the 30-year life of the project, create a foundation for future adaptive management opportunities, and provide the greatest habitat benefit with the least amount of impact.

¹ www.sfbaylivingshorelines.org; www.marincountyparks.org/projectsplans/land-and-habitat-restoration/island-enhancement-aramburu

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- **Enhancement of tidal salt marsh habitat.** The Project will enhance nearly seven acres of tidal salt marsh in an area where wetlands and ecologically valuable habitat are critically scarce, and where other habitat enhancement projects in the immediate vicinity (Pier 94 Wetlands, India Basin Shoreline) form a viable network of natural shorelines along the predominantly hardened San Francisco waterfront.
- **Greater habitat diversity and improved habitat function.** The Project will increase structure and complexity of habitat, expand and diversify foraging habitat for multiple bird, fish and invertebrate species, including the federally and state listed California Ridgway's Rail, and may improve foraging habitat for California least tern, four California Species of Special Concern (black skimmer, Alameda song sparrow, salt marsh common yellowthroat, northern harrier), and many coastal-dependent migratory and resident bird species such as black oystercatcher, American widgeon, surf scoter, greater scaup, northern pintail, and canvasback. The project may improve foraging habitat for fish including Pacific herring, a State-Managed California Commercial Fishery, fish managed under the Coastal Pelagic Fisheries Management Plan, three federally threatened fish species (Green sturgeon, Chinook salmon, steelhead). The beach will provide habitat for the endangered California seablite, and through active cultivation, planting, and maintenance, will increase populations of both common and rare wetland plants. The subtidal oyster habitat elements will enhance ecological function by providing nursery habitat for juvenile fish and substrate for development of Pacific herring larvae, as well as foraging habitat for many invertebrate and fish species.
- **Increased food resources and foraging habitat throughout the tidal elevation gradient.** The Project will plant native marsh vegetation in strategic locations in the transition zone and tidal marsh plain, providing food resources, and creating a tall marsh vegetation canopy that functions as high tide refuge. The beach and beach wrack will support invertebrates that are food for wildlife. The beach berm would also provide high tide refuge where shorebirds rest and conserve energy when the tidal flats are submerged.
- **Synergistic interaction between habitat types.** Ecologically, tidal flat foraging habitat and high tide roost habitat function together, as described above. Both the marsh revegetation and the oyster reef elements are expected to provide food and habitat resources that will benefit more species than either habitat element would achieve in isolation.
- **Increased awareness and appreciation of natural shorelines.** The lessons learned about living shoreline design, construction, and performance over time will inform the developing science and practice of living shoreline implementation. Due to its location in an urban area where direct public access to the bay is limited and armored shorelines predominate, Heron's Head Park is uniquely well-suited to provide public access to natural shoreline habitat that many neighbors and Bay Area residents might not otherwise reach. A significant part of Heron's Head Park's value to habitat conservation is the opportunity for public education and direct engagement with the type of shoreline that once encircled San Francisco Bay, and development of appreciation and advocacy for natural shoreline restoration.

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Background and Project History

The background and history of Heron's Head Park itself are described above. This section describes the background, history, and current status of the Herons' Head Park Shoreline Resilience Project. The Project was conceived in 2017, when the Port recognized the severity of impacts from shoreline erosion, habitat loss and invasive species, and the threats posed by sea level rise at Heron's Head Park and initiated planning, engineering design, and permitting of the proposed Heron's Head Park Shoreline Resilience Project.

In 2019, the San Francisco Bay Restoration Authority recommended award of \$1.1M of Measure AA funds to the Port to initiate wetland enhancement, and community engagement elements of the Project, support five years of ongoing salt marsh habitat planting and maintenance, and subsequently monitor physical and ecological performance of key project elements. The first phase of work funded by the Restoration Authority consists of the first two years of invasive species removal, native plant propagation and planting, and community-based outreach. This phase began in November 2020 and continues through 2023, after which a work plan and grant agreement for three additional years of planting and maintenance, and subsequent post-implementation monitoring will be negotiated and executed, subject to approval by the Restoration Authority Governing Board.

To date, the Port has completed planning and engineering design for the Project. The Basis of Design Report and 100% plans are provided with **Form 8 – Attachment 8 and 9**. All permits and authorizations required for Project implementation, including CEQA determination and permits from the U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, and Bay Conservation and Development Commission are in hand (provided with **Form 8 – Attachment 13**).

On February 16, 2021, the Ocean Protection Council (OPC) approved an award of \$1.667M from its Prop. 68 Coastal Resilience Grant Program for Project implementation. The OPC funding represents approximately 47% of the cost to implement the shoreline construction element and would be complimentary (additive) to the CDFW Prop.1 funding requested with this grant application. **The Port currently seeks \$1,493,000 from the Prop. 1 Watershed Restoration Grant Program to complete funding for the shoreline construction.** The Port does not anticipate seeking any other Prop. 1 funding for this project.

The Port has funded all Project planning, design, permitting, and project management to date. The Port will continue to fund project management through its operating budget. Secured and unsecured costs for the major Project elements and funding sources are:

Project Element	Amount	Funding Source	Status
Tidal Marsh Planting & Maintenance (2 yrs); Community outreach	\$297,000	SF Bay Restoration Authority	Secured, under current grant agreement
Tidal Marsh Planting & Maintenance (3 yrs); Future Monitoring (5 yrs)	\$803,000	SF Bay Restoration Authority	Recommended for award, subject to Board approval

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			of future workplan and budget.
Shoreline construction, including oyster reef elements, environmental compliance, post-construction site restoration:	\$1,667,000	Ocean Protection Council Prop. 68	Approved for award. Workplan, budget, and grant agreement in progress
Total Shoreline Construction Cost = \$3,160,000	\$1,493,000	Proposed CDFW Prop. 1	Request in current grant application
Total Project Cost	\$4,260,000		

The Project is entirely ready to proceed to construction upon securing required funding. Each of the Project elements is described further in the Scope or Work below.

Site Description and Landscape Context – Required for Acquisition, Planning, and Implementation projects

The Project is a natural infrastructure, or living shoreline, approach that will achieve balance between the project's objectives. The natural infrastructure approach generally aims to create and maintain nature-based landscapes that are appropriate to the physical setting and provide ecological benefits as well as shoreline stabilization functions. The target ecosystems to benefit from the Project are high intertidal/transition zone, intertidal wetland, including emergent salt marsh, and subtidal hard substrate. The marsh habitats support numerous species including the special status Ridgway's rail and California seablite.

The Project will provide opportunities to assess mudflat-gravel beach interactions, the ecological value of littoral shore forms in SF Bay (there are few remaining coarse beaches in the Bay due to historical development), and beach-wetland interactions. It will result in a new reference site for future constructed beaches and provide an opportunity to better understand wave-induced transport processes of littoral sediments exposed to wind waves and boat and ship wakes. The Project will also provide a reference site for assessing the performance of littoral transport retention structures.

The entire Project Area is owned by the Port and will be managed in accordance with the Port's public trust mission, including protection of natural resources as a trust priority, in perpetuity. The Project site and improvements will be maintained by the Port in accordance with its strategic plan goal of protecting the bay and its shoreline habitat. The Project is designed to conserve wetlands at the site for a minimum of 30 years. Less than ¼-mile to the north is the Port's Pier 94 wetland, which is more protected and less frequented by visitors. Directly across India Basin, less than ¼-mile south of the Project, the City of San Francisco is creating 0.3 tidal wetlands in conjunction with a sediment remediation and shoreline park development.

The Project will directly prevent coastal wetland loss and restore ecological function of nearly seven acres of degraded estuarine intertidal emergent wetlands, a nationally declining wetland type pursuant to the National Wetland Priority Conservation Plan. It will create new estuarine

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intertidal reef habitat, a regionally decreasing habitat type (SF Bay Subtidal Goals 2010) at the Project site as follows:

TABLE 1. WETLANDS CONSERVATION EXTENT		
Habitat type	Marsh Restoration (acres)	% of Project area
Declining coastal wetlands— estuarine intertidal emergent	6.8	50
Regionally declining estuarine intertidal reef habitat	<0.1	<1
Total wetlands	6.8	50
Other Aquatic Habitat: tidal ponds, rocky intertidal, vegetated and unvegetated gravel beach, intertidal mudflats	0	50
Total Project acres	13.5	100

The Project holds regional significance in that it:

- Supports the natural resource goals and objectives of several ecosystem and coastal watershed management plans. **Table 2** describes the relevant management plans and how the Project specifically relates to one or more objectives of each plan.
- Benefits special-status and other species within the Project site and in San Francisco Bay. **Table 3** lists anticipated benefits to a selection of special-status species that occur in San Francisco Bay and, where applicable, the management plans that identify critical habitat. The Project will directly restore habitat for the Federal and State-listed endangered California Ridgway's rail and the Federal endangered California seablite. **Table 4** provides a summary of anticipated project-related benefits to fish.
- Protects and enhances foraging, nesting, and roosting habitat in the San Francisco Bay Estuary, a Wetland of International Importance, and a critical stopover for birds on the Pacific Flyway. **Table 5** summarizes the potential benefits to coastal-dependent and migratory birds that use tidal marshes, mudflats, rocky shorelines, and shallow subtidal area in San Francisco Bay.

Best Available Science and Conceptual Models

The Project will serve as an important demonstration of the capacity for natural systems-based shoreline stabilization to protect wetlands from erosion, diversify habitat and improve overall ecological function. The Project design has been informed by a team (described below) that brings expertise and experience in these disciplines, including design, construction, and monitoring similar projects in San Francisco that have proven successful at stabilizing eroding marsh edges and improving abundance and diversity of wildlife ([SFEI & Baye, 2020](#)). The Project conceptual design, alternatives analysis, Basis of Design Report, and 100% design plans have been reviewed for technical/scientific merit and feasibility by the Technical Advisory Committee ("TAC"), the Port's Engineering Division, and a 3rd-party engineering peer reviewer. The

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qualifications of the design team and TAC are described further under “Collaboration, Integration, and Community Support” below.

The innovative techniques outlined in this project description are already being applied individually to several restoration projects in the region. The Baylands Ecosystem Goals Update (Goals Project 2015) suggests that integrating subtidal habitat elements into nature-based adaptation can reduce the impacts of sea level rise and erosion and reintroduce valuable habitat types, such as oyster reefs and coarse marsh-fringing beaches. There are several projects proposed for San Francisco Bay that plan to use similar approach. The lessons learned from the Project about living shoreline design, construction, and performance over time will inform the developing science and practice of living shoreline implementation and guide future managers interested in providing foraging habitat for waterbirds and fish while also providing shoreline protection.

With respect to analyzing the Project’s adaptive capacity as sea level rises, the Project design relies on the sea level rise estimates provided in the 2018 California Sea Level Rise Guidance from the Ocean Protection Council and Natural Resources Agency (“2018 State Guidance”), which represents the best available science. The 2018 State Guidance recommends use of probabilistic projections to understand potential sea level rise impacts, which associate a likelihood of occurrence with projected sea level increases and rates tied to a range of emission scenarios.

The Project design team from Environmental Science Associates (ESA) brings considerable experience and scientific expertise. Project Manager Eddie Divita is a licensed Hydrologist and Civil Engineer with experience in engineering design of coastal, wetland, and estuarine restoration projects in San Francisco Bay. Senior Engineer, Bob Battalio has over 30 years of experience in coastal engineering and multi-benefit restoration project design. Anne Borgonovo has provided engineering and construction oversight to several coastal stabilization and restoration projects, including one of the first natural system-based sea level rise adaptation projects in San Francisco Bay.

Collaboration, Integration, and Community Support

The Project enjoys strong support from local, regional, and State institutions as evidenced by the award of **\$1.1M from the San Francisco Bay Restoration Authority**, recommended award of **\$1.667M from the Ocean Protection Council** Coastal Resilience Grant Program, and donation of coarse sand and gravel material required for Project construction, valued at **\$417,000, from a neighboring sand and aggregate supplier** (letters of financial commitment on file, available upon request).

Beyond direct financial contribution, the Project benefits from collaboration between local (Port), regional, and State agencies and other Project partners, including:

Attachment 14. Project Narrative

- The **California State Coastal Conservancy** provides technical assistance regarding living shoreline project design, permitting, and construction and serves as project manager for the San Francisco Bay Restoration Authority grant.
- **Technical Advisory Committee (TAC)**: The Project's TAC has guided planning and design. TAC members include Kathy Boyer, faculty and research scientist at the Estuary and Ocean Science (EOS) Center at San Francisco State University, and Chela Zabin from the Smithsonian Environmental Research Center, who bring specialized expertise in ecology and habitat restoration for the native tidal marsh plants and native oysters respectively. The TAC includes ecologist and botanist Peter Baye, lead author of the San Francisco Estuary Institute's "*New Life for Eroding Shorelines*" report. The TAC will be retained to continue providing expert guidance during construction, monitoring, and adaptive management.
- **Literacy for Environmental Justice (LEJ)**: LEJ is a community-based, non-profit environmental education and youth empowerment organization created specifically to address the ecological and health concerns of Bayview Hunters Point and communities of southeast San Francisco. LEJ operates a native plant nursery in Hunters Point that specializes in growing locally adapted native species for shoreline and coastal upland habitats. The Port has contracted with LEJ to cultivate, install, monitor, and maintain the tidal salt marsh plants that will be installed over a 5-year period, beginning November 2020. This work will be conducted by LEJ's "Eco-Apprentices", low-income, predominantly minority transitional-age youth (age 18-26) with an interest in habitat restoration.

The Project partners also engage directly with regional stakeholders, including academic and scientific institutions, environmental advocacy groups, resource and regulatory agencies, and state, local, and federal land managers with interest, opportunity, or obligation to conserve coastal wetlands. Collaboration with these groups is done through a variety of workshops, meetings, conferences, and informal networking, all of which contribute to understanding best practices and provide opportunity to maximize effectiveness of wetland habitat enhancement projects in the bay.

The Project will increase public education, awareness, and advocacy for coastal wetlands in the local community and the region. The Project site is visited by thousands of people each year, approximately 75% from the City and County of San Francisco and 34% from the immediately surrounding economically disadvantaged community. The wildlife habitat at Heron's Head Park is a well-loved, uniquely accessible educational and recreational resource with a passionate constituency. The coastal wetlands are the essential focal point of the site and the public engagement programs. Most of the education programs and all volunteer programs include service-learning, wherein participants have an opportunity for direct observation of wetland habitat and wildlife and hands-on habitat stewardship. Action taken now to protect the wetlands from loss to erosion will preserve this educational and recreational asset for at least a generation in a community where such opportunities are scarce.

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The Port partners with the San Francisco Recreation & Parks Department (RPD) and City College of San Francisco to operate active and well-developed environmental education and volunteer programs both outdoors in Heron's Head Park and in "The EcoCenter at Heron's Head Park" (the EcoCenter). Programs include single-day or series of field trips for K-12 schools, universities, and the public. Staff and volunteers lead regular volunteer habitat stewardship events. RPD offers a 6-month service and leadership skills development program for local teenagers interested in environmental conservation ("the Greenagers"), a summer "Wetlands Explorers" day camp, and many other programs and events created in collaboration with other community partners. RPD staff offer regular drop-in bird-watching walks for beginning birders and Golden Gate Audubon Society leads scheduled field trips for birders of all skill levels. In 2020, RPD offered a new series of "Fishing for Youth at Heron's Head Park" classes (cancelled due to pandemic, will resume).

B. Scope of Work

Project Objectives

Project objectives are summarized in **Form 4**. Specific goals and objectives to achieve the Project purpose, and approach to achieving them are described in more detail in **Section 14.A. Project Description – Purpose and Need** above.

Approach and Statement of Work

The tasks listed below correspond to the numeric list of tasks in **Form 5 - Timeline**. Note that following Scope of Work includes all of the tasks that comprise the Heron's Head Park Shoreline Resilience Project as a whole. This inclusive description of the Scope of Work is essential to convey the full scope of the Project, the work required to complete it, and the breadth of potential benefits of the project. However, it includes tasks that have been, are currently, or will be funded by the Port or with grant funding from other sources. **With this application for Prop. 1 Watershed Restoration Grant Program funds, the Port seeks funding to support Task 5 – Shoreline Construction.** Consequently, this application describes a proposed CDFW grant term beginning August 1, 2022, which is the earliest that shoreline construction could begin due to seasonal restriction, and ending June 30, 2023, six months after the date that seasonal restrictions require the shoreline construction to be completed. Many of the tasks described below are essential precedent to, or will occur concurrent with, the shoreline construction work proposed for CDFW funding. The objectives listed below correspond to the numbered list of Project objectives described above under **Project Description – Purpose and Need**.

Task 1	Project Management	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco	Objectives #1 - #7	Present through completion of shoreline construction (1/31/23),

Attachment 14. Project Narrative

				Final Report to CDFW (6/30/23), and through post-restoration monitoring (2032)
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Project management by Port staff began with initial scoping and contracting for planning studies and conceptual design in 2017. It will continue through completion of construction of habitat protection and enhancement elements in January 2023 and post-restoration monitoring for 10 years (through 2032 assuming that the Project construction is completed in January 2023). Port staff have and will continue to provide technical and administrative services associated with performing and completing the work for this Project, including managing contracts and grant agreements, obtaining and ensuring compliance with all regulatory permits and authorizations, administering this and other grant agreements, managing bids and contracts, managing construction inspection and monitoring, and contracting for, managing, and reporting on post-restoration monitoring and data management and dissemination.

Deliverables include Quarterly Reports and invoices (within 30 days of the end of each quarter), Draft Final Report (within 30 days of the end of the last quarter of the construction period and 60 days before the end of the grant term), and Final Report (submitted prior to the end of the grant term). The first Quarterly Report will be submitted within 30 days after the quarter during which CDFW construction begins (July-Sept 2022), by 10/31/2022.

Task 2	Restoration Design	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco and ESA	Objectives #1 - #4	Completed. Submitted to CDFW 2/19/21

The Port initiated engineering design of the Project in 2017 through a contract with Environmental Science Associates (ESA). ESA prepared the Basis of Design Report (4/13/20, see **Form 8 – Attachment 9**) and conceptual, 65%, 90%, and 100% engineering design plans and technical specifications (see **Form 8 – Attachment 8**).

Task 3	Stakeholder Engagement	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco, ESA, and LEJ.	Objective #7	Conducted 2018 through 2032. First Quarterly Report to CDFW 10/31/22

The Port initiated stakeholder engagement in 2017 with presentations by Port Staff to the public meetings of the Port's citizen advisory committees (Southern Waterfront Advisory Committee, Waterfront Land Use Plan Sustainability Committee), local community groups in the Bayview Hunters Point neighborhood (EcoCenter Advisory Committee, Bayview Residents Improving their Environment) and the local chapter of the Audubon Society. This outreach has continued

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through the design and permitting process and will continue through construction and post-restoration monitoring.

Beginning Summer 2021, Project partner Literacy for Environmental Justice (LEJ) will initiate additional community outreach developed and presented by LEJ's EcoApprentices (see description under "Collaboration" above). Their outreach will be youth- and community-driven: The EcoApprentices will develop and deliver presentations about the Project (with technical support/supervision from Port) to groups and venues of their choosing. The EcoApprentices' outreach is funded by the San Francisco Bay Restoration Authority Grant to the Port.

Project partner ESA has presented the project to more technical audiences, including presenting at an on-line symposium on coarse grain beaches as habitat and shoreline resilience improvements hosted by the California Coastal Conservancy. More such presentations will be appropriate in the future as implementation experience yields lessons learned and results of post-restoration monitoring.

Additionally, the Port has more recently developed a robust [Waterfront Resilience Program \(WRP\) Communications and Engagement Plan](#) that provides additional capacity for community engagement about the Heron's Head Park Shoreline Resilience Project. Inclusion in the WRP Communications and Engagement Plan will provide more resources for community engagement and enable meaningful stakeholder input in addition to dissemination of information about the Project. Port staff will also continue to leverage its existing environmental education and public outreach programs at Heron's Head Park and other public meetings and events to engage community stakeholders and the public in the project.

The Deliverable for this task will consist of reporting on stakeholder engagement activities to CDFW in Quarterly Reports, to be submitted within 30 days after each quarter during which CDFW construction occurs. The first CDFW-funded construction activities will occur during the July-Sept 2022 quarter, with first report submitted by 10/31/22.

Task 4	Salt Marsh Habitat Restoration	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco; LEJ	Objectives #4 - #5	November 2020 - December 2025

The salt marsh habitat restoration element of the Project is described briefly above with respect to Project objectives under **Project Description – Purpose and Need**. It is a 5-year effort to remove invasive species, replace with locally adapted and propagated native salt marsh species, and employ local youth in the restoration effort. This task is funded by the Port's existing grant agreement with the San Francisco Bay Restoration Authority. The first phase of the Project was initiated in November 2020 with invasive species removal and seed collection. Salt marsh habitat restoration will be conducted in two phases:

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Scope	Schedule	Funding Status
Wetland plant restoration, Phase 1: First 2 of total of 5 yrs. wetland plant habitat restoration	Fall 2020 through Fall 2022.	Funds awarded by the San Francisco Bay Restoration Authority
Wetland plant restoration, Phase 2: Three additional years of wetland habitat restoration, including planting along new habitat features, will follow construction of stabilized shoreline.	Upon completion of shoreline construction, anticipated January 2023.	Funds designated for award to Port by the SF Bay Restoration Authority, subject to approval of Phase 2 work plan and budget.

The **Deliverable** for this task will consist of reporting on salt marsh restoration activities to CDFW in Quarterly Report, to be submitted within 30 days after each quarter during which CDFW construction occurs. The first CDFW-funded construction activities will occur during the July-Sept 2022 quarter, with first report submitted by 10/31/22.

Task 5	Shoreline Construction	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco, ESA	Objectives #1-#3	August 2022 -January 2023.

Task 5. Shoreline Construction is the Project element for which the Port seeks funding from the CDFW Prop. 1 Watershed Restoration Grant Program. Project design and permitting are complete, and the Project is currently ready to proceed to construction. Permits restrict on-site construction to occur only between August 1 and January 31 to protect nesting birds and special status species. If the requested CDFW Prop. 1 funds are awarded in May or June 2021, considering that grant agreement negotiation and approval and bid solicitation and award process takes about 6 months, the next possible window of opportunity for construction would be August 2022 through January 2023. Shoreline construction will consist of the following subtasks:

- Task 5.1. Construction Management and Design Engineering Team Oversight.** Prior to beginning construction, the Port will contract with ESA to provide technical support and consultation to Port staff during the bid period and through the 6-month construction period to assist with questions from bidders and oversight of the selected Contractor to ensure that construction conforms to design standards and technical specifications. The team will include Eddie Divita, who was the primary design engineer, and Ann Borgonovo, who has extensive experience overseeing construction of habitat restoration. See **Form 1 – Project Team and Qualifications**. The Port will also contract with a qualified consultant to provide on-site inspection and contract administration

Attachment 14. Project Narrative

during the 6-month construction period. This is an essential function that the Port is not able to fulfill with in-house staff capacity.

- **Task 5.2. Solicit Bids.** If funds are available by January 2022, the Port will initiate the bidding process in February 2022. Port staff will assemble bid documents including construction drawings and administrative and technical specifications, advertise the bid opportunity, conduct a pre-bid site walk, and address questions from bidders. The design and construction management team will support the process. The **Deliverable** for this task will consist of documentation of the bid solicitation process to be submitted to CDFW upon receipt of bids by the end of May 2022.
- **Task 5.3. Bids Due.** At bid opening, projected to occur by the end of May 2022, Port staff will determine the lowest bid from a responsive (meets all requirements of the bid process) qualified (meets technical and administrative requirements specified by the contract) bidder. The **Deliverable** for this task will be documentation of bids received and basis for determination of the lowest bid from responsive qualified contractor.
- **Task 5.4 Authorization to Award through Executed Subcontract.** Port staff will secure Port Commission and funders' approval of the recommended Contractor, obtain Contractors' submittals required prior to contract execution (e. g. insurance, bonding, licenses, or other qualifications), execute the contract, and issue a Notice to Proceed. This process typically requires a couple of months and is projected in the Project Timeline to occur during June and July 2022, enabling the Contractor to mobilize at the earliest permitted date of 8/1/22. The **Deliverable** for this task will be the executed contract between Port and Contractor, the subcontract to the Port's grant agreement with CDFW.
- **Task 5.5 Mobilization, Pre-Construction Surveys, and Training.** Beginning 8/1/22 and before shoreline work can begin on 9/1/22, the Contractor will be able to mobilize equipment and materials to the site and begin establishing temporary upland staging and construction access routes. Contractor will conduct pre-construction topographic surveys and obtain Port and supporting team approval of construction schedule, health and safety plan, stormwater pollution prevention plan and similar pre-construction submittals.

The Port will contract with qualified biologists to complete pre-construction surveys for potential presence of Ridgway's rail and eelgrass and locations of existing California seablite populations, which will be marked and protected. Biologists will also provide environmental awareness training regarding the environmental permit conditions, sensitive resources at the site, and the impact avoidance and minimization measures that must be implemented during construction to the Contractor's field management and construction personnel prior to commencement of work. The **Deliverable** for this

Attachment 14. Project Narrative

task will be documentation of construction activities in Quarterly Reports and invoices, the first of which will be submitted to CDFW by 10/31/22.

- **Task 5.6 Construct Shoreline.** This task is described in detail in the Basis of Design Report (provided with **Form 8 – Attachment 9**) and includes the following:
 1. After September 1st, to avoid disturbance to nesting birds, Contractor will establish temporary construction access routes to the shoreline and deliver bulk materials (sand, gravel, cobble, rock) to the unloading area shown on construction plans (see **Form 8 – Attachment 8**). It is estimated that the Project will require 1,350 truck trips to deliver material to the site, including transport of donated coarse sand/gravel from a nearby sand processing facility.
 2. Contractor will place rock groynes and drift sills, reinforced pond sills, coarse beach material, and natural wood habitat elements, working only during low tide when material can be placed in areas that are not inundated. These shoreline features will be surveyed and inspected at specified milestones to ensure that design quantities and elevations are achieved.
 3. Upon completion of the shoreline construction, LEJ will plant salt marsh species that have been cultivated for the Project, including the endangered California seablite, along the shoreline and beach crest (see **Task 4. Salt Marsh Habitat Restoration**).
 4. Contractor will remove all temporary construction materials and restore the site as specified by the constructions plans and specifications, including restoring vegetation in any impacted areas and reconstructing asphalt and decomposed granite paths.
 5. Throughout the construction period, biologists and other qualified consultants under contract to the Port will continue to monitor presence of Ridgway's rail and compliance with species and habitat, water quality, air quality, noise reduction, and other requirements.

Deliverables for this task will be documentation of construction activities in Quarterly Reports and invoices, the first of which will be submitted to CDFW by 10/31/22, and in the Draft Final and Final Reports.

Task 6	Oyster Reef Balls	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco, Supplier: Reef Innovations, Installation TBD	Objectives #1-#3	August 2022 - January 2023.

Oyster reef balls will be fabricated and delivered under separate contract, and installed along the toe of the constructed shoreline, most likely using marine equipment to place the reef balls during high tide. Oyster reef balls must be installed in September, when oysters are most likely to colonize the reefs but outside of the protected bird nesting season. Installation may be conducted by Port staff using Port-owned barges, cranes, and work boats as resources allow. A

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specialized marine construction contractor may be required. The **Deliverable** for this task will be documentation of oyster reef installation in Quarterly Reports and invoices and in the Draft Final and Final Reports.

Task 7	Post-restoration Monitoring & Management	Responsible Party:	Objective (Form 4)	Timeline (Form 5)
		Port of San Francisco, Consultants and Contractors TBD	Objectives #6	Spring 2023 -Winter 2032.

This task is described briefly above with respect to Project objective #6 under **Project Description – Purpose and Need**, and in detail in the *Monitoring and Adaptive Management Plan* provided as **Form 8 – Attachment 15**. With grant funding from the San Francisco Bay Restoration Authority (5 years) and subsequently supported by Port operating funds, the Port will monitor the physical and ecological outcomes of Project implementation for 10 years. Long-term monitoring will yield data as described below.

C. Dissemination of Information: Data Management and Access, Data Sharing, and Publications

The Port will conduct post-restoration monitoring beginning upon completion of construction and continuing for 10 years as described in the Monitoring and Adaptive Management Plan (**provided with Form 8 – Attachment 15**), including methods, equipment, and metrics. Monitoring will produce the following data:

- Geospatial and topographic survey data regarding vertical and horizontal location, volume, and elevation of the dynamically- stable beach and oyster reef balls, quantitative measurement of longshore and cross-shore movement of beach material, and aerial extent of beach, tidal marsh, and tidal flats.
- Geospatially referenced location of scarps indicating marsh erosion, and documented retention of tidal ponds.
- Geospatially referenced areal extent and percent cover of marsh vegetation as well as relative cover by native vs. non-native species, species diversity, mean cover height and density.
- Quantitative data regarding colonization of oyster reef balls, including density, size distribution, percent cover, and species composition.
- Quantitative and qualitative measures of California seablite population recovery, including geospatially-references location, size, aerial extent, survival, and reproduction.
- Qualitative data regarding wildlife use of the site collected quarterly surveys.

The Project site is currently represented in the [EcoAtlas Project Tracker](#), and applicable wetland monitoring data will be uploaded to the EcoAtlas on an on-going basis. Observation of special status species will be to the [California Natural Diversity Database \(CNDDB\)](#).

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Scientists from the Estuary and Ocean Science Center at San Francisco State University will support seed collection, planting, and monitoring the endangered California seablite at the source population and the Project site and report their activities to the Rare Plant Working Group of the US Fish & Wildlife Service-led Tidal Marsh Recovery Plan. Records will include GPS locations of where plant materials were collected and planted, how the plant material was collected, how it was propagated, and how, and when it was outplanted.

The Port has not yet developed a data management plan, but will do so concurrent with project implementation, prior to post-restoration monitoring data collection, in coordination with resource, regulatory, and funding agencies to ensure that data quality, retention, and minimum CDFW and other applicable data management standards. Data and information will be shared with the public, scientific and restoration community, resource and regulatory agencies, and other stakeholders as described with respect to **Task 3. Stakeholder Engagement** above.

D. References

California State Coastal Conservancy. 2010. *San Francisco Bay Subtidal Habitat Goals Report: Conservation Planning for the Submerged Areas of the Bay*. Oakland, CA.

California State Coastal Conservancy. 2015. *The Baylands and Climate Change: What We Can Do. Baylands Ecosystem Habitat Goals Science Update 2015*. Oakland, CA.

SFEI and Peter Baye. 2020. *New Life for Eroding Shorelines: Beach and Marsh Edge Change in the San Francisco Estuary*. Publication #984, San Francisco Estuary Institute, Richmond, CA.

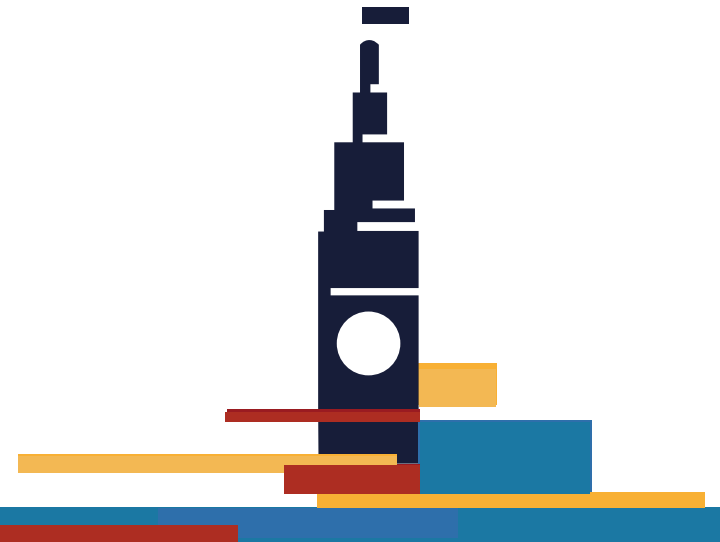
Heron's Head Park Shoreline Project

Accept California Department of Fish & Wildlife Grant

Requesting Authorization to Accept and Expend grant funds.

December 1, 2021

Presented By: Carol Bach
Environmental Affairs Manager
Port of San Francisco



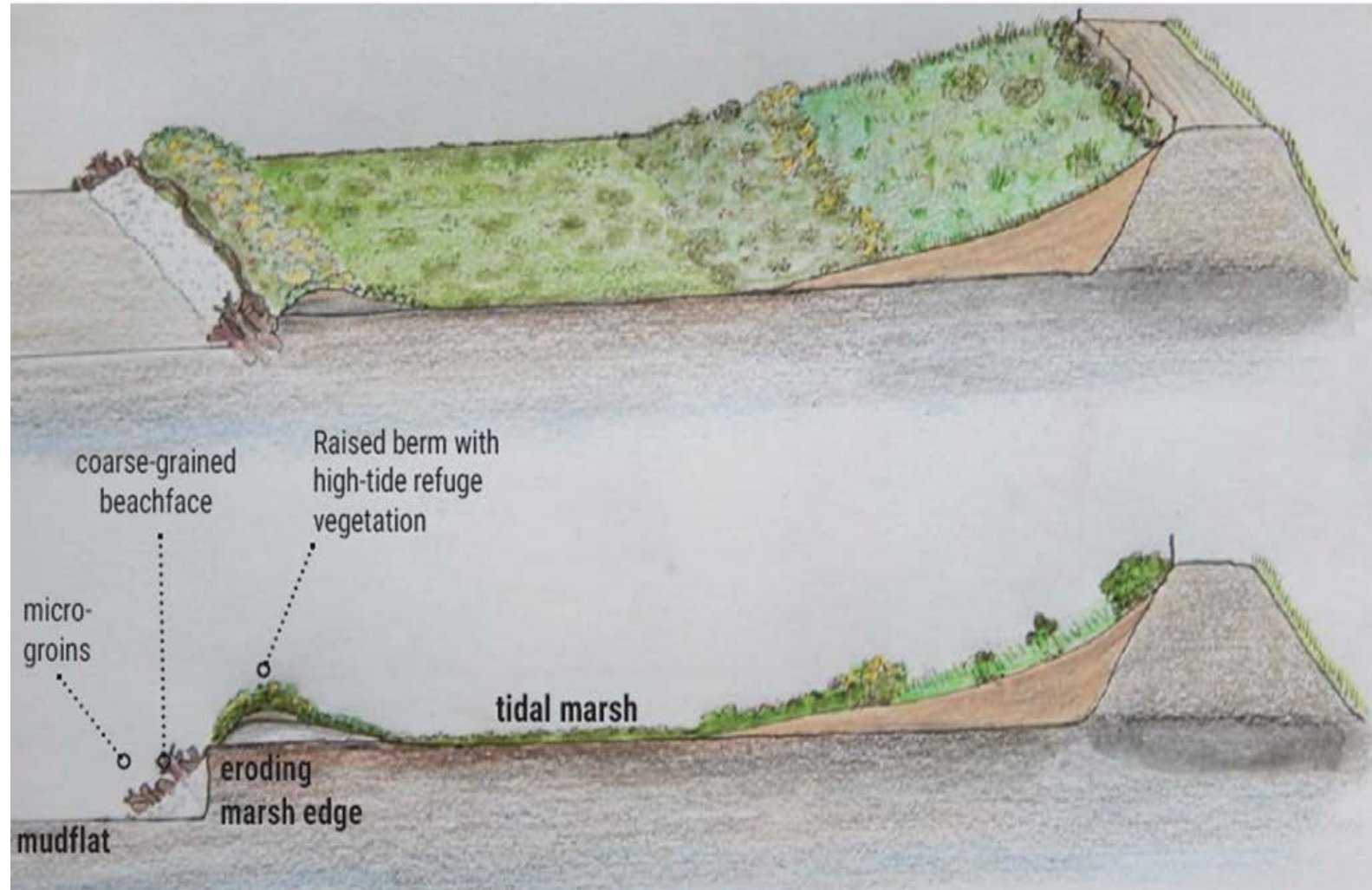
Erosion is removing valuable habitat from Herons' Head Park



Wetland habitat quality is impacted by invasive species.

Heron's Head Park Living Shoreline Project Objectives

1. Protect the southern shoreline from erosion.
2. Restore native wetland plant habitat.
3. Create capacity for adaption to sea level rise.
4. Create youth employment and community engagement opportunities.



Heron's Head Park Living Shoreline Project Actions

1. Hire local youth to grow native plants, remove invasive plants from the marsh, replace with native species.
2. Continue for five years.
3. Construct a dynamically stable coarse beach stabilized by rock and cobble groynes.
4. Monitor outcomes and adapt as needed.



Phasing and Funding

Scope	Schedule	Cost Estimate	Funding Status
Wetland revegetation, Phase 1	Fall 2020 through Fall 2022.	\$297,000	Funded by San Francisco Bay Restoration Authority, approved by Board of Supervisors September 30, 2020.
Shoreline stabilization	August 2022 through January 2023.	\$3,591,000	\$1,667,000 grant from OPC approved by Board of Supervisors July 13, 2021. \$1,493,000 grant from CDFW: requesting approval \$431,000 Port capital or non-Port source.
Wetland revegetation, Phase 2	After shoreline construction.	\$494,000	Recommended for SFBRA funding, subject to Port Commission and Board of Supervisors approval.
Post-Construction Monitoring: 5 yrs.	From completion of shoreline construction through five years.	\$310,000	Recommended for SFBRA funding, subject to Port Commission and Board of Supervisors approval.
Total Estimated Project Cost		\$4,285,000	

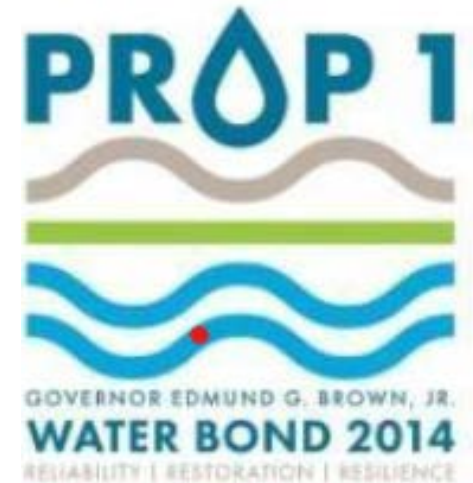
California Department of Fish & Game Prop.1 Ecosystem Restoration Grant Program

CDFW approved award of \$1,493,000

- For shoreline construction
- Port Commission Approved September 14, 2021
- Subject to Board of Supervisors Approval

Grant Terms and Conditions

- Grant Term: from execution through 2023.
- Obligation to operate & maintain the shoreline and public open space for 25 years after the end of the grant term
- Indemnification and Insurance
- Acknowledgement



TO: Angela Calvillo, Clerk of the Board of Supervisors
FROM: Boris Delepine, Port of San Francisco
DATE: October 19, 2021
SUBJECT: Accept and Expend Resolution for Subject Grant
GRANT TITLE: Heron's Head Park Shoreline Resilience Project,
California Department of Fish and Wildlife Grant

Attached please find the original* and 1 copy of each of the following:

☒ Proposed grant resolution; original* signed by Department, Mayor,
Controller

☒ Grant information form, including disability checklist

☒ Grant budget

☒ Grant application

☒ Grant award letter from funding agency

☐ Ethics Form 126 (if applicable)

☐ Contracts, Leases/Agreements (if applicable)

☐ Other (Explain):

Special Timeline Requirements:

Departmental representative to receive a copy of the adopted resolution:

Name: Boris Delepine Phone: 415-571-6626

Interoffice Mail Address: Pier 1, The Embarcadero, San Francisco, Ca 94111

Certified copy required Yes ☐ No X

(Note: certified copies have the seal of the City/County affixed and are occasionally required by funding agencies. In most cases ordinary copies without the seal are sufficient).

Updated August 7, 2014