

File No. 230099

Committee Item No. 2

Board Item No. 10

# COMMITTEE/BOARD OF SUPERVISORS

## AGENDA PACKET CONTENTS LIST

Committee: Budget and Finance Committee

Date March 8, 2023

Board of Supervisors Meeting

Date March 14, 2023

### 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 type="checkbox"/>            | <input 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. 22-56 11/8/2022</u> |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Staff Recommendation 10/14/2022</u>     |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Port Presentation 3/8/2023</u>          |
| <input type="checkbox"/>            | <input type="checkbox"/>            | _____                                      |
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Completed by: Brent Jalipa

Date March 2, 2023

Completed by: Brent Jalipa

Date March 9, 2023

1 [Accept and Expend Grant - San Francisco Bay Restoration Authority - Heron’s Head Park  
2 Shoreline Resilience Project - \$796,100]

3 **Resolution authorizing the Port of San Francisco to accept and expend a grant in the**  
4 **amount of \$796,100 from the San Francisco Bay Restoration Authority to fund the**  
5 **Heron’s Head Park Shoreline Resilience Project for a period to commence following**  
6 **Board approval, through December 2033; and to authorize the Port Executive Director**  
7 **to enter into amendments or modifications to the agreement that do not materially**  
8 **increase the obligations or liabilities to the City and are necessary to effectuate the**  
9 **purposes of the agreement or this Resolution.**

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

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

17 WHEREAS, Heron’s Head Park is a 22-acre open space and thriving wildlife habitat  
18 located on Port property in the City’s southeast sector; and

19 WHEREAS, Since its creation over 20 years ago, the park has evolved with the  
20 addition of the EcoCenter in 2010 and additional expansion and improvements of the park in  
21 2012; and

22 WHEREAS, Heron’s Head Park has also experienced significant erosion and invasion  
23 by non-native plants, resulting in decreased acreage and ecological value of the tidal wetland;  
24 and

25 WHEREAS, The Port has developed the Heron’s Head Park Shoreline Resilience

1 Project to construct a living shoreline and restore wetland habitat in order to mitigate negative  
2 impacts to the tidal wetland; and

3 WHEREAS, The San Francisco Bay Restoration Authority Act, Government Code,  
4 Sections 66700-66706, establishes the San Francisco Bay Restoration Authority (“Authority”)  
5 as a regional entity to generate and allocate resources for the protection and enhancement of  
6 tidal wetlands and other wildlife habitat in San Francisco Bay and along its shoreline, and  
7 authorizes the Authority to award grants to public and private entities to achieve these  
8 purposes; and

9 WHEREAS, The Authority awards grants for eligible projects consistent with  
10 Government Code, Section 66704.5, the Authority’s Grant Program Guidelines, first adopted  
11 in May 2017, and the Authority’s San Francisco Bay Clean Water, Pollution Prevention and  
12 Habitat Restoration Measure (“Measure AA”), passed by the voters in June 2016; and

13 WHEREAS, On November 18, 2018, the Port submitted an application for grant funds  
14 to the Authority to construct a living shoreline and restore tidal wetland habitat at Heron’s  
15 Head Park; and

16 WHEREAS, At its October 14, 2022 meeting, the Authority adopted a Resolution  
17 authorizing a grant to the Port in the amount of \$796,100 for the Heron’s Head Park Shoreline  
18 Resilience Project - Phase 2; the Authority’s resolution was adopted by the Authority pursuant  
19 to, and is included in, the Authority’s October 14, 2022 staff recommendation, a copy of which  
20 is on file with the Secretary of the Port Commission and with the Authority; and

21 WHEREAS, On November 8, 2022, the Port Commission through Resolution No. 22-56  
22 authorized the Port to accept and expend the grant and the Port Executive Director or her  
23 designee to negotiate and execute a grant agreement (“Grant Agreement”) and all other  
24 instruments necessary to obtain and expend the grant monies on behalf of the Port; now,  
25 therefore, be it

1 RESOLVED, That the Board of Supervisors authorizes the Port to accept and expend a  
2 grant in the amount of \$796,100 from the Authority to fund Heron’s Head Park Shoreline  
3 Resilience Project - Phase 2; and, be it

4 FURTHER RESOLVED, That, pursuant to Charter, Section 9.118, the Board of  
5 Supervisors approves the Grant Agreement in substantially the form as on file with the Clerk  
6 of the Board of Supervisors in File No. 230099 and authorizes the Port Executive Director or  
7 her designee to conduct all negotiations, and execute and submit all documents, including but  
8 not limited to applications, agreements, amendments, payment requests, and so on, that may  
9 be necessary for acceptance and expenditure of the grant and fulfillment of the grant terms  
10 that the Port Executive Director determines, in consultation with the City Attorney, are in the  
11 best interests of the City and do not materially increase the obligations or liabilities of the City,  
12 are necessary or advisable to effectuate the purposes of the grant or this Resolution, and are  
13 in compliance with all applicable laws, including the City’s Charter; and, be it

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

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

19  
20 Recommended:

21  
22  
23 /s/ \_\_\_\_\_

24 Executive Director, Port of San Francisco

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Approved:

Approved:

/s/ \_\_\_\_\_

/s/ \_\_\_\_\_

Mayor

Controller

# Heron's Head Park Shoreline Resilience Project

## Accept San Francisco Bay Restoration Authority Grant

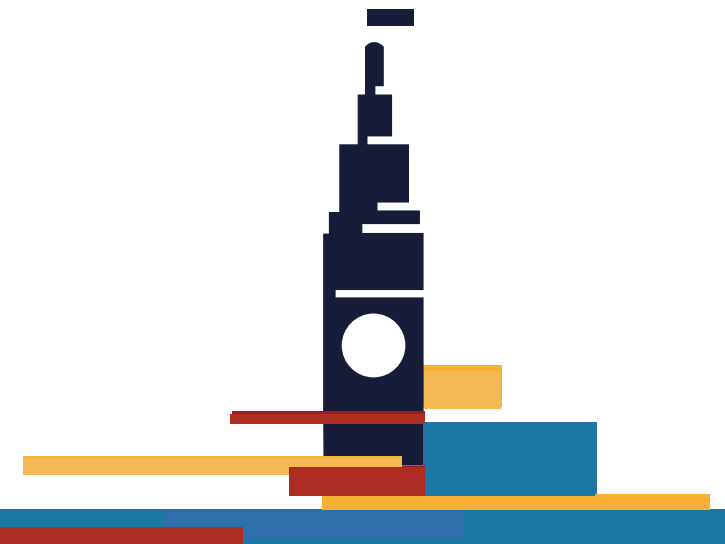
Requesting Authorization to Accept and Expend grant funds.

March 8, 2023

Presented By: Carol Bach

Environmental Affairs Manager

Port of San Francisco



# Erosion is removing valuable habitat from Herons' Head Park

**Legend**

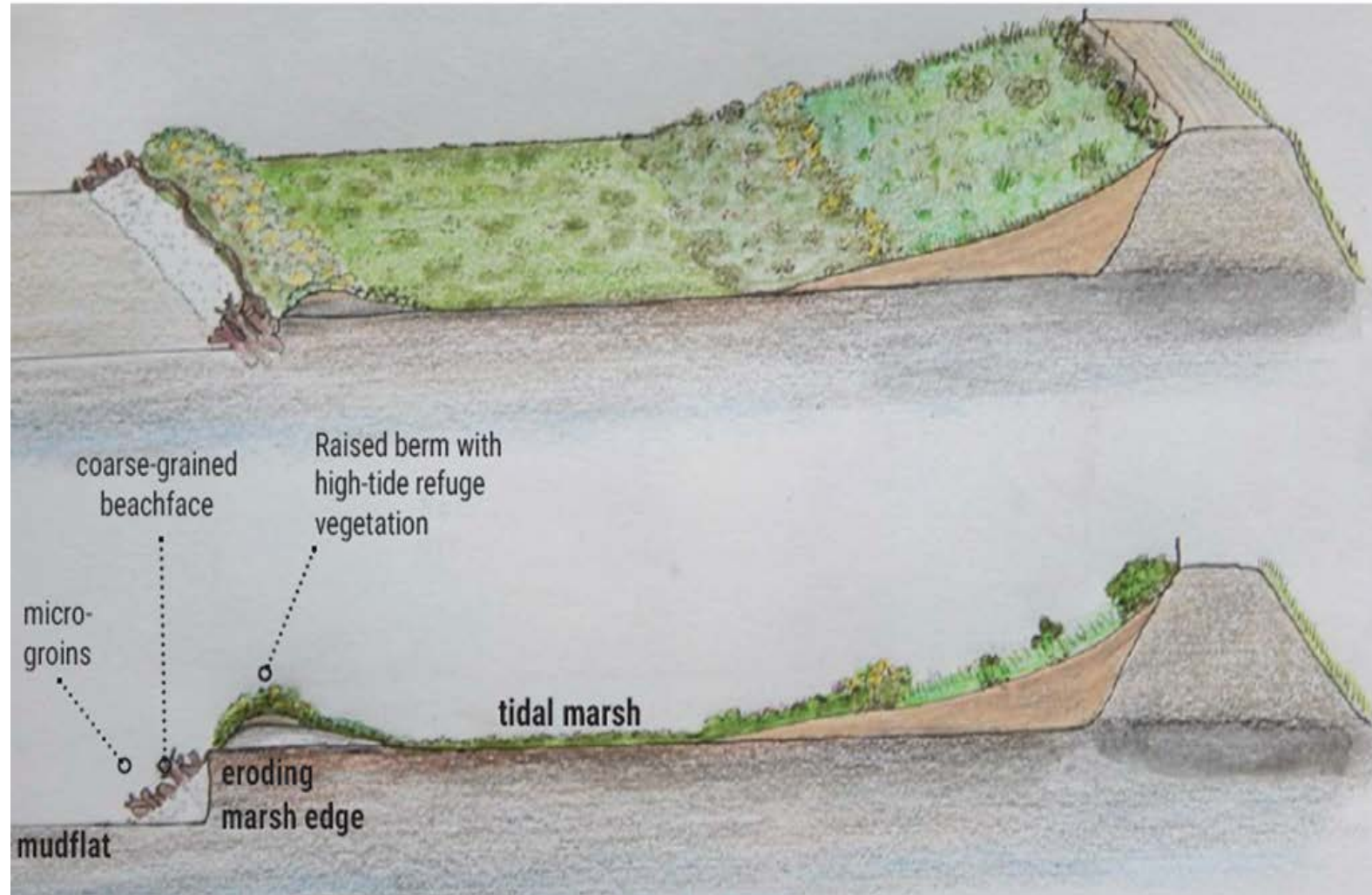
- 1999 shoreline (approx.)
- 2018 shoreline
- ..... Estimated 2050 shoreline



Wetland habitat quality is impacted by invasive species.

# Heron's Head Park Shoreline Resilience 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 Shoreline Resilience Project Actions

1. Hire local youth to restore native marsh plant habitat for 7 years. *Funded by San Francisco Bay Restoration Authority and California State Coastal Conservancy.*
2. Construct a coarse material beach stabilized by rock and cobble groynes to control erosion. Completed December 2022. *Funded by the California Ocean Protection Council and California Department of Fish & Wildlife.*
3. **Monitor physical and ecological performance for 10 years.** *Would be funded by the San Francisco Bay Restoration Authority subject to Authorization to Accept and Expend grant funds.*



# San Francisco Bay Restoration Authority Grant

**Would be 2nd of 2 grants from SF Bay Restoration Authority to Port for Heron's Head Park Shoreline Resilience:**

1. Award of \$297,000 for 2 years wetland restoration approved by Board of Supervisors September 2020.
2. Award of \$796,000 for 10 years of post-construction monitoring.

## **Grant Terms and Conditions Include:**

- Term – 10 years
- Maintenance of improvements through grant term
- Indemnification and Insurance
- Acknowledgement



*Source of Funds Logo: Measure AA*

File Number: 230099  
(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: \$796,100
6. a. Matching Funds Required: None  
b. Source(s) of matching funds (if applicable):
7. a. Grant Source Agency: San Francisco Bay Restoration Authority  
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 funding for required monitoring of the shoreline stabilization and living shoreline elements of the project.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:  
Start-Date: Upon execution, ideally January 2023 End-Date: December 31, 2033
10. a. Amount budgeted for contractual services: \$796,100  
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: 1/10/2023

  
(Signature Required)

\_\_\_\_\_



AGREEMENT NUMBER	AM. NO.
TAXPAYERS FEDERAL EMPLOYER IDENTIFICATION NO.	

# STANDARD AGREEMENT

(RA 3/2018)

THIS AGREEMENT, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2023 in the State of California, by and between the San Francisco Bay Restoration Authority, a regional public entity, through its duly appointed

TITLE OF OFFICER ACTING FOR PUBLIC ENTITY <b>Executive Officer</b>	PUBLIC ENTITY <b>San Francisco Bay Restoration Authority</b>	, hereafter called the Authority, and
GRANTEE'S NAME		, hereafter called the Grantee.

The Grantee and the Authority hereby agree as follows:

## SCOPE OF AGREEMENT

Pursuant to the San Francisco Bay Restoration Authority Act, California Government Code § 66700-66706, the San Francisco Bay Restoration Authority (“the Authority”) hereby grants to the **Port of San Francisco** (“the grantee”) a sum not to exceed **\$796,100**, subject to this agreement. The grantee shall use these funds to complete the following project (“the project”) at **Heron’s Head Park, San Francisco, CA** as shown on Exhibit 1, which is incorporated by reference and attached.

*(Continued on following pages)*

The provisions on the following pages constitute a part of this agreement.

IN WITNESS WHEREOF, this agreement has been executed by the parties hereto, upon the date first above written.

GRANTOR	GRANTEE
AGENCY <b>San Francisco Bay Restoration Authority</b>	GRANTEE (If other than an individual, state whether a corporation, partnership, etc.) <b>Port of San Francisco</b>
BY (Authorized Signature) 	BY (Authorized Signature) 
PRINTED NAME AND TITLE OF PERSON SIGNING <b>Amy Hutzel, Executive Officer</b>	PRINTED NAME AND TITLE OF PERSON SIGNING <b>Elaine Forbes, Executive Director</b>
ADDRESS & PHONE NUMBER 1515 Clay Street, 10 <sup>th</sup> Floor Oakland, CA 94612 Phone: (510) 286-1015	ADDRESS <b>Port of San Francisco, Pier 1-The Embarcadero San Francisco, CA94111</b> Phone: (415)274-0568

AMOUNT ENCUMBERED BY THIS DOCUMENT <b>\$796,100</b>	PROGRAM/CATEGORY (CODE AND TITLE) <b>Measure AA</b>
PRIOR AMOUNT ENCUMBERED FOR THIS AGREEMENT <b>\$-0-</b>	WORK ITEM NUMBER
TOTAL AMOUNT ENCUMBERED TO DATE <b>\$</b>	PROJECT NAME <b>Heron’s Head Park Shoreline Resilience</b>

*I hereby certify upon my own personal knowledge that budgeted funds are available for the period and purpose of the expenditure stated above.*

PRINTED NAME AND TITLE OF PERSON SIGNING <b>Elaine Forbes, Executive Director, Port of San Francisco</b>	SIGNATURE 	DATE
---	---------------	------

GRANTEE     ACCOUNTING     PROJECT MANAGER     AGREEMENT FILE

## **PROJECT SUMMARY**

Heron's Head Park (park) is in the City and County of San Francisco along the Bay shoreline (Exhibit 1). It contains a mosaic of shoreline habitats including tidal marsh, mudflats, tidal ponds, rocky intertidal habitat, and various subtidal habitats that support a diversity of San Francisco Bay wildlife. In addition, the park contains an environmental education center (EcoCenter) and a spur of Bay Trail, providing the adjacent communities a unique space for environmental education and outdoor recreation along a highly industrialized shoreline. The park's shoreline is estimated to have retreated 50 feet since 1998, and one tidal pond is consistently flooded instead of tidally flushed. Tidally flushed ponds are important because they support a diversity of invertebrates, which also provide food for birds. The Heron's Head Shoreline Resilience Project (the project) as a whole will implement nature-based solutions along the Bay shoreline that are designed to prevent habitat loss due to erosion and sea level rise, enhance wetland habitat, provide paid internships to members of the adjacent communities, engage the adjacent communities in stewardship of the project area, and monitor and report on project performance for ten years.

The subject phase of the Heron's Head Park Shoreline Resilience Project that will be funded by this grant consists of ten years of postconstruction monitoring and reporting on project performance. Monitoring and reporting on the performance of the project is particularly important given its innovative nature-based design, which was developed in collaboration with staff of the Restoration Authority and the Bay Restoration Regulatory Integration Team (BRRIT). The design deviates from traditional shoreline armoring structures that disrupt natural processes. Instead, it implements "nature-based solutions," which use natural and/or constructed materials to mimic natural features that stabilize and restore the ecological functions of the shoreline. The project will place coarse sediment to create beaches at the bayward edge of the marshes, and use additional structures, such as rock groynes, large woody debris, and subtidal oyster reef balls, to protect and enhance shoreline habitat. This concept is being tested in several locations around San Francisco Bay. This project will provide information that will be useful to the Regionally Advancing Living Shorelines Project, a collaborative effort funded by the Authority in June 2022.

The grantee shall carry out the project in accordance with this agreement and a work program, as provided in the "WORK PROGRAM" section, below. The grantee shall provide any funds beyond those granted under this agreement which are needed to complete the project.

## **CONDITIONS PRECEDENT TO CONSTRUCTION AND DISBURSEMENT**

The grantee shall not begin construction of the project, and the Authority shall not be obligated to disburse any funds unless and until the following conditions precedent have been met:

1. The grantee has adopted a resolution designating positions whose incumbents are authorized to negotiate and execute this agreement and amendments to it on behalf of the grantee.
2. The Executive Officer of the Authority ("the Executive Officer") has approved in writing:

- a. A work program for the project, as provided in the “WORK PROGRAM” section, below.
  - b. A plan for installation of signs and acknowledgment of Authority support, as provided in the “SIGNS AND ACKNOWLEDGMENT” section, below.
  - c. All contractors that the grantee intends to retain in connection with the project.
3. The grantee has provided written evidence to the Authority that:
- a. All permits and approvals necessary to the completion of the project under applicable local, state and federal laws and regulations have been obtained.
  - b. The grantee has provided for required insurance coverage, including additional insured endorsement, as described in the “INSURANCE” section, below.

### **ADDITIONAL GRANT CONDITIONS**

The grantee shall also meet the following conditions:

1. The Publication of Project Information. The grantee shall upload project information, including periodic monitoring data, to the project tracker for “EcoAtlas”, an online database and web-based viewer of stream and wetland maps, restoration information, and monitoring results (currently available at <http://ptrack.ecoatlas.org/>), to track project information and aggregate data.
2. Using the Lessons Learned Report form provided by the Authority and in accordance with the deadline set forth in the PROJECT COMPLETION section, below, the grantee shall submit a report describing whether the project met the project goals and information learned from project implementation that could help others more effectively implement similar projects.

### **TERM OF AGREEMENT**

This agreement shall take effect when signed by both parties and received in the offices of the Authority together with the resolution described in the “CONDITIONS PRECEDENT TO CONSTRUCTION AND DISBURSEMENT” section of this agreement. This agreement may be signed using an electronic process specified by the Authority.

This agreement shall run from its effective date through **December 31, 2033** (“the termination date”) unless otherwise terminated or amended as provided in this agreement. However, all work shall be completed by **September 30, 2033** (“the completion date”). The grantee shall submit a final Request for Disbursement no later than **October 31, 2033**.



## **AUTHORIZATION**

The signature of the Executive Officer of the Authority on this agreement certifies that at its **October 14, 2022** meeting, the Authority adopted the resolution included in the staff recommendation attached as Exhibit 2. This agreement is executed under that authorization.

## Standard Provisions

### WORK PROGRAM

Before beginning construction, the grantee shall submit a detailed work program to the Executive Officer for review and written approval of its consistency with the purposes of this grant agreement. The work program shall include:

1. Site Plan.

1. A schedule of completion for the project specifically listing the completion date for each project component and a final project completion date.
2. A detailed project budget. The project budget shall describe all labor and materials costs of completing each component of the project, including the grantee's labor and materials costs and costs to be incurred under a contract with any third party retained by the grantee for work under this agreement. For each project component, the project budget shall list all intended funding sources, including the Authority's grant, and all other sources of monies, materials, or labor. The grantee shall review the plans on-site with Authority staff.

If all or any part of the project to be funded under this agreement will be performed by third parties ("contractors") under contract with the grantee, then the grantee shall, prior to initiating any contractor selection process, submit the selection package, including any applicable construction plans and specifications that have been certified or approved as described above, to the Executive Officer for review and written approval as to consistency with the purposes of this grant agreement. Upon approval by the Executive Officer, the grantee shall proceed with the contractor selection process. Prior to final selection of a contractor, the grantee shall submit to the Executive Officer for written approval the names of all contractors that the grantee intends to hire. The grantee shall then comply with the above paragraph regarding submission and approval of a work program prior to construction.

The work program shall have the same effect as if included in the text of this agreement. However, the work program may be modified without amendment of this agreement upon the grantee's submission of a modified work program and the Executive Officer's written approval of it. If this agreement and the work program are inconsistent, the agreement shall control.

The grantee shall construct the project in accordance with the approved work program.

### SIGNS AND ACKNOWLEDGMENT

Prior to beginning the project, the grantee shall submit a plan to the Executive Officer for the installation of signs and acknowledgment of Authority support. Except as the Executive Officer agrees otherwise, the plan shall commit the grantee to mention the Authority's support in its project-related press releases, contacts with the media, and social media postings, and on its website.

The grantee shall install and maintain a sign or signs visible from the nearest public roadway identifying the project, acknowledging Authority assistance and displaying the Authority's logo, and directing the public to the project. The Authority shall provide to the grantee specifications for the signs. The grantee may incorporate the required information into other signs as approved by the Executive Officer. In special circumstances, where the placement of signs or the general specifications are inappropriate, the Executive Officer may approve alternative, more appropriate methods for acknowledging the sources of funding. The grantee shall submit plans describing the number, design, placement and wording of the signs, or the specifications of a proposed, alternative method. The Authority will withhold final disbursement until the signs are installed in accordance with the approved plan.

### **COSTS AND DISBURSEMENTS**

When the Authority determines that all "CONDITIONS PRECEDENT TO CONSTRUCTION AND DISBURSEMENT" have been fully met, the Authority shall disburse to the grantee, in accordance with the approved project budget, a total amount not to exceed the amount of this grant, as follows:

The withholding for this agreement is ten percent. The Authority shall disburse funds for costs incurred to date, less ten percent, upon the grantee's satisfactory progress under the approved work program, and upon the grantee's submission of a "Request for Disbursement" form, which shall be submitted no more frequently than monthly but no less frequently than quarterly. The Authority's fiscal year ends on June 30. For all costs the grantee incurs through the end of the Authority's fiscal year, Requests for Disbursement shall be submitted by July 20th. The Authority shall disburse the ten percent withheld upon the grantee's satisfactory completion of construction and compliance with the "PROJECT COMPLETION" section, below, and upon the Authority's acceptance of the project.

The Authority will reimburse the grantee for expenses necessary to the project when documented by appropriate receipts. The Authority will reimburse travel and related expenses at actual costs not to exceed the rates provided in Title 2, Division 1, Chapter 3, Subchapter 1, Article 2 of the California Code of Regulations ("CCR"), except that reimbursement may be in excess of these rates upon documentation that these rates are not reasonably available to the grantee. Reimbursement for the cost of operating a private vehicle shall not, under any circumstance, exceed the current rate specified by the State of California for unrepresented state employees as of the date the cost is incurred. The Authority will reimburse the grantee for other necessary expenses if those expenses are reasonable in nature and amount taking into account the nature of the project, its location, and other relevant factors.

The grantee shall request disbursements by filing with the Authority a fully executed "Request for Disbursement" form (available from the Authority). The grantee shall include in the form its name and address, the number of this agreement, the date of the submission, the amount of the invoice, the period during which the work was actually done, and an itemized description, including time, materials, and expenses incurred of all work done for which disbursement is requested. Hourly rates billed to the Authority, and specified in the approved work program

budget shall be equal to the actual compensation paid by grantee to employees, which may include employee benefits. The form shall also indicate cumulative expenditures to date, expenditures during the reporting period, and the unexpended balance of funds under the grant agreement.

An authorized representative of the grantee shall sign the forms. Each form shall be accompanied by:

1. All receipts and any other source documents for direct expenditures and costs that the grantee has incurred.
2. Invoices from contractors that the grantee engaged to complete any portion of the work funded under this agreement and any receipts and any other source documents for costs incurred and expenditures by any such contractor, unless the Executive Officer makes a specific exemption in writing.
3. A supporting progress report summarizing the current status of the project and comparing it to the status required by the work program (budget, timeline, tasks, etc.) including written substantiation of completion of the portion of the project for which the grantee is requesting disbursement.

The grantee's failure to fully execute and submit a Request for Disbursement form, including attachment of supporting documents, will relieve the Authority of its obligation to disburse funds to the grantee until the grantee corrects all deficiencies.

### **EXPENDITURE OF FUNDS AND ALLOCATION OF FUNDING AMONG BUDGET ITEMS**

The total amount of this grant may not be increased except by written amendment to this agreement. The grantee shall expend funds consistent with the approved project budget. Expenditure on items contained in the approved project budget, other than overhead and indirect costs, may vary by as much as ten percent without prior approval by the Executive Officer, provided that the grantee first submits a revised budget to the Authority and requests disbursement based on the revised budget. Any deviation greater than ten percent, and any deviation that shifts funds from approved budget items into an overhead or indirect costs category, must be identified in a revised budget approved in advance and in writing by the Executive Officer. The Authority may withhold payment for items that exceed the amount allocated in the project budget by more than ten percent and which have not received the approval required above. Any increase in the funding for any particular budget item shall mean a decrease in the funding for one or more other budget items unless there is a written amendment to this agreement.

## **PROJECT COMPLETION**

Within thirty days of completion of construction of the project, the grantee shall supply the Authority with evidence of completion by submitting a final report which includes:

1. A report by the grantee's project manager certifying completion of the project according to the approved work program.
2. Documentation that signs are installed as required by the "SIGNS AND ACKNOWLEDGMENT" section of this agreement.
3. A fully executed final "Request for Disbursement."
4. Photographs documenting project completion.
5. The Lessons Learned Report.

Within thirty days of grantee's submission of the above, the Authority shall determine whether the grantee has satisfactorily completed the project. If so, the Authority shall issue to the grantee a letter of acceptance of the project. The project shall be deemed complete as of the date of the letter.

## **EARLY TERMINATION, SUSPENSION AND FAILURE TO PERFORM**

Before the project has commenced, either party may terminate this agreement for any reason by providing the other party with seven days notice in writing.

Before the project is complete, the Authority may terminate or suspend this agreement for any reason by providing the grantee with seven days notice in writing. In either case, the grantee shall immediately stop work under the agreement and take all reasonable measures to prevent further costs to the Authority. The Authority shall be responsible for any reasonable and non-cancelable obligations incurred by the grantee in the performance of this agreement prior to the date of the notice to terminate or suspend, but only up to the undisbursed balance of funding authorized in this agreement. Any notice suspending work under this agreement shall remain in effect until further written notice from the Authority authorizes work to resume.

Before the project is complete, the grantee may terminate this agreement for any reason by providing the Authority with seven days notice in writing and repaying to the Authority all amounts disbursed by the Authority under this agreement. The Authority may, at its sole discretion, consider extenuating circumstances and allow early termination without repayment for work partially completed.

The parties expressly agree to waive, release and relinquish the recovery of any consequential damages that may arise out of the termination or suspension of this agreement under this section.

If the grantee fails to complete the project as required or fails to fulfill any other obligations of this agreement, the grantee shall be liable for immediate repayment to the Authority of all amounts disbursed by the Authority under this agreement. The Authority may, at its sole discretion, consider extenuating circumstances and not require repayment for work partially completed. This paragraph shall not be deemed to limit any other remedies the Authority may have for breach of this agreement.

The grantee shall include in any agreement with any contractor retained for work under this agreement a provision that entitles the grantee to suspend or terminate the agreement with the contractor for any reason on written notice and on the same terms and conditions specified in this section.

### **OPERATION AND MAINTENANCE**

The grantee shall use, manage, maintain and operate the project throughout the term of this agreement consistent with the purposes for which the Authority's grant was made. The grantee assumes all operation and maintenance costs of these facilities and structures; the Authority shall not be liable for any cost of maintenance, management, or operation. The grantee may be excused from its obligations for operation and maintenance during the term of this agreement only upon the written approval of the Executive Officer.

For purposes of this agreement, "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses. "Maintenance costs" include ordinary repairs and replacements of a recurring nature necessary to prolong the life of capital assets and basic structures, and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures.

### **MITIGATION**

Without the written permission of the Executive Officer, the grantee shall not use or allow the use for mitigation (in other words, to compensate for adverse changes to the environment elsewhere) of any portion of real property on which the Authority has funded construction. In providing permission, the Executive Officer may require that all funds generated in connection with any authorized or allowable mitigation on the real property shall be remitted promptly to the Authority. As used in this section, mitigation includes, but is not limited to, any use of the property in connection with the sale, trade, transfer or other transaction involving carbon sequestration credit or carbon mitigation.

### **INSPECTION**

Throughout the term of this agreement, the Authority shall have the right to inspect the project area to ascertain compliance with this agreement.

## **INDEMNIFICATION AND HOLD HARMLESS**

The grantee shall be responsible for, indemnify and hold harmless the Authority, its officers, agents, and employees from any and all liabilities, claims, demands, damages, or costs, including, without limitation, litigation costs and attorneys fees, resulting from or arising out of the willful or negligent acts or omissions of the grantee, its officers, agents, contractors, subcontractors, and employees, or in any way connected with or incident to this agreement, except for the active negligence of the Authority, its officers, agents, or employees. The duty of the grantee to indemnify and hold harmless includes the duty to defend as provided in Civil Code section 2778. This agreement supersedes any right the grantee may have as a public entity to indemnity and contribution as provided in Gov. Code Sections 895 et seq.

The grantee waives any and all rights to any type of express or implied indemnity or right of contribution from the Authority, its officers, agents, or employees, for any liability resulting from, growing out of, or in any way connected with or incident to this agreement.

Nothing in this agreement is intended to create in the public or in any member of it rights as a third-party beneficiary under this agreement.

The obligations in this “INDEMNIFICATION AND HOLD HARMLESS” section shall survive termination of this agreement.

## **INSURANCE**

The grantee shall procure and maintain insurance, as specified in this section, against claims for injuries to persons and damage to property that may arise from or in connection with any activities of the grantee or its agents, representatives, employees, volunteers, or contractors associated with the project undertaken pursuant to this agreement.

As an alternative, with the written approval of the Executive Officer, the grantee may satisfy the coverage requirement in whole or in part through: (a) its contractors’ procurement and maintenance of insurance for work under this agreement, if the coverage otherwise fully satisfies the requirements of this section; or (b) the grantee’s participation in a “risk management” plan, self insurance program or insurance pooling arrangement, or any combination of these, if consistent with the coverage required by this section.

The grantee shall maintain property insurance, if required below, throughout the term of this agreement. Any required errors and omissions liability insurance shall be maintained from the effective date through two calendar years after the completion date. The grantee shall maintain all other required insurance from the effective date through the completion date.

1. Minimum Scope of Insurance. Coverage shall be at least as broad as:

- a. Insurance Services Office (“ISO”) Commercial General Liability coverage, occurrence basis (Form CG 00 01) or comparable.
  - b. Automobile Liability coverage: ISO Form Number CA 0001, Code 1 (any auto).
  - c. Workers’ Compensation insurance as required by the Labor Code of the State of California.
2. Minimum Limits of Insurance. The grantee shall maintain coverage limits no less than:
- a. General Liability: *(Including operations, products and completed operations, as applicable)* \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to the activities under this agreement, or the general aggregate limit shall be twice the required occurrence limit.
  - b. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
3. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Executive Officer.
4. Required Provisions Concerning the Authority.
- a. Each insurance policy required by this section shall be endorsed to state that coverage shall not be canceled by either party, except after thirty days’ prior written notice by first class mail has been given to the Authority; or in the event of cancellation of coverage due to nonpayment, after ten days prior written notice to the Authority. The grantee shall notify the Authority within two days of receipt of notice that any required insurance policy will lapse or be cancelled. At least ten days before an insurance policy held by the grantee lapses or is cancelled, the grantee shall provide the Authority with evidence of renewal or replacement of the policy.
  - b. The grantee hereby grants to the Authority, its officers, agents, employees, and volunteers, a waiver of any right to subrogation which any insurer of the grantee may acquire against the Authority, its officers, agents, employees, and volunteers, by virtue of the payment of any loss under such insurance. Grantee agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation, but this provision applies regardless of whether or not the grantee has received a waiver of subrogation endorsement from the insurer.
  - c. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:



- (i) The Authority, its officers, agents, employees, and volunteers are to be covered as additional insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the grantee; and with respect to liability arising out of work or operations, including completed operations, performed by or on behalf of the grantee including materials, parts or equipment furnished in connection with the work or operations.
  - (ii) For any claims related to this agreement, the grantee's insurance coverage shall be primary insurance as respects the Authority, its officers, agents and employees, and not excess to any insurance or self-insurance of the Authority.
  - (iii) The limits of the additional insured coverage shall equal the limits of the named insured coverage regardless of whether the limits of the named insurance coverage exceed those limits required by this agreement.
5. **Acceptability of Insurers.** Insurance shall be placed with insurers admitted to transact business in the State of California and having a current Best's rating of "B+:VII" or better or, in the alternative, acceptable to the Authority and approved in writing by the Executive Officer.
6. **Verification of Coverage.** The grantee shall furnish the Authority with original certificates and amendatory endorsements, or copies of the applicable policy language, effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Executive Officer before work commences. The Authority may require, at any time, complete, certified copies of all required insurance policies, including endorsements affecting the coverage.
7. **Contractors.** The grantee shall include all contractors as insureds under its policies or shall require each contractor to provide and maintain coverage consistent with the requirements of this section. To the extent generally available, grantee shall also require each professional contractor to provide and maintain Errors and Omissions Liability insurance appropriate to the contractor's profession and in a reasonable amount in light of the nature of the project.
8. **Premiums and Assessments.** The Authority is not responsible for premiums and assessments on any insurance policy.

### **AUDITS/ACCOUNTING/RECORDS**

The grantee shall maintain financial accounts, documents, and records (collectively, "records") relating to this agreement, in accordance with the guidelines of "Generally Accepted Accounting Principles" ("GAAP") published by the American Institute of Certified Public Accountants. The records shall include, without limitation, evidence sufficient to reflect properly the amount, receipt, deposit, and disbursement of all funds related to the implementation of the project, and the use, management, operation and maintenance of the real property. Time and effort reports are also required. The grantee shall maintain adequate supporting records in a manner that

permits tracing from the request for disbursement forms to the accounting records and to the supporting documentation.

Additionally, the Authority or its agents may review, obtain, and copy all records relating to performance of the agreement. The grantee shall provide the Authority or its agents with any relevant information requested and shall permit the Authority or its agents access to the grantee's premises upon reasonable notice, during normal business hours, to interview employees and inspect and copy books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this agreement and any applicable laws and regulations.

The grantee shall retain the required records for a minimum of three years following the later of final disbursement by the Authority, and the final year to which the particular records pertain. The records shall be subject to examination and audit by the Authority and the Bureau of State Audits during the retention periods.

If the grantee retains any contractors to accomplish any of the work of this agreement, the grantee shall first enter into an agreement with each contractor requiring the contractor to meet the terms of this section and to make the terms applicable to all subcontractors.

The Authority may disallow all or part of the cost of any activity or action that it determines to be not in compliance with the requirements of this agreement.

### **COMPUTER SOFTWARE**

The grantee certifies that it has instituted and will employ systems and controls appropriate to ensure that, in the performance of this agreement, Authority funds will not be used for the acquisition, operation or maintenance of computer software in violation of copyright laws.

### **NONDISCRIMINATION**

During the performance of this agreement, the grantee and its contractors shall not deny the agreement's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. The grantee shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. The grantee and contractors shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, §11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code §§11135-11139.5), and the

regulations or standards adopted by the Authority to implement such article. The grantee shall permit access by representatives of the Department of Fair Employment and Housing and the Authority upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or the Authority shall require to ascertain compliance with this clause. The grantee and its contractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. (See Cal. Code Regs., tit. 2, §11105.)

The grantee shall include the nondiscrimination and compliance provisions of this clause in all contracts to perform work under this agreement.

### **PREVAILING WAGE**

Work done under this grant agreement may be subject to the prevailing wage and other related requirements of the California Labor Code, Division 2, Part 7, Chapter 1, sections 1720-1861. If required by law to do so, the grantee shall pay prevailing wage to all persons employed in the performance of any part of the project and otherwise comply with all associated requirements and obligations.

The grantee shall review applicable statutory provisions and the regulations adopted under the provisions and the information available on the Department of Industrial Relations website (<http://www.dir.ca.gov/Public-Works/PublicWorks.html>) to determine its responsibilities. For additional information, the grantee may also review the State Coastal Conservancy's publication, *Information on Current Status of Prevailing Wage Laws for State Coastal Conservancy Grantees (March 2015)*, available from the Authority on request.

### **INDEPENDENT CAPACITY**

The 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 the Authority.

### **ASSIGNMENT**

Without the written consent of the Executive Officer, the grantee may not assign this agreement in whole or in part.

### **TIMELINESS**

Time is of the essence in this agreement.

### **EXECUTIVE OFFICER'S DESIGNEE**

The Executive Officer shall designate an Authority project manager who shall have authority to act on behalf of the Executive Officer with respect to this agreement. The Executive Officer shall notify the grantee of the designation in writing.

### **AMENDMENT**

Except as expressly provided in this agreement, no changes in this agreement shall be valid unless made in writing and signed by the parties to the agreement. No oral understanding or agreement not incorporated in this agreement shall be binding on any of the parties.

### **LOCUS**

This agreement is deemed to be entered into in the County of Alameda.

### **SURVIVAL**

The obligations in the "INDEMNIFICATION AND HOLD HARMLESS" section, above, shall survive the termination of this agreement.

Exhibit 1

Exhibit 1: Project Location Map

Exhibit 2

SAN FRANCISCO BAY RESTORATION AUTHORITY


Staff Recommendation



## MEMORANDUM

November 4, 2022

**TO:** MEMBERS, PORT COMMISSION  
Hon. Willie Adams, President  
Hon. Kimberly Brandon, Vice President  
Hon. John Burton  
Hon. Gail Gilman  
Hon. Steven Lee

**FROM:** Elaine Forbes  
Executive Director 

**SUBJECT:** Request authorization to accept and expend \$796,100 in grant funds from the San Francisco Bay Restoration Authority for the Heron's Head Park Shoreline Resilience Project and approve the grant agreement, subject to Board of Supervisors' approval.

**DIRECTOR'S RECOMMENDATION:** Approve the Attached Resolution No. 22-56

### **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. To address these conditions, the Port designed, obtained regulatory permits, and secured grant funding for construction of a living shoreline and wetland habitat restoration project, known as the Heron's Head Park Shoreline Resilience Project (the "Project"), which is currently under construction.

Over the past two years, the Port Commission has authorized Port staff to accept and expend funds and approved related grant agreements for three grants supporting various elements of the Project: \$297,000 from the San Francisco Bay Authority ("SFBRA") to support wetland plant habitat enhancement, and \$1,667,000 from the Ocean Protection Council ("OPC") and \$1,493,000 from the California Department of

**THIS PRINT COVERS CALENDAR ITEM NO. 10F**

Fish & Wildlife (“CDFW”) to fund construction of the shoreline stabilization element of the Project.

Port staff now requests the Port Commission’s authorization to accept and expend a second grant for \$796,100 of Measure AA grant funds from the SFBRA for post-construction monitoring, and authorize the Port 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.*** Construction of the Project will be completed by 2023. Acceptance of the second grant from SFBRA will enable post-construction monitoring of the Project’s physical and ecological performance as required by regulatory and resource agency permits.

**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. Port staff and project partners, Literacy for Environmental Justice and the Estuary and Ocean Science Center participate in volunteer events and environmental education programs about Heron’s Head Park and the shoreline resilience project.

**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, 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 developed the Project that will:

1. Place coarse sand and gravel, stabilized by rock and cobble groynes<sup>1</sup>, 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 to enhance biodiversity and ecological function of the existing wetlands.
3. Create youth employment opportunities in habitat restoration.
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. All of the regulatory and resource agency approvals require post-construction monitoring.

### **Existing Funding**

**SFBRA Grant – Phase 1:** 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 approximately two years of wetland habitat restoration at Heron's Head Park. 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](#). The first grant agreement with SFBRA was executed in November 2020. The funded wetland plant habitat restoration work has been underway since then and will be completed by Summer 2023.

**OPC Grant:** Proposition 68, The "California Drought, Water, Parks, Climate, Coastal

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<sup>1</sup> 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.



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 erosion. 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](#). The grant agreement with OPC was executed in November 2021.

**CDFW Grant:** The “Water Quality, Supply, and Infrastructure Improvement Act of 2014” (Proposition 1) funds ecosystem restoration projects through CDFW. Through [Resolution 21-38](#), the Port Commission authorized acceptance of the grant and expenditure of grant funds in September 2021. The Board of Supervisors authorized the Port to accept and expend the CDFW grant in December, 2021 by [Resolution 551-21](#). The grant agreement with CDFW was executed in January 2022.

All OPC and CDFW grant funds will be used to construct the resilient shoreline at Heron’s Head Park, which is currently underway and expected to be substantially complete by the end of December 2022.

### **Proposed SFBRA Grant – Phase 2**

On October 14, 2022, the SFBRA Board of Directors voted unanimously to award \$796,100 to the Port to fund post-construction monitoring of project outcomes as specified by the Project’s [“Monitoring and Adaptive Management Plan”](#).

The SFBRA requires the receiving entity (“grantee”) to make certain findings, which are included in the proposed Resolution, and execute its standard grant agreement which includes the following key terms:

- The grantee must maintain the improvements for the duration of the grant term or reasonable life of the improvements.
- The grantee must indemnify and hold harmless the SFBRA from liability in any way connected with the project. The requirement to 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 the indemnification provision of the SFBRA standard grant agreement.
- The grantee must procure and maintain specified insurance and require the same of its contractors executing the grant-funded work.
- The grantee must acknowledge SFBRA and Measure AA funding in written, verbal, and digital communications about the project

### **Recommendation**

Port staff requests that the Port Commission approve the attached resolution

authorizing staff to accept and expend \$796,100 in grant funds from the SFBRA, 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 SFBRA to fund post-construction monitoring of the Heron's Head Park Shoreline Resilience Project.

Prepared by: Carol Bach  
Environmental Affairs Manager

For: David Beaupre  
Deputy Director, Planning &  
Environment Division

**PORT COMMISSION  
CITY AND COUNTY OF SAN FRANCISCO  
RESOLUTION NO. 22-56**

WHEREAS, Charter Section B3.581 empowers the Port Commission with the authority and duty to use, conduct, operate, maintain, manage, regulate and control the lands within Port jurisdiction; and

WHEREAS the San Francisco Bay Restoration Authority Act, Government Code §§ 66700-66706, establishes the San Francisco Bay Restoration Authority (“Authority”) as a regional entity 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, and authorizes the Authority to award grants to public and private entities to achieve these purposes; and

WHEREAS the Authority awards grants for eligible projects consistent with Government Code § 66704.5, the Authority’s Grant Program Guidelines, first adopted in May 2017, and the Authority’s San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure (“Measure AA”), passed by the voters in June 2016; and

WHEREAS on November 18, 2018, the Port submitted an application for grant funds to the Authority to construct a living shoreline and restore tidal wetland habitat at Heron’s Head Park, and

WHEREAS at its October 14, 2022 meeting, the Authority adopted a resolution authorizing a grant to the Port in the amount of \$796,100 for the Heron’s Head Park Shoreline Resilience project - Phase 2; the Authority’s resolution was adopted by the Authority pursuant to, and is included in, the Authority’s October 14, 2022 staff recommendation, a copy of which is on file with the grantee and with the Authority; and

WHEREAS the Authority requires execution of its standard grant term and conditions as further described in the staff report accompanying this Resolution (“Grant Agreement”); and

WHEREAS Port acknowledges that it has or will have sufficient funds to complete the grant-funded project and to operate and maintain, for the 10-year grant period set forth in the Grant Agreement, any property acquired, or improvements constructed as a part of the grant-funded project; and

WHEREAS under the City Administrative Code Section 10.107-1, the Port must obtain Board of Supervisors’ approval to accept and expend grant funds of \$100,000 or more; and

WHEREAS the shoreline resilience project and related monitoring are categorically exempt from the California Environmental Quality Act; now therefore be it

RESOLVED that the Port Commission authorizes its Executive Director to seek Board of Supervisors' approval and urges the Board of Supervisors to approve the request to accept and expend the grant from the Authority; and be it further

RESOLVED that, upon Board of Supervisors' approval of the grant, 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; and be it further

RESOLVED that, upon Board of Supervisors' approval of the grant, the Port Commission hereby authorizes the Executive Director or her designee to implement the grant-funded project as further described in the staff report accompanying this Resolution.

***I hereby certify that the foregoing resolution was adopted by the San Francisco Port Commission at its meeting of November 8, 2022.***

DocuSigned by:

*Carl Meita*

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Secretary

**THIS PRINT COVERS CALENDAR ITEM NO. 10G**

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



**Port of San Francisco – Heron’s Head Park Shoreline Resilience Project**

**CONTACT INFORMATION**

<b>Organization</b>	Port of San Francisco		
<b>Contact Persons (Primary/Alternate)</b>	Carol Bach, Environmental Affairs Manager Diane Oshima, Planning & Environment Director	<b>Email</b>	<a href="mailto:Carol.bach@sfport.com">Carol.bach@sfport.com</a> <a href="mailto:Diane.Oshima@sfport.com">Diane.Oshima@sfport.com</a>
<b>Phone</b>	direct: <b>415.274.0568</b> (main: 415.274.0400)	<b>Fax</b>	<b>415.274.0453</b>
<b>Address</b>	Port of San Francisco, Pier 1-The Embarcadero, San Francisco, CA 94111		
<b>Partner Entities</b>	Literacy for Environmental Justice (LEJ), San Francisco State University - Estuary & Ocean Science Center (EOS Center)		

**PROJECT INFORMATION**

<b>Project Name</b>	Heron’s Head Park Shoreline Resilience		
<b>Summary</b>	The Port proposes to plan, permit, and construct a living shoreline at Heron’s Head Park to control erosion, protect wetland habitat and upland public access, improve ecological function and biodiversity, and enable adaptation to sea level rise. The project will include planting, monitoring and stewardship.		
<b>Total Project Cost</b> (rounded to nearest \$100)	<b>\$4,254,200</b>	<b>Amount Requested</b>	<b>\$3,456,600</b>
<b>Other Funding Sources</b> (Amount, rounded to nearest \$100)	<b>\$797,600</b>	<b>Other Funding Sources</b>	Port of San Francisco Capital Budget & Partner donation
<b>Start Date</b>	<b>September 2019</b>	<b>End Date</b>	<b>December 2023</b>
<b>Project Type</b>	<input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Flood/Habitat <input checked="" type="checkbox"/> Public Access/Habitat		
<b>Project Phase</b> (check all that apply)	<input type="checkbox"/> Acquisition <input checked="" type="checkbox"/> Planning <input type="checkbox"/> Operations <input type="checkbox"/> Other: _____ <input checked="" type="checkbox"/> Permitting <input checked="" type="checkbox"/> Maintenance <input type="checkbox"/> Design <input checked="" type="checkbox"/> Monitoring <input checked="" type="checkbox"/> Construction/Implementation		
<b>CEQA</b>	What are the CEQA requirements for your project? <input type="checkbox"/> Not a project under CEQA <input checked="" type="checkbox"/> Exempt from CEQA (statutorily or categorically) <input type="checkbox"/> ND <input type="checkbox"/> MND <input type="checkbox"/> EIR If required, has the CEQA document been approved and filed?		

	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, date filed; If no, expected filing month/year: <b>Cat Ex Application submitted 11/9/18</b>				
<b>Acres</b> (habitat acreage to be restored, or land to be acquired)	<b>2.65</b>	<b>Trail length</b> (miles)	<b>NA</b>	<b>APNs</b> (Acquisition Only)	<b>NA</b>
<b>Shoreline length (miles)</b>				<b>1,600 ft.</b>	

### LOCATION INFORMATION

<b>SFBRA REGION</b>	<input type="checkbox"/> North (Sonoma, Marin, Napa, Solano)		<input type="checkbox"/> East (Alameda, Contra Costa)		
	<input checked="" type="checkbox"/> West (San Francisco, San Mateo)		<input type="checkbox"/> South (Santa Clara)		
<b>County</b>	San Francisco	<b>Specific Location</b>	Heron's' Head Park, Foot of Cargo Way at Jennings St.		
<b>Latitude</b> Format: 33.3333	37.7373	<b>Longitude</b> Format:-111.1111	122.3725		
<b>What point is represented by the lat/longs (eg., parking lot, center of site, etc):</b>	Center of the Site				

### ELECTED OFFICIALS

Districts	Number(s)	Name(s)
State Senate	11	Scott Wiener
State Assembly	17	David Chiu
Congressional	12	Representative Nancy Pelosi Senator Diane Feinstein Senator Kamala Harris

## **I. GRANT APPLICATION – PROJECT DESCRIPTION**

### **I.1. Project Eligibility.**

The Port of San Francisco (Port), an enterprise agency of the City and County of San Francisco, owns 7.5 miles of the San Francisco Bay shoreline from Aquatic Park to India Basin. The Port is charged with managing the waterfront consistent with the public trust, including providing public access, recreation, protection of natural resources, and economic opportunity for the city, the region, and the state.

### **I.2. Need for the Project.**

The Port's Heron's Head Park provides recreation, education and volunteer opportunities, and habitat for native plants and wildlife, including two endangered species: Ridgeway's rail and California seablite. Although small, Heron's Head Park provides valuable habitat in an otherwise urban environment. Due to its size and location, it is uniquely well-suited to offer public access to natural shoreline habitat that many 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 engagement with the type of shoreline that once encircled San Francisco Bay that it provides.

In the 20 years since the wetlands and park were created, the shoreline at Heron's Head Park has experienced subsidence of the fill soils, erosion from wind-waves and tidal flows, and a low supply of 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. Current rates of erosion in combination with sea level rise are encroaching on tidal wetlands, and may eventually threaten the segment of Bay Trail located in the upland portion of the park. 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 Port proposes to construct a living shoreline that will enhance and preserve the physical, biological, and community benefit functions at Heron's Head Park.

### **I.3. Goals and Objectives.**

The proposed Heron's Head Park Shoreline Resilience Project ("Project") is designed to achieve the following objectives:

1. Stabilize the southern shoreline and protect it from continued erosion and subsidence.
2. Enhance biodiversity and ecological function.
3. Create a resilient shoreline that can adapt to a moderate amount of sea level rise through 2050.

The Project will restore the originally designed areal extent and type of habitat. It will provide new habitat in the form of sand/gravel beach, new and revegetated areas within the wetlands to reinforce shoreline and pond edges, and constructed oyster reefs. The sand/gravel shoreline will be dynamic, enabling 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, and provide employment opportunities for local residents as well as opportunities for volunteers and visitors from throughout the San Francisco Bay Area to connect with this unique wetland.



#### **I.4. Applicant and Project History.**

The 21 acres of land that comprise Heron's Head Park originated as bay fill placed in the 1970s. The originally authorized construction was never completed. In 1998, the Port constructed Heron's Head Park to create wetland habitat and public access amenities. The Port has extensive experience delivering capital improvement projects, including many shoreline stabilization projects. The Port has demonstrated its commitment to enhancing bay and shoreline habitat, and supports wetland restoration through ongoing stewardship at Heron's Head Park and Pier 94 Wetlands. The Port currently partners with non-profit organizations and other city agencies to provide environmental education programs at Heron's Head Park. It also offers workforce development opportunities in maintaining Port land and facilities. With expertise in coastal engineering and construction, and its history of engaging the public in its shoreline parks and open spaces, the Port is very well-poised to successfully complete the proposed Project.

The Port proposes to partner with the following organizations to deliver the Project:

**Port of San Francisco Youth Employment Program (YEP).** Every four years the Port solicits proposals from and contracts with one or more local organizations that provide youth employment program services to economically disadvantaged and at-risk San Francisco youth ages 16 through 24. Under contract to the Port, these organizations offer employment, job readiness training, and maintenance skills to San Francisco youth. The San Francisco Conservation Corps (SFCC) and Hunters Point Family, a community-based organization that serves at-risk youth and young adults living in Bayview Hunters Point, were awarded contracts in April of 2015. The Port's current contract expires in May 2019.

The Port's selection of YEP partners is subject to City of San Francisco contracting procedures, including awarding contracts through a competitive, transparent process. The Port will be initiating its next YEP contracting process in Spring 2019 and will include the planting and habitat stewardship work proposed for the Project in the scope of work to be performed by YEP workers. For the proposed Project, the Port will hire YEP crews, typically five youth with one supervisor per crew, to plant and maintain plantings.

**Literacy for Environmental Justice (LEJ).** LEJ is an environmental education and youth empowerment organization created specifically to address the ecological and health concerns of Bayview Hunters Point and the surrounding communities of southeast San Francisco. Its mission is to connect people to urban open spaces to restore ecology, improve environmental health, and strengthen communities. LEJ operates a native plant nursery located in Hunters Point that specializes in growing locally-adapted native species for shoreline and coastal upland habitats. For the proposed Project, the Port proposes to purchase the wetland and transition zone plants, many of which will be grown from locally-collected seeds and including California sea-blite (*Suaeda californica*), from LEJ. The Port will also hire staff from LEJ's "Eco-Apprentice Program", which serves transitional-age youth (18-26) from Bayview Hunters Point, to train and work alongside the YEP members to plant and maintenance plantings.

**San Francisco State University Estuary & Ocean Science Center (EOS Center).** The EOS Center is located at the Romberg Tiburon campus of San Francisco State University. Faculty from the EOS Center and affiliated scientists have served on a technical advisory committee guiding the planning and design of the Project to date. With funding to implement the Project, the technical advisory team will be retained to continue providing expert guidance during construction, monitoring, and future adaptive management measures.

### I.5. Project Description.

The Project consists of planning, design, permitting, and construction of a living shoreline at Heron’s Head Park. It includes post-construction monitoring of physical outcomes and key habitat indicators for at least five years after construction. The Port’s proposal includes funding to support five years of active habitat stewardship: planting during initial construction followed by ongoing seasonal planting and removal of invasive species. After planting the newly constructed shoreline and reinforcing existing pond sills with vegetation, ongoing stewardship will focus on removing and replacing invasive Algerian sea lavender (*Limonium ramossissium*) in severely impacted areas along the high marsh/transition zone.

### I.6. Site Description.

Heron’s Head Park, is an approximately 21-acre peninsula, comprised of seven acres of jurisdictional wetlands and tidal ponds, and 14 acres of public open space. The site is owned and managed by the Port of San Francisco, and located at the southern end of the Port’s jurisdiction in the Bayview Hunters Point neighborhood. The Port’s 1998 wetland creation/enhancement project at the site was designed to provide a variety of habitat types, including high intertidal transition zone, tidal salt marsh, refugial islands, and tidal ponds. Park improvements in the adjacent uplands include a 1/3-mile trail (a spur off the San Francisco Bay Trail), native plant landscaping, picnic areas, a fishing pier, bird blinds, and an environmental education center, The EcoCenter at Heron’s Head Park.

### I.7. Specific Tasks.

#	Task Name	Description
1a	Planning	This task includes conceptual planning, site-specific studies (jurisdictional wetland delineation, biological assessment, topographic and bathymetric surveys) and alternatives analysis to determine preferred approach to shoreline stabilization. The Port initiated planning in October 2017 and completed the Alternatives Analysis, with recommendation of the proposed living shoreline approach, in September 2018.
1b	Engineering Design	The proposed project requires engineering from conceptual plan through construction documents. This task is underway, funded by Port Capital, and is currently at 30% engineering design. Construction documents are expected to be complete by May 2019.
1c	Permitting	Concurrent with engineering design, the Port will complete CEQA review and obtain permits to construct from the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and Bay Conservation and Development Commission.
2	Shoreline Construction	Shoreline construction will include placement of the sand/gravel beach material, rock headlands and oyster reef elements. Depending on access route to the shoreline, construction may also include reinforcement of the existing trail to support construction equipment. The Project will include post-construction restoration of the trail and any habitat areas, public access facilities, or other site features impacted by construction.
3	Construction Management	A Port or City of San Francisco Construction Manager will oversee construction to ensure compliance with all engineering plans and specifications, permit requirements, administrative contract requirements and schedule. The Port’s standard contracting practices require funding for construction management at

		15% of the construction cost. The Port will also retain the existing design engineering team and technical advisory committee for pre-construction surveys, environmental monitoring, and other technical consultation during construction.
4	Revegetation	The Port will contract with LEJ (see Section 1.4 re. partners) to cultivate and install wetland and high marsh/transition zone plants on the shoreline and wetland areas most impacted by invasive species. To allow for cultivation of plants, installation at optimal season, and on-going monitoring and maintenance of plantings, revegetation will occur in phases over several years.
5	Monitoring	The Port anticipates that permits to construct the shoreline improvements will require monitoring key habitat indicators for at least 5 years after construction. Monitoring may include topographic surveys, quantitative habitat assessments (such as mapping vegetation extents, bird occupancy/usage surveys and oyster surveys), qualitative habitat assessments, and photo documentation.
6	Stewardship	The Port will contract with LEJ and another youth/workforce development organization (see Section 1.4 re. partners) to maintain plantings, including removing invasives and installing supplemental and replacement plants as needed, for a period of four years after initial installation
7	Contingency	A contingency is required to manage uncertainty about the impact of difficult access to the shoreline, special equipment that may be required, seasonal and tidal restrictions for environmental protection, other unanticipated conditions, and the bidding climate for construction work in San Francisco on project cost.

### **I.8. Work Products.**

The primary work product will be the newly reinforced shoreline, which will immediately mitigate erosion and habitat loss. Other work products include post-construction as-built drawings, monitoring reports, and a final “lessons learned” report on Project design, construction, monitoring, and 5-year outcomes.

### **I.9. Measuring Success.**

The Port will monitor the performance of the constructed beach and headlands, the dynamics of beach nourishment, the recovery of vegetation and other habitat features (e.g. tidal ponds) in areas formerly impacted by erosion, the ecological function of the oyster reef elements, and other parameters as specified by resource and regulatory agency permits, which typically require at least five years of monitoring. The success criteria and specific monitoring protocols will be specified by and/or developed in consultation with the agencies and the Project’s technical advisors. To evaluate performance of the Project with respect to its primary objects, the Port anticipates that success criteria will include, but will not be limited to, reduced erosion and loss of wetland area landward of the new shoreline, increased presence of the endangered California seablite, and colonization of the oyster reef elements by native oysters as part of a diverse assemblage of invertebrate species.

### **I.10. Barriers and Risks.**

The Project faces construction challenges related to the sensitive environment and difficult access to the shoreline, both of which pose a potential to impact project cost and duration. Seasonal restrictions to protect aquatic species and nesting birds will limit the construction period to fall and winter, when wet

weather may prolong the construction period. Working with the design team that has extensive experience in wetland restoration and living shoreline creation, the Port is developing construction plans and specifications that will manage that risk by incorporating appropriate environmental protections while also allowing land and/or water access. This will enable contractors bidding on the construction to bring their experience and expertise to develop the most efficient construction approach.

Sea level rise poses a potential risk to the long term success of the Project. However, the proposed shoreline elevations and vegetation are designed to balance reinforcement of the shoreline to accommodate sea level rise and provide long term protection for habitat against the risk of over-building for current conditions and potentially impacting existing habitat.

Oyster drills, predatory marine snails that feed primarily on oysters and other bivalves, pose a risk to the success of the proposed oyster reef elements as habitat for native oysters. This risk will be addressed by conducting pre-construction assessment of oyster recruitment and presence of oyster drills, and developing materials specifications to minimize the risk of introducing oyster drills to the area.

**I.11. Environmental Review.** The proposed Project (select the appropriate answer(s)):

- Is exempt under CEQA. Environmental Evaluation Application for **Categorical Exemption Class 33 – Small Habitat Restoration** was submitted 11/9/18 and is currently under review by City Planning .
- Requires a Neg Dec, MND, or EIR. Specify which: \_\_\_\_\_
- Also please specify the CEQA lead agency (the agency preparing the document) and the (expected) date for adoption or certification: **Lead agency: City & County of San Francisco Planning Department** (City Planning).

Please note that the Authority will need to review and consider the adopted or certified CEQA document prior to authorizing a grant.

**I.12. Public Access.**

The project site includes an approximately 1/3-mile spur of the San Francisco Bay Trail. The Project is designed to mitigate the impact of sea level rise on public access areas of the park, including protection of the Bay Trail, through approximately 2050 (based on moderate sea level rise estimates).

**I.13. Community Support, Involvement and Benefits.**

Since Heron’s Head Park opened to the public after the wetlands restoration and park construction in 1998, it has become a well-loved resource for visitors from the surrounding community and throughout the Bay Area. Port partners, including the San Francisco Recreation & Parks Department (SF-RPD), LEJ, and the non-profit bay.org, have provided environmental education and volunteer programs in the park since inception (see [Section III.6 – Engage Youth and Young Adults](#)). Other organizations, such as Golden Gate Audubon and the Bayview YMCA, and schools, including the Wilderness Arts and Literacy Collaborative (an alternative high school), and City College of San Francisco, to name a few, lead their own education programs and excursions in Heron’s Head Park. Countless other groups and individuals enjoy walking and wildlife viewing at Heron’s Head Park.

In developing plans for the proposed Project, the Port has sought input from its Southern Waterfront Citizens’ Advisory Committee, Golden Gate Audubon’s Conservation Committee, and the EcoCenter

Advisory Committee. The Port has found enthusiastic support for the Project, some of which is evidenced in the letters of support accompanying this grant application.

The public benefits of the proposed Project are substantive and tangible to the surrounding community. The Port's community partners in this grant application are described in Section I.4 – Applicant and Project History. Through the Port's YEP contract and its partnership with LEJ, the Port will hire local residents to participate in construction, native plant cultivation and installation, and ongoing habitat stewardship. The Project will protect the wetland habitat and Bay Trail that draw many to Heron's Head Park, and enable the Port and its partners to continue environmental education and volunteer programs that encourage participants of all ages to get their hands dirty to restore coastal habitat.

#### **I.14. Permitting and Mitigation.**

The following permits will be required:

- US Army Corps of Engineers 404 Permit.
- Regional Water Quality Control Board 401 Certification.
- Bay Conservation and Development Commission (BCDC) permit (type to be determined).
- CEQA Review - currently underway.

The Port and its consultant team have extensive experience with resource and regulatory agency permitting, which will help manage permitting challenges. The Project team has presented the Project at an interagency meeting attended by Army Corps, Water Board, and BCDC staff in July 2018. Attendees expressed support for the Project based on the conceptual plan level of information that was available at the time. It was acknowledged in the discussion that although the Project does involve placement of fill, it would convert existing low-value rubble-covered shoreline to more ecologically valuable gravel beach, restore intertidal elevations to those approved by permits for the initial wetland creation, and ultimately result in the preservation of existing tidal wetlands that would otherwise be lost to erosion. The Port will continue to engage resource and regulatory agency staff to facilitate permitting and ensure that the Project incorporates agency input.

#### **I.15. Acquisitions.**

The project site is owned and managed by the Port; no acquisition is required.

## II. GRANT APPLICATION – PRELIMINARY BUDGET AND SCHEDULE

**In Kind Services:** A Port tenant, Lehigh Hanson/ Hanson Aggregates is donating 12,000 cubic yards of mixed sand, gravel and shell material from its sand washing and sorting operation at Pier 92 to the Project, including transporting to and stockpiling material on adjacent Port property. The estimated commercial value of this material is \$80,000. It is expected to take approximately six months to accumulate the required quantity. All project management, including engineering review, budget and contract administration, financial reporting, and coordinating work by Project partners, will be performed by Port staff without cost to the Project. The exception is construction management, which will be performed by San Francisco Port or Department of Public Works staff, or qualified consultant.

**Contingency Costs:** A design contingency of 35% to account for variance from the current 30% engineering design to 100% design is included in the construction cost presented for Task 2 in the preliminary budget. Additionally, a 30% construction contingency is presented in Task 7 to allow for potential impact of difficult access, special equipment that may be required, seasonal and tidal restrictions on construction for environmental protection, other unanticipated conditions, Project Labor Agreements, and the bidding climate for construction work in San Francisco. See Section I.10 – Barriers and Risks.

**Other Funds:** The Port has allocated funds from its capital budget to the Project, including \$320,000 that is encumbered to a contract for planning, engineering design, and permitting. The proposed budget identifies \$717,565 of Port capital funds allocated to tasks to match SFBRA grant funds.

**Operation and Maintenance:** The shoreline stabilization components (sand/gravel beach, additional beach nourishment material, rock headlands) are designed to withstand hydrodynamic conditions and also adapt, pushed by waves and tides to higher elevation with sea level rise. Significant need for physical maintenance of the shoreline is not anticipated. The Port’s grant application includes funding for maintenance of vegetated areas (pond sills and inland side of beach berm) and high marsh areas impacted by invasive species. With intensive management during the first four to five years after construction, ongoing management by Port staff, YEP workers, and volunteers can be more feasibly accomplished within the Port’s existing budget for maintenance of its parks and open spaces.

**Uncertainties:** The key uncertainties that may significantly affect the cost or success of the Project, and the Project’s approach to managing uncertainty are discussed in Contingency Costs (above) and Section I.10 – Barriers and Risks. Permitting requirements and timing pose a potential uncertainty as discussed in Section I.14 – Permitting. Ability to procure the oyster reef elements is uncertain. The Port is in contact with staff at the Coastal Conservancy and Presidio Trust, as well as restaurants and volunteers interested in or currently working on small-scale oyster shell recycling to learn from their experience with obtaining materials and fabricating the oyster reef elements. While this uncertainty poses a challenge, it also offers significant opportunity for community participation. Finally, the feasibility of controlling the population of invasive Algerian sea lavender at the Project site is somewhat uncertain. This infestation has been identified as a threat to the extent and diversity of native wetland and transition zone plants at Heron’s Head Park, and a potential source of invasion of neighboring shorelines. The Port is working closely with the California Invasive Plant Council to coordinate efforts at Heron’s Head Park with their regional effort to manage Algerian Sea Lavender. Funding to support the habitat stewardship portion of the Project, removing invasives by hand and replanting the disturbed area with appropriate natives, will significantly improve the likelihood of success.

### **III. GRANT APPLICATION - PRIORITIZATION CRITERIA**

#### **III.1. Greatest positive impact.**

This Project will have immediate positive impact by creating a stable shoreline that will prevent ongoing loss of wetland area and protect a small but important habitat from erosion and flooding. The Project will protect habitat utilized by over 100 resident and migratory bird species, and beach habitat that supports the endangered California seablite. It will create new beach and reef habitat to be colonized by invertebrates, and enhance the existing mosaic of tidal wetland, tidal pond, and transition zone habitat.

The greatest positive impact may stem from the Project's location in a highly-urbanized area, where direct access to the bay is limited and armored shorelines predominate. Heron's Head Park offers visitors and residents in an increasingly densely-built community an opportunity to forge a personal connection with the wetland and shoreline habitats there. The shoreline and habitat improvements proposed for funding by the SFBRA will protect this unique asset and involve community members in hands-on restoration and stewardship to foster that personal connection.

#### **III.2. Greatest long-term impact.**

The Project will protect habitat and public access from flooding due to sea level rise for decades. The lessons learned about living shoreline design, construction, and performance over time will inform the developing science and practice of living shoreline implementation. The employees, visitors, and volunteers who participate in this project will be the conservation voters and advocates of the future.

#### **III.3. Leveraging resources and partnerships.**

The Port and its partners are contributing approximately 19% of the project cost in cash and construction materials. This does not consider the funds invested to date or staff time that has been and will continue to be dedicated to the Project. Port funds and partner contributions are secured, not relying on anticipated revenue or otherwise uncertain. However, without SFBRA funding, the Port will not be able to implement the most critical component of the project, shoreline stabilization, in a timely manner, which would subject the site to additional habitat loss.

#### **III.4. Economically disadvantaged communities.**

Heron's Head Park is located adjacent to the Bayview Hunters Point neighborhoods in the southeastern corner of the city. These majority-minority neighborhoods have been historically disenfranchised and have experienced under-investment. Block group level data indicates that the neighborhood surrounding Heron's Head Park is an Economically Disadvantaged Community, with average income less than 80% of Area Median Income. The area is identified by the Urban Displacement project as "At Risk of Gentrification and/or Displacement."

CalEnviroScreen mapping (which ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors and prevalence of certain health conditions) identifies the census tracts adjacent to the park at 90-95% for tract 6075023103 and 85-90% for tract 6075023200. These very high percentiles indicate that this community is at the highest level of vulnerability due to environmental and socioeconomic factors and thus bears a disproportionate environmental and health burden.

### **III.5. Benefits to economy.**

As part of its capital planning process, the Port estimates economic benefit that results from its implementation of capital improvement projects in accordance with accepted public finance practice. This calculation method estimates that the over \$1.9 million spent on the shoreline and oyster reef construction components of the Project (Task 2) would create approximately 16 jobs. Such direct result would be difficult to document because the calculation considers collateral economic activity as well as jobs working directly on the Project. Additionally, the Project is of short duration and some of the cost is related to difficult logistics and need for specialized marine construction equipment and methods rather than labor. However the Project is likely to generate significant short-term demand for trucking, which is a great opportunity for small and local business participation and includes contractors who do not have expensive construction equipment. The local workforce development opportunities are discussed in [Section 1.4 – Applicant and Project History](#); overall community benefit is discussed in [Section I.13. Community Support, Involvement and Benefits](#).

### **III.6. Engage youth and young adults.**

Port partners in this grant application, LEJ and the non-profit organizations that work with the Port through its Youth Employment Program contracts, are dedicated to the development of and comprised primarily of youth and young adults from the Bayview Hunters Point community. Those partner organizations are described in [Section I.4 – Applicant and Project History](#). Through these partnerships, local youth and young adults will work directly on Project implementation.

Additionally, the Port partners with SF-RPD to provide free K-12 environmental education programs at Heron’s Head Park and employ the “Greenagers”, using Heron’s Head Park as their home base. The K-12 programs bring hundreds of school-age children to Heron’s Head Park each year. The Greenagers program is a youth leadership development program for teenagers who live or go to school in southeast San Francisco and are interested in environmental and community service. The program’s mission is to engage youth in improving the City’s green spaces through stewardship, creating place-based projects, and connecting youth to the great outdoors. The Greenagers and their followers collectively provide thousands of hours of volunteer stewardship at Heron’s Head Park each year. All of these paths to youth engagement will benefit from preservation of the natural area that make Heron’s Head Park the unique resource that it is.

### **III.7. Monitoring, maintenance, and stewardship.**

The Project would include pre-construction surveys to gauge suitability for oyster recruitment, presence of oyster drills, and distribution of existing vegetation. This assessment will inform the implementation of the oyster reef, wetland and transition zone planting, and subsequent habitat stewardship (primarily removal of invasive species, planting natives in areas disturbed by removal, and replacement of plantings that do not thrive). Monitoring beach dynamics, survival and growth of installed vegetation, wildlife usage, and ecological function of the oyster reefs over a period of years will contribute to the growing body of knowledge about natural and ecologically valuable solutions to improve shoreline resilience. If monitoring beyond the 5-year duration presented in this proposal is warranted to maximize the value of the monitoring effort, the Port will fund and manage additional monitoring.



### **III.8. Coastal Conservancy's San Francisco Bay Area Conservancy Program.**

The project is consistent with the San Francisco Bay Area Conservancy Program criteria because it:

- (1) is supported by adopted regional plans (*Baylands Ecosystem Habitat Goals Report (1999)* pp. 98, 118-119, *Baylands Goals Update (2016)* pp. 173-177, *USFWS Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (2013)*; *Comprehensive Conservation and Management Plan (2016)*, and the *San Francisco Basin (Region 2) Water Quality Control Plan (May 2017)* pp. 2-2 and 4-90; *San Francisco Bay Plan*, and the Joint Venture's Implementation Strategy (see below));
- (2) serves a regional constituency (will benefit regional populations of fish, wildlife, and shellfish),
- (3) can be implemented in a timely way (with construction beginning in 2019),
- (4) provides opportunities for benefits that could be lost if the project is not quickly implemented (benefits, particularly regarding protection against wetland erosion, invasive plants, and sea level rise, could be lost); and
- (5) includes matching funds from other sources of funding (from the Port and private in-kind contributions from Hanson Aggregate).

### **III.9. San Francisco Bay Conservation and Development Commission's Coastal Management Program.**

The project is consistent with the San Francisco Bay Conservation and Development Commission's (BCDC's) Coastal Management Program priorities for wildlife habitat, water-related recreation, and climate change resilience. Port staff met with BCDC staff on July 12, 2018 to discuss the proposed project activities and benefits of the proposed bay fill (for beach creation and wetland erosion protection). The project will apply for a BCDC permit, and an approved permit would be in place prior to Project construction.

### **III.10. San Francisco Bay Joint Venture's Implementation Strategy.**

The Heron's Head Park Shoreline Resilience Project is designated as a Tier 1 priority project in the Joint Venture's priority projects list (August 2018), indicating that it advances the Joint Venture's goals for protecting and enhancing wetland habitat for key species, has a strong biological foundation, and is being implemented by an entity or partnership that has the resources and expertise to ensure the project will be completed in a timely way with the best long-term habitat value.

## GRANT APPLICATION CHECKLIST

A complete application will consist of the following files:

- Cover Letter (optional) – no more than one page.
- Grant application form (in Microsoft word or rtf format), includes:
  - cover page (2 pages)
  - project description (6 pages)
  - preliminary budget and schedule (1 page)
  - prioritization criteria (3 pages)
- Project maps and design plans (in one pdf file, 10 MB maximum size)
- Project photos (in jpg format)

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

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

**I have reviewed the Grant Agreement Provisions listed in the Grant Guidelines (Page 9) and understand the likely requirements for receiving and administering Measure AA Funds.**

Applications should be emailed to: [grants@sfbayrestore.org](mailto:grants@sfbayrestore.org). If you are unable to email your application, you may send the electronic files on a CD or other common electronic storage device. Mail the files to:

State Coastal Conservancy      1515 Clay Street, 10<sup>th</sup> Floor      Oakland, CA 94612

**Grant applications must be received by the San Francisco Bay Restoration Authority by 5pm PST on November 26, 2018.**

**II. GRANT APPLICATION - PRELIMINARY BUDGET AND SCHEDULE**

Task Number	Task	2017-2018 Year 0 <sup>1</sup>	2019 Year 1	2020 Year 2	2021 Year 3	2022 Year 4	2023 Year 5	2024 Year 6 <sup>10</sup>	Applicant's Funding	San Francisco Bay Restoration Authority	Other Funds <sup>4</sup>	Total Cost
1	Planning, design, permitting	\$160,000	\$160,000						\$160,000			\$160,000
2	Shoreline construction <sup>2</sup>		\$1,863,776							\$1,863,776	\$80,000	\$1,943,776
2a	Oyster reef elements <sup>3</sup>		\$80,000							\$80,000		\$80,000
3	Construction management & contract admin. <sup>5</sup>		\$316,065						\$316,065			\$316,065
4	Native plant cultivation, purchasing & planting <sup>6</sup>		\$166,650	\$115,100	\$115,100	\$115,100	\$115,100			\$627,050		\$627,050
5	Monitoring and reporting <sup>7</sup>		\$40,000	\$61,500	\$61,500	\$61,500	\$61,500	\$61,500	\$61,500	\$286,000		\$347,500
6	Habitat stewardship <sup>8</sup>			\$45,000	\$45,000	\$45,000	\$45,000		\$180,000			\$180,000
7	Contingency <sup>9</sup>		\$599,798							\$599,798		\$599,798
<b>TOTAL</b>			<b>\$3,226,290</b>	<b>\$221,600</b>	<b>\$221,600</b>	<b>\$221,600</b>	<b>\$221,600</b>		<b>\$717,565</b>	<b>\$3,456,624</b>	<b>\$80,000</b>	<b>\$4,254,190</b>

**Notes:**

1. Port funds spent prior to SFBRA grant award (Fall 2017 through December 2019) are not included in Total Project Cost, presented for information only.
2. Includes mobilization, transportation and placement of beach, headland, and oyster reef materials, and post-construction restoration of access route and impacted vegetation.
3. Assumes 100 oyster reef elements purchased or manufactured for \$800 ea., based on recent Coastal Conservancy projects with similar elements. Cost to install is in shoreline construction.
4. Engineer's estimate of cash value of coarse sand/gravel material for beach material, donated by Hanson Aggregate.
5. City of San Francisco-specified rate = 15% of construction cost + oversight during construction by design engineers and Estuary & Ocean Science Center
6. Seed collection, cultivation, transportation, planting, crew supervision, and project management by Literacy for Environmental Justice, with a total of 26,000 plants installed over 5 years.
7. Includes 4 of anticipated 5 years of post-construction monitoring, pre-construction biological survey, and environmental monitoring during construction.
8. 6 weeks/year of Port Youth Employment Program crews to work with LEJ habitat restoration apprentice program to maintain plantings. Based on 2018 cost + escalation.
9. Assumes a 30% contingency on construction and 10% contingency on revegetation. Monitoring will enable adaptive revegetation management that may impact cost over time.
10. Outside of the 5-year grant period and funded by Port, "Year 6" allows time for 5th year of post-construction monitoring and final report.

Rate Escalation per Year 5%  
Rate Escalation Factor 1.00 1.05 1.10 1.16 1.22 1.28 1.34 1.41 1.48 1.55 1.63

Task #	Task	Task Budget/Year (Year 0 Dollars)	Year 0	Year 1	Year 2	Year 4	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total All Years
1A	Physical Conditions and Processes: Visual Qualitative Assessment and Photo Documentation	\$ 5,600	\$ 5,600	\$ 5,880	\$ 6,170	\$ 6,480	\$ 6,810	\$ 7,150	\$ 7,500	\$ 7,880	\$ 8,270	\$ 8,690	\$ 9,120	\$ 79,550
1B	Physical Conditions and Processes: Drone-based Survey	\$ 10,000	(by Contractor) -	\$ 11,030	-	\$ 12,160	-	\$ 13,400	-	\$ 14,770	-	\$ 16,290	-	\$ 67,650
1C	Physical Conditions and Processes: Survey Workup and Quantitative Assessment	\$ 5,000	\$ 5,000	-	\$ 5,510	-	\$ 6,080	-	\$ 8,150	-	\$ 12,040	-	\$ 3,500	\$ 40,280
1D	Field Equipment (RTK GPS, GIS Data Collector, Cameras)	\$ 1,500	\$ 1,500	\$ 1,580	\$ 1,650	\$ 1,740	\$ 1,820	\$ 1,910	\$ 2,010	\$ 2,110	\$ 2,220	\$ 2,330	\$ 2,440	\$ 21,310
2	Oyster Colonization													
	Oyster Colonization Monitoring by SERC	\$ 26,000		\$ 27,300	\$ 28,670	\$ 30,100	\$ 31,600	\$ 48,180		\$ 36,580	-		\$ 42,351	\$ 244,781
	ESA 5% markup on SERC			\$ 1,370	\$ 1,430	\$ 1,510	\$ 1,580	\$ 2,410		\$ 1,829			\$ 2,120	\$ 12,249
3	Avian Species Surveys	\$ 4,200	-	\$ 4,410	\$ 4,630	\$ 4,860	\$ 5,110	\$ 5,360	-	-	-	-	-	\$ 24,370
4A	Marsh Vegetation: Qualitative Assessment	\$ 4,200	-	\$ 4,410	\$ 4,630	\$ 4,860	\$ 5,110	\$ 5,360	-	-	-	-	-	\$ 24,370
4B	Marsh Vegetation: Mapping and Quantitative Assessment	\$ 6,300	-	\$ 6,620	-	\$ 7,290		\$ 8,040	-	-	-	-	-	\$ 21,950
4C	Marsh Vegetation: California Seablite Surveys	\$ 6,300	\$ 6,300	-	\$ 6,950	-	\$ 7,660	-	\$ 8,440	-	\$ 9,310	-	\$ 10,260	\$ 48,920
6	Report Preparation	\$ ~14,500 (30% of survey tasks)	\$ 3,630	\$ 15,470	\$ 19,120	\$ 17,050	\$ 21,080	\$ 23,523	\$ 9,320	\$ 14,520	\$ 11,190	\$ 3,310	\$ 22,750	\$ 160,960
7	Project Management	\$ 3,500	\$ 3,500	\$ 3,675	\$ 3,859	\$ 4,050	\$ 4,250	\$ 4,470	\$ 4,690	\$ 4,920	\$ 5,170	\$ 5,430	\$ 5,700	\$ 49,710
<b>Total per Year</b>			<b>\$ 25,530</b>	<b>\$ 70,715</b>	<b>\$ 93,650</b>	<b>\$ 77,940</b>	<b>\$ 103,260</b>	<b>\$ 106,403</b>	<b>\$ 53,510</b>	<b>\$ 67,839</b>	<b>\$ 62,970</b>	<b>\$ 19,760</b>	<b>\$ 114,531</b>	<b>\$ 796,100</b>

Table 1: Monitoring Schedule

Monitoring Element	Year 0 <sup>1</sup>	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Physical condition and processes (visual/photo-documentation)	X	X	X	X	X	X	X	X	X	X	X
Physical condition and processes (mapping, quantitative)	X		X		X		X		X		X
Oyster colonization		X	X	X	X	X		X			X
California seablite	X	X	X	X	X	X					
Avian species		X	X	X	X	X					
Marsh vegetation (qualitative)		X	X	X	X	X					
Marsh vegetation (mapping, quantitative)		X		X		X					

<sup>1</sup> Year of construction/installation

SAN FRANCISCO BAY RESTORATION AUTHORITY

Staff Recommendation  
October 14, 2022

**Heron's Head Park Shoreline Resilience Project, Phase Two**

Project No. RA-017  
Project Manager: Erica Johnson

**RECOMMENDED ACTION:** Authorization to disburse up to \$796,100 to the Port of San Francisco for Phase Two of the Heron's Head Park Shoreline Resilience Project, which consists of ten years of monitoring and reporting on project performance, in the City and County of San Francisco.

**LOCATION:** City and County of San Francisco; Measure AA Region: West Bay

**MEASURE AA PROGRAM CATEGORY:** Vital Fish, Bird and Wildlife Habitat Program.

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**EXHIBITS**

- Exhibit 1: Project Location and Site Map
  - Exhibit 2: July 17, 2020 Staff Recommendation
  - Exhibit 3: October 8, 2020 Monitoring & Adaptive Management Plan
- 

**RESOLUTION AND FINDINGS**

Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution and findings:

Resolution:

The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed seven hundred ninety-six thousand one hundred dollars (\$796,100) to the Port of San Francisco for Phase Two of the Heron's Head Park Shoreline Resilience Project, which consists of ten years of monitoring and reporting on Shoreline Resilience Project performance as described in the Monitoring & Adaptive Management Plan attached to the accompanying staff recommendation as Exhibit 3. Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Authority the following:

*HERON'S HEAD PARK SHORELINE RESILIENCE PROJECT, PHASE 2*

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be employed in carrying out the project.
3. A plan for acknowledgement of Authority funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.

**Findings:**

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

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

**STAFF RECOMMENDATION**

**PROJECT SUMMARY:**

Staff recommends that the Authority authorize a grant of up to seven hundred ninety-six thousand, one hundred dollars (\$796,100) to the Port of San Francisco (Port) for Phase Two of the Heron's Head Park Shoreline Resilience Project, which consists of ten years of post-construction monitoring and reporting on project performance. Heron's Head Park is in the City and County of San Francisco along the Bay shoreline (Exhibit 1).

Heron's Head Park (park) contains a mosaic of shoreline habitats including tidal marsh, mudflats, tidal ponds, rocky intertidal habitat, and various subtidal habitats that support a diversity of San Francisco Bay wildlife (see "Site Description" below). In addition, the park contains an environmental education center (EcoCenter) and a spur of Bay Trail, providing the adjacent communities a unique space for outdoor recreation along a highly industrialized shoreline. The park's shoreline is estimated to have retreated 50 feet since 1998, and one tidal pond is consistently flooded instead of tidally flushed. Tidally flushed ponds are important because they support a diversity of invertebrates, which also provide food for birds. The Heron's Head Shoreline Resilience Project (the project) as a whole will implement nature-based solutions along the Bay shoreline that are designed to prevent habitat loss due to erosion and sea level rise, enhance wetland habitat, provide ten paid internships to members of the adjacent communities, engage the adjacent communities in stewardship of the project area, and monitor and report on project performance for ten years.

Monitoring and reporting on the performance of the project is particularly important given its innovative nature-based design, which was developed in collaboration with staff of the Authority and the Bay Restoration Regulatory Integration Team (BRRIT). The design deviates from traditional shoreline armoring structures that disrupt natural processes. Instead, it implements

## *HERON'S HEAD PARK SHORELINE RESILIENCE PROJECT, PHASE 2*

“nature-based solutions,” which use natural and/or constructed materials to mimic natural features that stabilize and restore the ecological functions of the shoreline.

The project will place coarse sediment to create beaches at the bayward edge of the marshes, and use additional structures, such as rock groynes, large woody debris, and subtidal oyster reef balls, to protect and enhance shoreline habitat. This concept is being tested in several locations around San Francisco Bay. This project will provide information that will be useful to the Regionally Advancing Living Shorelines Project, a collaborative effort funded by the Authority in June 2022, in which the Port is one of the key landowners.

### **Project Phases**

Staff included the Heron's Head Shoreline Resilience Project in the Staff's Recommendation on Projects to be Considered for Funding through Grant Round 2, presented at the June 7, 2019 Governing Board meeting. Staff recommended that the Port receive partial funding of \$1,100,000 for habitat enhancement, community engagement, and post-construction monitoring and reporting, with the expectation that the construction of shoreline stabilization elements could be funded by other sources. Securing these additional funds from other grant programs took longer than expected, so staff worked with the Port to break the project into phases (Phase One and Phase Two) and begin Phase One to avoid any further delays.

### **Phase One: Habitat Enhancement, Community Engagement and Workforce Development**

At its June 17, 2020 meeting, the Board authorized \$297,000 to implement Phase One of the project (Exhibit 2), to enhance shoreline habitat, implement community workshops and stewardship days at the park, and provide paid environmental internships to ten young adults from the adjacent communities. To complete the work, the Port hired Literacy for Environmental Justice (LEJ), a community-based organization in the Bayview and Hunters Point communities adjacent to the park. LEJ recruited ten interns to participate in their Eco Apprentice internship program. As part of the program, Eco Apprentices are trained in native plant identification and cultivation and help LEJ staff remove invasive Algerian sea lavender and plant 13,220 out of the total 22,700 native marsh plants planned for this phase, including endangered California seablite. They are on track to complete Phase One in Spring of 2023.

By February 2022, the Port acquired all the permits and funds (see PROJECT FINANCING below) necessary to proceed with construction of the shoreline stabilization elements, which are as follows: coarse material beach with rock and cobble groynes; living shoreline elements, including large woody debris placement; and subtidal oyster reef balls. The Port completed a construction bidding process in March 2022, through which they received multiple bids within range of their construction estimate. The Port has selected a contractor from the submitted proposals and has begun construction as of September 2022. Construction is scheduled to finish in January 2023.

### **Phase Two: Post-Construction Monitoring and Reporting - Current Request**

The current request is for Phase Two of the project, which consists of project monitoring and reporting to evaluate project performance. The Monitoring & Adaptive Management Plan

*HERON'S HEAD PARK SHORELINE RESILIENCE PROJECT, PHASE 2*

(Exhibit 3), referenced in the Port's permits, requires monitoring, reporting, and adaptive management actions in consultation with permitting agencies for ten years following project completion. This proposed authorization will fund project monitoring and reporting and does not include potential adaptive management actions, which will be implemented by the Port should the need arise. The success criteria and specific monitoring protocols were developed in consultation with the BRRIT. Protocols consist of quantitative and qualitative habitat assessments, photo documentation, and topographic surveys. The specific project performance elements specified in the permits are as follows: performance of the coarse material beach and groynes at reducing shoreline erosion and preserving the tidal marsh and tidal ponds, recruitment of native oysters on subtidal oyster reef balls, establishment of native vegetation in enhanced areas, and evaluation of the habitat created and/or preserved by project elements for bird nesting and feeding. As noted above, monitoring and reporting are valuable components of the project because they will provide insights and lessons learned that can be applied to future projects involving implementation of nature-based solutions to sea-level rise and erosion along the Bay shoreline. Phase Two is anticipated to begin in Spring 2023.

**Site Description:** Heron's Head Park is owned and managed by the Port. It is a 21.5-acre open space located on a peninsula extending out into the San Francisco Bay from the eastern shoreline of San Francisco. The project area includes approximately 13.5 acres of shoreline habitat, including tidal marsh, mudflats, tidal ponds, rocky intertidal habitat, and various subtidal habitats. Together these shoreline habitats support over 200 resident and migratory birds, several federally or state listed special status species (such as the North American green sturgeon, steelhead, Chinook salmon, and longfin smelt), and federally listed endangered species (Ridgway's rail and California seablite).

The project area is located along a highly urbanized waterfront, adjacent to the Bayview and Hunters Point neighborhoods. The shoreline has experienced years of heavy industrial development, such as the establishment of a shipyard and powerplant. The residents of the Bayview and Hunters Point communities have suffered from the impacts of industrial pollution and racial and class discrimination. This park provides these communities much-needed access to the San Francisco Bay Trail, an environmental education center (EcoCenter), wildlife, and one of the few wetlands in the city.

**PROJECT FINANCING**

<b>San Francisco Bay Restoration Authority (Phase Two)</b>	<b>\$796,100</b>
San Francisco Bay Restoration Authority (Phase One)	\$297,000
U.S. Fish and Wildlife Service National Coastal Wetlands Conservation Grant Program (via a grant to the Conservancy)	\$987,000
California Ocean Protection Council	\$1,667,000
California Department of Fish and Wildlife	\$1,493,000
Port of San Francisco (the proposed grantee)	\$541,000
<b>Project Total</b>	<b>\$5,781,100</b>



Hanson Aggregates (Hanson) operates a sand and gravel processing facility at the Port's Pier 92, located approximately one mile from the project area. Hanson will donate sediment dredged from central San Francisco Bay to the Port for coarse beach construction. The coarse dredged material is a production byproduct of sifting for the finer, more commercially valuable sand. This is an in-kind donation with a commercial value estimated at \$417,000.

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

See the staff recommendation for Phase One of the project (Exhibit 2) for this information.

**CONSISTENCY WITH MEASURE AA PROGRAMS AND ACTIVITIES:**

The project will help achieve the *Vital Fish, Bird and Wildlife Habitat Program*'s purpose to "significantly improve wildlife habitat that will support and increase vital populations of fish, birds, and other wildlife in and around the Bay" by enhancing shoreline habitat that supports over 200 resident and migratory birds, several federally or state listed special status species (such as the North American green sturgeon, steelhead, Chinook salmon, and longfin smelt), and federally listed endangered species (Ridgway's rail and California seablite). The project will also protect the shoreline habitat for the 30-year life of the project construction elements. Phase Two will consist of monitoring and reporting on these improvements for ten years after the project is completed to evaluate the project's success and develop information and data that can inform development of similar nature-based shoreline projects.

**CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:**

1. **Greatest positive impact.** A direct impact of sea level rise in the San Francisco Bay Area is the loss of shoreline habitat due to erosion. A conventional response to shoreline erosion is armoring structures, which disrupt the natural, dynamic processes of the shoreline. The project implements "nature-based solutions" in its design and will protect valuable habitat for wildlife over the 30-year design life of the project. In particular, the project will provide additional habitat for the Ridgway's rail and will plant and monitor California seablite, both of which are federally listed endangered species.
2. **Greatest long-term impact.** The project will enable sea level rise adaptation for the 30-year design life of the shoreline stabilization elements. The reef ball component of the project is expected to provide habitat for fish larvae recruitment and growth of oysters beyond the 30-year design life. In addition, the ten years of monitoring and reporting in Phase Two of the project will benefit the scientific community and public agencies and ensure the lessons of the project can be shared widely for years to come.
3. **Leveraging resources and partnerships.** The project leverages in-kind support and funding from the California Ocean Protection Council, Hanson Aggregates, California Department of

*HERON'S HEAD PARK SHORELINE RESILIENCE PROJECT, PHASE 2*

Fish and Wildlife, United States Fish and Wildlife Service, and the Port's own funds (see "PROJECT FINANCING" section above). In addition, the Port has partnered with LEJ and other community organizations to lead community engagement and workforce development, and San Francisco State University's Estuary and Ocean Science Center to assist with workforce development and communication with the scientific community.

4. **Economically disadvantaged communities.** The project benefits the economically disadvantaged communities of Bayview and Hunters Point which are adjacent to the park. These communities are some of the most economically disadvantaged in the City and County of San Francisco and experience environmental burden due to the history of industrial pollution in the area. The residents will be able to enjoy continued access to park amenities and wildlife while using the trails and have opportunities to learn about nature-based adaptations, wildlife, and shoreline habitats as part of the programs at the EcoCenter located in the park.
5. **Benefits to economy.** The project benefits the region's economy by providing jobs in plant propagation at LEJ's Candlestick Point Native Plant Nursery and supporting ten young adults in the Eco Apprentice program, which provides a year-long field training on bay ecology, native plant restoration, invasive plant control, and project monitoring to residents of the Bayview and Hunters Point communities. Gaining these skills and network of professionals will allow the interns to compete for professional jobs in the growing field of habitat restoration.
6. **Engage youth and young adults.** The project is occurring during a period of park and community revitalization events planned for the Bayview and Hunters Point neighborhoods through a community outreach grant authorized by the State Coastal Conservancy on September 6, 2018. The grant currently engages the community in recently enhanced areas of the shoreline at Candlestick Point, India Basin, and eventually, Heron's Head. Also, with initial funding from the Authority (Phase One), the Port and LEJ have provided paid environmental internships to ten young adults from the adjacent communities via LEJ's Eco Apprentice program. Together, they have also engaged with the surrounding communities with the intent to inform, build trust, and receive input on the desired outcomes of the project. Stakeholder groups included in outreach and engagement include the following community-based organizations and committees:
  - a. Port Southern Waterfront Advisory Committee
  - b. San Francisco Recreation & Parks Department's EcoCenter Advisory Committee
  - c. Bayview Hunters Point Environmental Justice Taskforce
  - d. India Basin Neighborhood Association
  - e. Bayview Hunters Point Mobilization for Adolescent Growth in our Communities "BMAGIC" Parks Collaborative

7. **Monitoring, maintenance, and stewardship.** Phase Two will fund ten years of monitoring and reporting on the project's shoreline stabilization elements and habitat enhancement (see "Phase Two: Post-Construction Monitoring and Reporting - Current Request" above).
8. **Coastal Conservancy's San Francisco Bay Area Conservancy Program.**
  - a. The project is supported by adopted local and regional plans including the following: Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California (USFWS 2013), North American Waterfowl Management Plan (2012), California State Wildlife Action Plan (2015 update), San Francisco Bay Subtidal Habitat Goals Report (2010), Baylands Ecosystem Habitat Goals (2015 update), San Francisco Estuary Blueprint (2022), The San Francisco Bay Shoreline Adaptation Atlas (2019), and Sediment for Survival: A Strategy for Resilience of Bay Wetlands in the Lower San Francisco Estuary (2021).
  - b. Phase Two must be implemented as soon as the construction of shoreline elements is complete, per the terms of the Port's permits. The Port will be ready to start the monitoring program in February 2023.
  - c. The project serves the Bayview and Hunters Point neighborhoods in San Francisco and will also share information with the scientific community and public agencies to encourage nature-based solutions at other locations in the San Francisco Bay region.
  - d. The project provides opportunities for benefits that could be lost if the project is not quickly implemented as sea level rise is an urgent threat facing San Francisco Bay.
  - e. The project leverages funds and in-kind support from multiple agencies (see "PROJECT FINANCING" above).
9. **San Francisco Bay Conservation and Development Commission's Coastal Management Program.** The project is consistent with BCDC's Management Program, including multiple policies of the San Francisco Bay Plan, including the following:
  - a. Tidal Marshes and Tidal Flats, Policy 6: The project design is based on analysis of localized sediment erosion and accretion, rates of vegetation colonization, potential for invasive species introduction and control, expected use of the site by fish and wildlife, and resilience to sea level rise and climate change. It includes clear and specific biological and physical goals, success criteria, a monitoring program, and an adaptive management plan.
  - b. Tidal Marshes and Tidal Flats, Policy 10: The project design relies on the use of fill, which has been authorized based on scientific ecological analysis and consultation with relevant state and federal agencies.
  - c. Tidal Marshes and Tidal Flats, Policy 11: The project is a demonstration project that addresses sea level rise adaptation of bay habitats. It includes appropriately detailed experimental design and monitoring to inform initial and future work.
10. **San Francisco Bay Joint Venture's Implementation Strategy.** The project advances the Habitat Goals listed by the Joint Venture by protecting and enhancing San Francisco Bay's tidal marsh and flats to benefit waterfowl, shorebirds, and other wildlife. The proposed project is listed as a Tier 1 priority project in the Joint Venture's 2019 Priority Projects List.

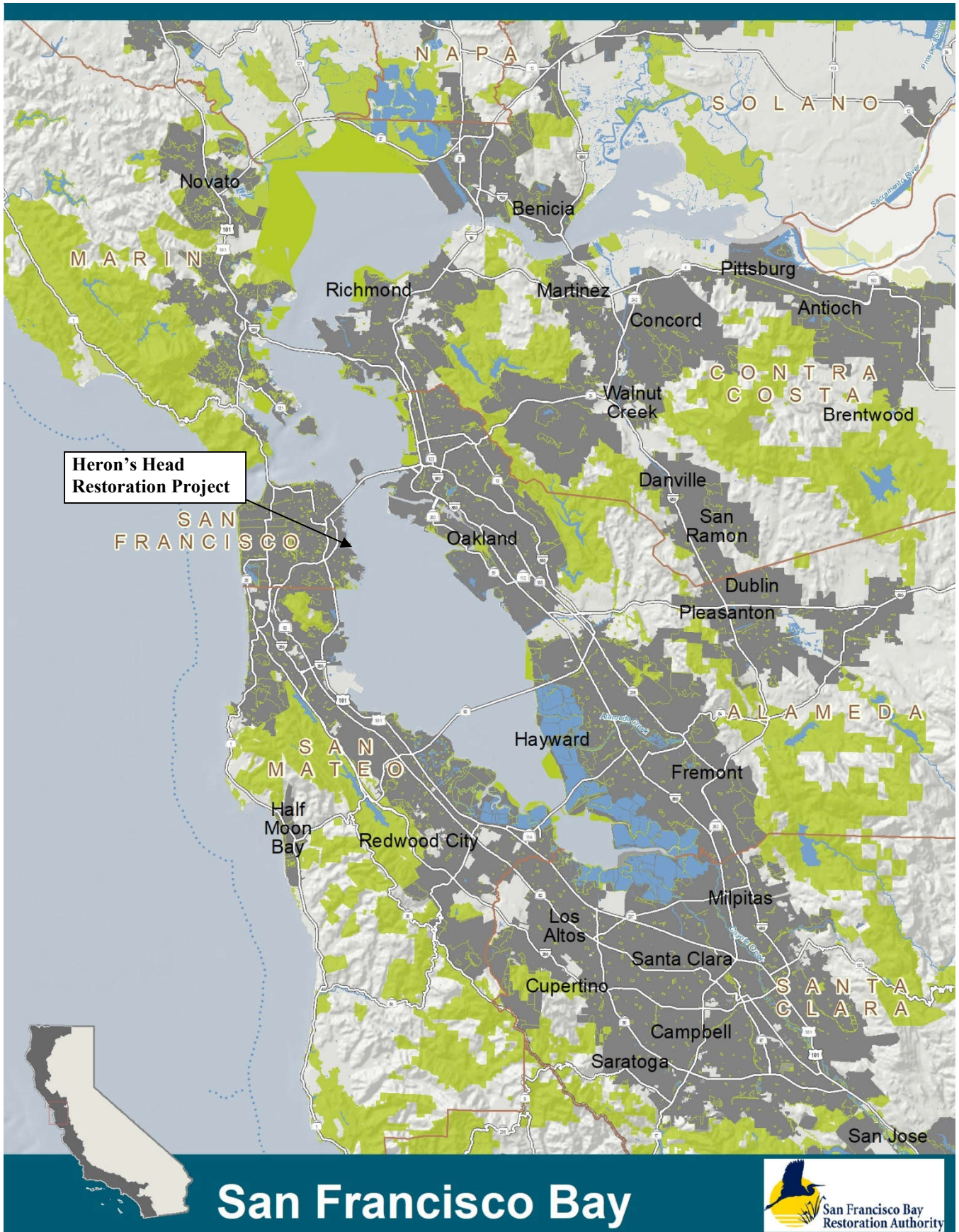
**COMPLIANCE WITH CEQA:**

The project as whole (consisting of construction as well as the Authority's Phase One and Phase Two components) is categorically exempt from environmental review under 14 California Code of Regulations Section 15333 because it consists of habitat restoration activities in an area less than five acres, including nature-based shoreline stabilization and revegetation of disturbed areas with native plants. There will be no significant adverse impact on endangered, rare, or threatened species or their habitat, there are no known hazardous materials at or around the project site and, given the scale and methodology, there is no potential for cumulatively significant effects.

Removal of invasive plants and revegetation with native plants is also exempt under Section 15304 as a minor alteration to vegetation without the removal of healthy, mature, scenic trees.

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

Exhibit 1: Project Location and Site Maps





SAN FRANCISCO BAY RESTORATION AUTHORITY

Staff Recommendation  
July 17, 2020

**HERON'S HEAD PARK SHORELINE RESILIENCE PROJECT: PHASE 1**

Project No. RA-017  
Project Manager: Marilyn Latta

**RECOMMENDED ACTION:** Authorization to disburse up to \$297,000 to the Port of San Francisco to implement native plant propagation, revegetation, invasive weed control, and community engagement and job training as part of the Heron's Head Park Shoreline Resilience Project in the City and County of San Francisco.

**LOCATION:** City and County of San Francisco; Measure AA Region: West Bay

**MEASURE AA PROGRAM CATEGORY:** Fish, Bird and Wildlife Habitat Program; Shoreline Public Access Program.

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**EXHIBITS**

- Exhibit 1: [Project Location and Site Map](#)  
Exhibit 2: [Project Designs and Photographs](#)  
Exhibit 3: [Project Letters](#)
- 

**RESOLUTION AND FINDINGS:**

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

“The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed two hundred ninety seven thousand dollars (\$297,000) to the Port of San Francisco for Phase One of the Heron's Head Park Shoreline Resilience Project. Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Authority the following:

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

4. Evidence that all permits and approvals required to implement the project have been obtained.

Staff further recommends that the Authority adopt the following findings:

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

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

### **PROJECT SUMMARY:**

Staff recommends that the Authority authorize a grant of two hundred ninety seven thousand dollars (\$297,000) to the Port of San Francisco (Port) for Phase One of the Heron’s Head Park Shoreline Resilience Project (Exhibit 1, Location and Site Map).

The Heron’s Head Park Shoreline Resilience Project (project) consists of restoring and enhancing wetlands and upland habitat along the Bay shoreline in Bayview Hunters Point to stabilize the shoreline and improve habitat. The overall project will provide beneficial native habitat enhancement improvements to an urban shoreline park in the Bayview Hunters Point neighborhood, a diverse and economically disadvantaged community in southeast San Francisco. In addition to the habitat enhancement benefits, the project includes community engagement, local job training in green infrastructure activities, and workforce development.

To achieve the goals of the project, during Phase I, the Port and Literacy for Environmental Justice (LEJ) will hire a team of four “Eco-Apprentices” and an experienced crew leader. The Eco-Apprentices will be low income transitional age youth (18-25 years old) with a passion for conservation, habitat restoration, and community engagement. Leveraging long-standing connections with San Francisco government agencies, environmental stewardship groups, schools, and youth-serving organizations active in southeast San Francisco, LEJ will recruit young residents of the Bayview Hunters Point community to be Eco-Apprentices on the Heron’s Head Park Shoreline Resilience Project crew. These youth will be trained by LEJ and by researchers from San Francisco State University’s Estuary and Ocean Science (EOS) Center in bay ecology, invasive weed control, native plant propagation and outplantings, and project monitoring.

During the first year of Phase I of the project, preliminary methods for weed control and plantings will occur in two test plots. This area is impacted by the invasive Algerian sea lavender which can degrade habitat values and reduce biodiversity. The test plots will enable the project team to refine planting plans with respect to native species representation and placement by soil type and marsh elevation. At the end of this assessment of the test plots, LEJ will use insights gained from test plantings to strategically propagate and plant approximately an additional 22,700 marsh plants grown over 20,000 – 30,000 square feet of intertidal zone. Habitat stewardship during this phase will include manual removal of invasive species and strategic replacement of native plants in cleared areas.



With intent to inform, build trust, and make the project culturally relevant to the surrounding communities, the Port and LEJ propose to present at up to four community meetings during the first year of the project. The Eco-Apprentice team will work with the Port to develop content and presentation materials and present the purpose, potential beneficial and adverse impacts, and desired outcomes of the project. They will give presentations to key stakeholders for the project, such as the following:

- Port Southern Waterfront Advisory Committee
- City and County of San Francisco Recreation & Parks Department's EcoCenter Advisory Committee
- Bayview Hunters Point Environmental Justice Taskforce
- India Basin Neighborhood Association
- Bayview Hunters Point Mobilization for Adolescent Growth in our Communities (BMAGIC) Parks Collaborative

These community outreach efforts will not only foster broader awareness of the project, they will also offer LEJ Eco-Apprentices the opportunity to develop their understanding of the scientific basis for the work they are doing and practice professional presentation skills. Additionally, these presentations may offer a vision to communities in southeast San Francisco of how nature-based shorelines may serve as an option for sea level rise adaptation.

The project's Measure AA application focused on stabilizing the shoreline using nature-based features, noting that, without shoreline protection, the wetlands are expected to erode significantly over the next 30 years. Authority staff's overview of Round 2 grant recommendations, presented at the June 2019 Governing Board meeting, included an initial recommendation of partial funding in the amount of \$1,100,000 toward a total cost of \$4,254,200. As the Port continues to seek additional funds to implement the full project, Authority staff and the Port have agreed to divide the project into two phases in order to reduce delay.

The board authorization requested now is for Phase I of the total project. Phase I, which will cost \$297,000, consists of initial site preparation activities including invasive weed control, planting native plants in weeded areas, native plant propagation, and initial community engagement including workforce development. Phase Two is expected to include habitat treatments in the intertidal and adjacent subtidal areas to protect the 7 acre wetland, including construction of a coarse grain cobble beach, installation of 5 rock groynes, and placement of approximately 80-100 oyster reef elements offshore. Phase I has independent value, regardless of whether Phase 2 is implemented.

The Port has submitted permit applications to all agencies through the Bay Restoration Regulatory Integration Team (BRRIT). The Port and the BRRIT held a site meeting in November 2019 and have held several coordination meetings to discuss BRRIT input to the design, which has been incorporated into the 65% design plans that have been completed. The Port is actively working to fundraise to complete the designs and implement the full restoration project from a variety of sources, including a \$1 million grant application that the Port and State Coastal Conservancy will submit in July 2020 to the USFWS National Coastal Wetlands Grant

Program. The Phase 1 funding requested now will start native plant habitat enhancements and community engagement that is planned to continue with the larger full project.

The Port owns and manages property along the southern San Francisco waterfront, including this parcel at Heron's Head Park. The Port has a strong track record of successfully managing projects that include community involvement and environmental enhancement, and has built multiple long-standing partnerships with local, state, and federal partners to accomplish these goals.

LEJ is a non-profit environmental education and youth empowerment organization created specifically to address the ecological and health concerns of Bayview Hunters Point and the surrounding communities of southeast San Francisco. LEJ trains youth for rewarding green careers, supports transformation of underutilized "brownfields" into public parks, and engages community volunteers to care for their open spaces. LEJ's native plant nursery, located in Hunters Point, specializes in growing locally adapted native species for shoreline and coastal upland habitats. The Port will purchase native wetland and transition zone plants from LEJ and hire LEJ's Eco-Apprentices (each crew comprised of four interns and one Crew Leader, described further below), to remove invasive species, plant natives, and maintain native marsh vegetation in the Project area.

The Estuary and Ocean Science Center (EOS) is housed at the Romberg Tiburon Campus of San Francisco State University. Senior Scientist Kathy Boyer and Staff Scientist Melissa Patten from the EOS Center will lead the effort to collect seeds and cuttings of the endangered California sea-blite (*Suaeda californica*, "Suaeda"), train and advise LEJ staff in Suaeda cultivation, planting, and arboring, and monitor and report on the success of Suaeda establishment. LEJ and EOS Center staff will work together to train LEJ's nursery staff and Eco-Apprentices to propagate Suaeda in their nursery and plant it at Heron's Head Park. Working alongside EOS Center staff will offer LEJ staff and interns meaningful work experience and exposure to careers in the field of ecological restoration.

The project includes a substantial education and outreach component, building on existing education and public engagement programs that have operated at the project site for over 20 years. Port partners in community engagement include the San Francisco Recreation & Parks Department, Golden Gate Audubon Society, San Francisco K-12 schools, and City College of San Francisco. These and many other community-based organizations have created and/or participated in programs that engage the public in volunteering, studying and enjoying the project site. The Port has sought input from its Southern Waterfront Citizens' Advisory Committee, Golden Gate Audubon's Conservation Committee, and the EcoCenter Advisory Committee and will continue to broaden its community engagement in the project.

**Site Description:** Heron's Head Park is the result of never completed construction of Pier 98 in the 1970's. In 1998 the Port completed a wetland creation/enhancement project at the site 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 1/3-mile spur of the San Francisco Bay Trail, native plant landscapes, and the EcoCenter, an educational community center.

Heron's Head Park today is an approximately 21-acre peninsula, comprised of seven acres of

jurisdictional wetlands and tidal ponds, and 14 acres of public open space on San Francisco Bay. Restoration work will occur on fewer than five acres but will benefit the entire seven acre wetland. The site is owned and managed by the Port, located at the southern end of the Port’s jurisdiction in the Bayview Hunters Point neighborhood (**Exhibit 2**). The waterfront here and extending through San Francisco and San Mateo counties is highly urbanized, forming a lengthy shoreline with limited habitat for resident or migratory wildlife. Heron’s Head Park is one of the few tidal marsh habitats along the San Francisco waterfront.

In the 20 years since the wetlands and park were created, the shoreline at Heron’s Head Park has experienced subsidence of the fill soils, erosion from wind-waves and tidal flows, and a low supply of 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. The Port intends to address shoreline erosion through Phase 2 of this project.

The project site is a highly valued resource both for wildlife and public access and education. Federally or state-listed special status species that are present in the vicinity include North American green sturgeon, steelhead, Chinook salmon, and longfin smelt. The proposed activities will enhance native plant communities in the intertidal and upland areas of the site, which provide valuable habitat cover, nesting substrate, and food resources for a variety of birds and wildlife. The site has a significant infestation by invasive Algerian sea lavender, which will be addressed by Phase 1 of the project.

**PROJECT FINANCING**

<b>San Francisco Bay Restoration Authority</b>	<b>\$297,000</b>
Others	\$0
<b>Project Total</b>	<b>\$297,000</b>

The Port will provide \$38,000 in in-kind staff time to manage the project.

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

The San Francisco Bay Restoration Authority Act (SFBRA Act), Government Code section 66704.5, authorizes the Authority to grant funds for eligible projects. Consistent with Section 66704.5(a), the project is located in San Francisco City and County in the Central Bay, outside of the Delta primary zone.

The project is eligible for a grant under section 66704.5(b), which provides that an eligible project shall: “(1) Restore, protect, or enhance tidal wetlands, managed ponds, or natural habitats on the shoreline in the San Francisco Bay area, excluding the Delta primary zone”. Both the Phase 1 and the overall project will restore tidal wetlands and natural habitats along the shoreline.

Funding the native plant propagation, invasive weed control, native outplantings, and monitoring for the project is consistent with SFBRA Act section 66704.5(e), which provides that the Authority may award grants for “all phases of planning, construction, monitoring, operation, and maintenance” of eligible projects.

#### **CONSISTENCY WITH MEASURE AA PROGRAMS AND ACTIVITIES:**

The project will help achieve the *Vital Fish, Bird and Wildlife Habitat Program*'s goal to “significantly improve wildlife habitat that will support and increase vital populations of fish, birds, and other wildlife in and around the Bay.” This restoration project will enhance wetlands and provide upland transition zone for a number of important fish, bird, and mammal species of concern, including the salt marsh harvest mouse, Ridgway's rail, and numerous other shorebirds and songbirds. Upon completion of the invasive weed control and plantings of the project, the Port will provide for stewardship, maintenance and monitoring of the restored areas. The Port is committed to maintaining the marsh and parkland to ensure its benefits for future generations.

#### **CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:**

1. **Leveraging resources and partnerships.** The restoration Project will leverage public/private partnerships that have been started by the Port, including the construction of the EcoCenter at Heron's Head park which was funded by the State Coastal Conservancy and other partners, and is operated by the San Francisco Recreation & Parks Department.
2. **Economically disadvantaged communities.** The Project will benefit the economically disadvantaged community of Bayview Hunters Point in San Francisco. The community will benefit from visiting the enhanced habitat while using the trails and enjoying open space at the site; and through opportunities to learn about the native plantings and invasive weed control as part of educational programs at the EcoCenter.
3. **Benefits to economy.** The project will benefit the region's economy by providing jobs in plant propagation at LEJ's Candlestick Point Native Plant Nursery, and supporting green infrastructure job training and workforce development to four youth Eco-Apprentices in Bayview Hunters Point.
4. **Engage youth and young adults.** The project will provide field training on bay ecology, native plant restoration, invasive plant control, and project monitoring to four youth Eco-Apprentices from the Bayview Hunters Point neighborhood. Gaining these skills will enable the apprentices to build their resumes and help them compete for professional jobs in the growing field of habitat restoration.
5. **Monitoring, maintenance, and stewardship.** The Eco-Apprentices will work with a crew leader from LEJ and with researchers from the Estuary and Ocean Science Center to monitor and maintain the native plantings and invasive weed control. They will implement two test plots to assess a variety of plant sizes, planting methods, and planting timing, in order to define the best practices for the full planting approach.

6. **Coastal Conservancy's San Francisco Bay Area Conservancy Program.** The project is consistent with the Conservancy's San Francisco Bay Area Conservancy Program's Criteria:
  - a. The project is supported by the Port Master Plan and by actions recommended in the Baylands Habitat Goals Science Update (2015) and San Francisco Estuary Institute's Adaptation Atlas (2018), which both recommend nature-based approaches to help wetlands adapt to sea level rise and other climate changes;
  - b. The project serves a regional constituency in the Bayview Hunters Point neighborhood in San Francisco, and is also a pilot demonstration project that will share information with other entities to encourage invasive weed control and native plant revegetation at other locations in San Francisco Bay;
  - c. The project can be implemented in a timely way- all partners are ready to start work in August 2020 if funding is approved;
  - d. The project provide opportunities for benefits that could be lost if the project is not quickly implemented as sea level rise is an urgent threat facing San Francisco Bay and these actions help to enhance native plant habitats that can continue to grow and become more robust over time; and
  - e. Includes in-kind staff time from the Port staff who will manage the project.
  
7. **San Francisco Bay Conservation and Development Commission's Coastal Management Program.** The project is consistent with San Francisco Bay Conservation and Development Commission's Coastal Management Program as it enhances native tidal wetland and upland transition zone habitats, and controls invasive species that impact wetlands in San Francisco Bay.
  
8. **San Francisco Bay Joint Venture's Implementation Strategy.** The project is consistent with the Joint Venture's Implementation Strategy as it includes actions to control invasive species and enhance native wetland and upland ecotone vegetation. The project is included on the Joint Venture's Priority Projects List, and the Port received a positive confirmation of support after consultation with Joint Venture staff prior to applying for funding.

#### **COMPLIANCE WITH CEQA:**

The project is categorically exempt from review under CEQA Guidelines Section 15333 (14 Cal. Code Regs. §15333) as a small habitat restoration project, not exceeding five acres, to assure the restoration and enhancement of habitat for fish, plants, or wildlife and with no significant adverse impact on endangered, rare or threatened species or their habitat, no known hazardous materials at or around the project site and, given the scale and methodology, no potential for cumulatively significant effects.

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



# Heron's Head Shoreline Resilience Project **Monitoring & Adaptive Management Plan**

Prepared by Acta Environmental  
With contributions from Environmental Science Associates

For the Port of San Francisco

July 6, 2020  
Revised: October 8, 2020



acta environmental, inc.



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## 1.0 INTRODUCTION

This document describes the long-term monitoring and adaptive management plan for the proposed Heron’s Head Shoreline Resilience Project (“the project”), located at Heron’s Head Park (“the site”), in the City and County of San Francisco (**Figure 1**). The project would install shoreline protection and habitat enhancement features at the site to protect existing shoreline and wetland habitat from ongoing erosion, enhance intertidal and subtidal aquatic habitat, enhance biodiversity, and enable the wetlands and park to adapt to sea level rise (**Figure 2**). The project would place coarse sand, gravel and rock to construct a gravel beach berm and rock groynes along the site’s south-facing shoreline. Integrated with these features would be fabricated reef elements to provide habitat for native oysters, rock/earth sills to stabilize the tidal pond edges, and plantings of native marsh species including California seablite (*Suaeda californica*).

This monitoring plan describes performance criteria, metrics, and methods that will be used to evaluate the performance of the constructed beach and headlands, the dynamics of beach nourishment, recovery of marsh vegetation and tidal ponds in areas formerly impacted by erosion and by temporary construction access, ecological function of the oyster reefs and other new habitat elements, and the success of native plant restoration.

## 2.0 MONITORING OBJECTIVES

The monitoring program’s objectives are defined in light of the overall project purpose: to enhance and preserve aquatic resources and tidal wetlands by stabilizing the southern shoreline; to preserve existing habitat and recreational features; and to enable the wetlands and park to adapt to a moderate level of sea level rise over an approximately 30-year project life. The monitoring program objectives are as follows:

- Evaluate the performance of the beach berm and groynes
- Assess project success at reducing shoreline erosion and preserving the tidal marsh and ponds
- Assess colonization of the reef structures by native oysters
- Measure the areal extent of California seablite onsite
- Assess vegetation characteristics in the tidal marsh, replanted temporary impact areas, and native plant restoration areas
- Qualitatively evaluate habitat functions for avian species

## 3.0 PROJECT EVALUATION

The proposed project is designed to create new habitat types at the site, protect existing habitat, increase diversity and complexity of the shoreline habitat, and achieve a net increase in aquatic habitat function. Performance criteria for critical aspects of the project will be used to determine project success (see Section 3.1). If performance criteria are not met, the Port will evaluate the reasons why they are not being met and implement corrective actions if needed in consultation with appropriate agencies. In addition to required performance criteria, the project has a set of goals for the intended

biological responses and physical processes (see Section 3.2). If these goals are not met, the Port will consider whether corrective actions are appropriate and feasible.

### **3.1 PERFORMANCE CRITERIA**

The project will be considered successful if the following criteria are met by Year 5 of the monitoring period. If these criteria are not met, the Port will evaluate the reasons why they are not being met and implement corrective actions if needed in consultation with appropriate agencies:

#### *Beach and groyne physical characteristics:*

- Elevations of the beach berm crest remain above elevation 5.5 feet NAVD where the beach is adjacent to sensitive habitats (no elevation criteria are proposed at the channel mouth where the beach is deliberately lower or at the feeder beach where beach material is expected to move westward onto other segments of the beach).
- No significant horizontal movement of the large rocks or significant failures of groyne structures as qualitatively assessed by observation.
- Crest elevation of at least 75% of the groyne structures (by length) remains within 1 foot of initial elevation.
- No significant horizontal movement of the oyster reef elements.
- No obstruction of tidal flow in and out of the main tidal channel

#### *Marsh Vegetation:*

- Replanted temporary impact areas will support at least 10% absolute cover of tidal marsh vegetation by Year 1, at least 50% absolute cover of tidal marsh vegetation by Year 3, and at least 70% absolute cover of tidal marsh vegetation by Year 5.
- In any monitoring year, absolute percent cover of invasive species in replanted temporary impact areas will be the same or less than absolute percent cover of invasive species in unimpacted areas of the tidal marsh.

### **3.2 PROJECT GOALS**

The project is intended to achieve the following biological and physical conditions. If these goals are not met, the Port will consider whether corrective actions are appropriate and feasible. The Port will discuss corrective actions with the appropriate agencies before taking such actions.

#### *Beach and groyne physical characteristics:*

- Crest elevation of at least 75% of the oyster reef elements (by number of elements) remains within 1 foot of initial elevation.

#### *Shoreline erosion and habitat preservation:*

- Area of vegetated tidal marsh remains stable or increases over the monitoring period.

- No continued erosion of existing marsh scarps and no formation of new eroding scarps along section of shoreline where beach is installed.
- Tidal ponds continue to pond water during low tides.

Oyster Reef Elements:

- Native oyster recruitment observed with densities of >5 adult oysters per square meter of oyster reef structure.
- Native marine flora or native sessile epifauna colonize >50% of the surface area of >75% of the oyster reef elements.

California Seablite:

- Square footage of existing California seablite assemblages will be the same or greater than pre-project conditions as determined by preconstruction mapping.

## **4.0 METRICS, METHODS, AND EQUIPMENT**

The following sections describe monitoring metrics, methods, and equipment for each element of the project's monitoring program

### **4.1 BEACH PERFORMANCE, SHORELINE EROSION, AND PRESERVATION OF TIDAL MARSH AND POND HABITAT**

Metrics

- Top elevations of beach berm, groynes, and oyster reef elements
- Occurrence of new eroding marsh scarps
- Change in volume of beach (cubic yards per linear foot) along the length of shoreline
- Quantitative estimate of longshore and cross-shore transport of beach sediment rates (to the extent supported by survey data and observed site conditions)
- Areal extent of beach, tidal marsh, and mudflats
- Observed water levels in ponds at low tide
- Physical condition of project elements

Methods

Post-construction monitoring of beach performance, shoreline erosion, and marsh/pond habitat preservation will be performed within 3 months of completion of fill placement (year 0). Thereafter, visual surveys and photo-documentation of the project elements will be conducted annually and quantitative surveys will be conducted in years 2, 4, 6, 8 and 10. If a significant wave event occurs in an off year, quantitative surveys will be conducted in that year and that event will replace another future planned survey event.

Photo-documentation of readily observed field markers will be used to document both bulk and small-scale movement of beach material due to large wave events. The field markers will include be painted rocks or landscape rocks of a color that contrasts with the beach material, of a size and density similar to

the bulk beach material. The marker rocks will be placed along the shoreline to form one or more distinct stripes extending from the beach crest to approximately MLLW with a large enough width, thickness and contrast to be visible from the ground and in low-elevation aerial photos. The groyne structures will also act as field markers. The large rocks provide will provide a stationary reference against which it will be possible to observe movement (e.g., accretion or erosion) of the beach material. Significant disturbance of the marker stripe (e.g., visible signs of longshore transport of either a large number of individual marker rocks, or the stripe in bulk), or a significant change in burial or exposure of the groyne rocks is apparent, will be interpreted as an indication that a significant wave event has occurred, triggering a review of recent wind events to characterize the estimated wind and wave conditions that cause the observed movement of beach material. Depending on the scale of observed movement, the project team may choose to adjust the timing of the next scheduled quantitative beach survey in order to better document the impact of a significant wave event.

The following physical process monitoring actions will be conducted **annually (years 0 through 10)**:

- Photo-documentation of groyne structures, oyster reef elements, beach sections, tidal marsh, and tidal ponds.
- Visual survey for new eroding marsh scarps. New scarp features will be photo documented and mapped using GPS.
- Photo-documentation of field markers to detect significant wave events.

The following physical process monitoring actions will be conducted in **years 0, 2, 4, 6, 8, and 10** (unless monitoring years are adjusted in response to significant wave events as described above):

- An aerial photo and aerial topographic survey performed at low tide. Aerial imagery will be used to map the areal extent of beach material and location/movement of the marker stripe(s). Digital Elevation Model (DEM) differencing analysis will be performed to document changes in beach elevation relative to the post-construction (year 0) baseline survey and trends in beach material transport
- Ground-based survey (e.g., using total-station or RTK GPS) and of rock groyne crests, beach crests, and cross sections extending from existing trail, across the tidal marsh, and beyond the toe of the new beach.
- Ground-based survey of the top of each oyster reef element.
- Photo documentation of ponded water in tidal ponds at low tide with a coincident water surface elevation survey.

#### Equipment

- Drone or aircraft-based aerial photography and aerial topographic survey
- RTK GPS or Total Station for ground surveys
- Camera for photo documentation
- Field markers (e.g., painted or colored landscape rocks)

## 4.2 COLONIZATION OF OYSTER REEF ELEMENTS

### Metrics

- Density of adult and juvenile oysters
- Size-distribution of adult oysters
- Percent cover of oysters
- Percent cover of other sessile epifauna
- Percent cover of marine flora
- Percent native/non-native taxa

### Methods

Oyster monitoring will be conducted once a year in June or July. Monitoring will be conducted annually in years 1 through 5 and then twice more in years 7 and 10. Oyster reef elements will be accessed on foot along the shoreline or by water using small non-motorized craft such as kayaks to avoid disturbance to the marsh during nesting seasons for Ridgway's Rail and migratory birds. A randomly selected subset of approximately 25% of the oyster reef elements will be monitored each year. One sample shell bag (1/4-size shell bags deployed during the initial installation) will be collected from each selected reef element. Density of oysters, both juvenile and adult, will be counted and size of oysters (longest shell dimension measured in mm) will be measured on 10 shells per bag. Percent cover of oysters and percent cover of other sessile organisms will be estimated on sampled shells, and the number of mobile epifauna per bag will be counted.

Reef elements will be sampled in situ once a year in June or July during extreme low tides in the same low tide series. One vertical surface above the waterline will be selected on both east and west sides of the same reef elements from which sample shell bags were collected. On each selected surface the total number of oysters, both juvenile and adult, in 10 cm<sup>2</sup> quadrats will be counted and the size of 10 individual oysters will be measured (longest shell dimension measured in mm). In the same quadrats, the cover of oysters and percent cover of other sessile epifauna will be estimated using a 10 cm<sup>2</sup> acetate sheet with 25 uniform points. To the extent practicable, taxa will be identified as native or non-native. The total percent cover of native marine flora and native sessile epifauna on all of the oyster reef elements will be visually estimated.

### Equipment

- 10 cm<sup>2</sup> quadrat
- 10 cm<sup>2</sup> acetate sheet with 25 uniform points
- Removable sample shell bags
- Digital caliper

## 4.3 CALIFORNIA SEABLITE

### Metrics

- Location of seablite assemblages
- Areal extent (per assemblage and total for site)

- Height of plants
- Percent survival of plantings
- Proportion of flowering branches
- Overall condition

#### Methods

All existing seablite assemblages onsite (determined by preconstruction survey) and planted seablite will be monitored. The first monitoring event will be conducted in the fall, after planting. In subsequent years the plants will be monitored twice yearly in late winter and fall of years 1 through 5. The location of each assemblage will be recorded using GPS. The areal extent (longest dimension x perpendicular dimension) and height of each assemblage will be measured using a meter stick. The proportion of the plant that has flowering/fruited branches will be visually estimated. Percent survival of planted seablite will be recorded. If plants are arbored, the status of the arbors will be assessed (presence, sturdiness, need for increased height relative to plant as it grows). Each assemblage will be photo documented from a set position during each monitoring event.

#### Equipment

- Mapping grade GPS
- Meter stick
- Camera

### **4.4 AVIAN SPECIES**

#### Metrics

- Abundance and species richness
- Behavioral observations

#### Methods

Use of the site by seabirds, waterfowl, shorebirds and wading birds will be qualitatively assessed. Surveys will be conducted quarterly in years 1 through 5 and will consist of visual observations at high and low tide for set time periods. Four observation points will be established (one each in tidal marsh, tidal ponds, gravel beach, and tidal flats) and the locations recorded using GPS. Observations will be recorded for 15 minutes at each point using binoculars and a spotting scope.

Biologists will record the number of species, the number of individuals of each species, and their behavior (e.g., nesting, foraging, roosting). Monitors will also note any observed associations of species or taxonomic groups with sub-habitats (e.g., preferential foraging substrates, use of trellises/woody debris).

#### Equipment

- Spotting scope
- Binoculars
- Mapping grade GPS for mapping observation points

## 4.5 MARSH VEGETATION

### Metrics

- Areal extent of tidal marsh vegetation categorized by cover class
- Total percent cover
- Relative percent cover by species
- Percent native/non-native species
- Species richness
- Mean cover height
- Cover density
- Percent cover of *Limonium ramosissimum* and other invasive plant species

### Methods

Vegetation characteristics and the areal extent of vegetated tidal marsh will be monitored to assess project success at reducing shoreline erosion and preserving the tidal marsh and recovery of areas impacted by previous shoreline erosion and by temporary construction access. Vegetation monitoring will also include native plant restoration efforts undertaken by the Port as part of a coordinated but separate project. Qualitative monitoring of vegetation will be conducted annually to identify any problems with the revegetated areas and to guide corrective actions. Quantitative measurement of vegetation parameters will be performed every two years to map the areal extent of tidal marsh as part of the assessment of beach performance and to quantitatively document recovery of impact areas and success of native plantings. Existing, unimpacted areas of the tidal marsh will be used as reference areas for comparison with replanted impact areas. Ground surveys of vegetation within and adjacent to tidal marsh will be conducted outside Ridgway's rail breeding season.

**Annual** vegetation monitoring (years 1, 2, 3, 4, and 5) will comprise:

- Photo documentation of the vegetated gravel beach, tidal marsh, replanted temporary impact areas, and native plant restoration areas
- Qualitative vegetation survey documenting any new populations of invasive plants and qualitatively evaluating performance of new plantings

**Bi-annual** vegetation monitoring (years 1, 3, and 5) will comprise:

- Interpretation of aerial imagery (collected as described in Section 4.1) to map the extent of tidal marsh vegetation. Mapping will categorize vegetation across the entire tidal marsh by cover class ("full cover", 50%-100% cover, 10-50% cover, <10% cover). Ground-truthing will be performed as needed to verify plant patch types
- Measurement of vegetation metrics in 10 randomly placed 1 m<sup>2</sup> quadrats within the tidal marsh
- Measurement of vegetation metrics in 1 m<sup>2</sup> quadrats located every 100 feet along the length of the beach crest
- Measurement of vegetation metrics in 1 m<sup>2</sup> quadrats located at 20- to 50-foot intervals along revegetated construction access corridors

- Measurement of vegetation metrics in 1 m<sup>2</sup> quadrats within native plant restoration areas; quadrats will be randomly placed within native plant restoration areas at a frequency of one per approximately 100 square feet of restored area

#### Equipment

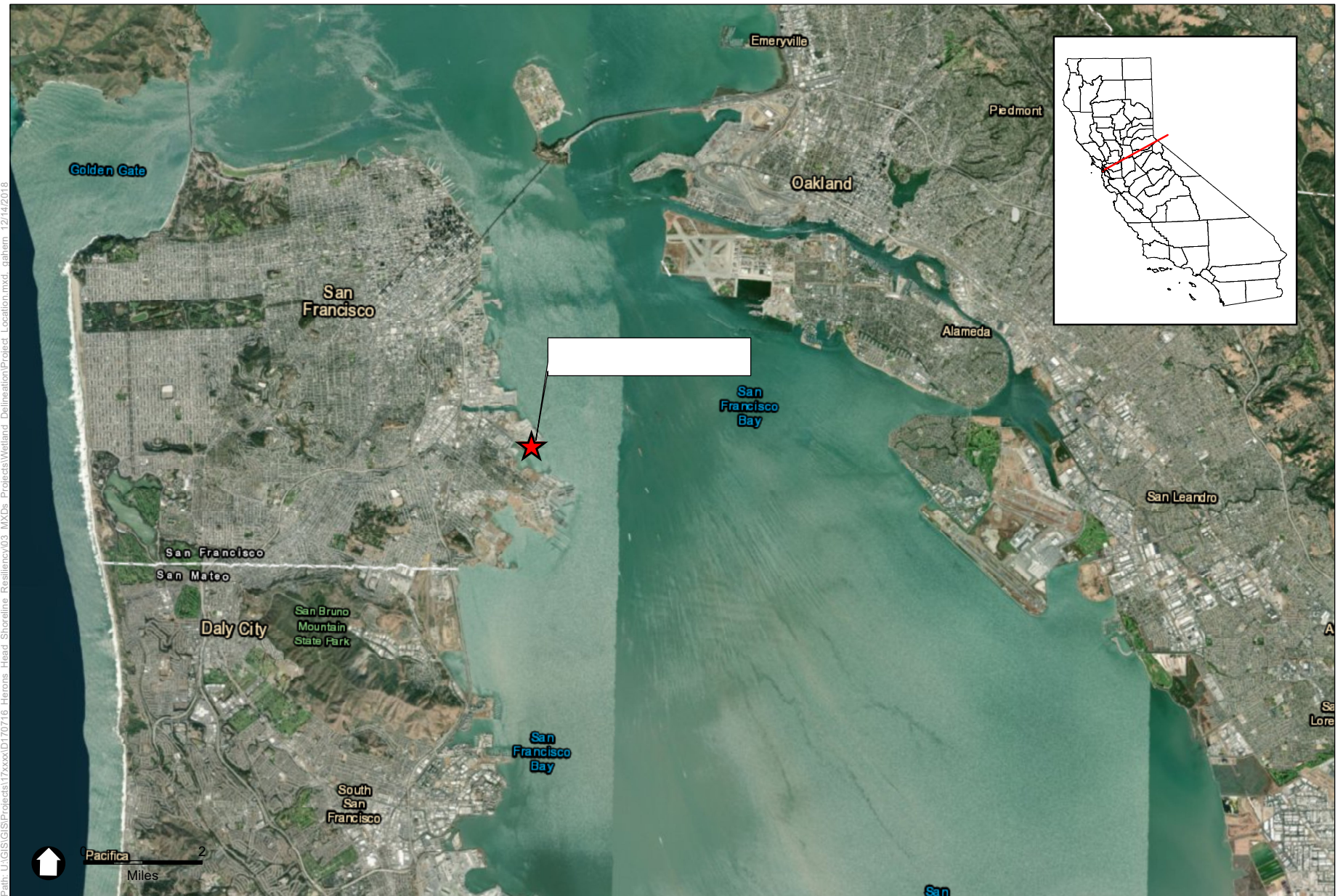
- Drone or aircraft based aerial photography (as described in Section 4.1)
- Mapping grade GPS for mapping vegetation quadrat locations and for ground-truthing aerial imagery
- 1 m<sup>2</sup> quadrat
- Camera for photo documentation

## **5.0 ADAPTIVE MANAGEMENT ACTIONS**

If monitoring data indicate that performance criteria are not being met, adaptive management actions will be identified and implemented as appropriate and in consultation with the project's Technical Advisory Committee and the applicable resource and regulatory agencies. The actions taken will depend on the specific circumstances and objectives and may include modification of physical features or substrates, measures to limit invasive species, measures to enhance target vegetation, or other interventions deemed appropriate and necessary. Examples of these measures include, but are not limited to, actions such as those below:

- Lowering the beach berm at the tidal channel inlet if the berm impedes tidal flow. Hand-labor or other non-mechanized means would be used to minimize disturbance
- Adding gravel if appropriate to increase the level of shoreline protection, if this can be done using water-based access
- Replacement of California seablite (and/or other native wetland vegetation) plantings that die within the 5-year monitoring period
- Control of invasive plants in planted areas during the 5-year monitoring period. Invasive plant control actions will be guided by a long-term shoreline vegetation plan being developed as part of a separate but coordinated native plant restoration effort undertaken by the Port.





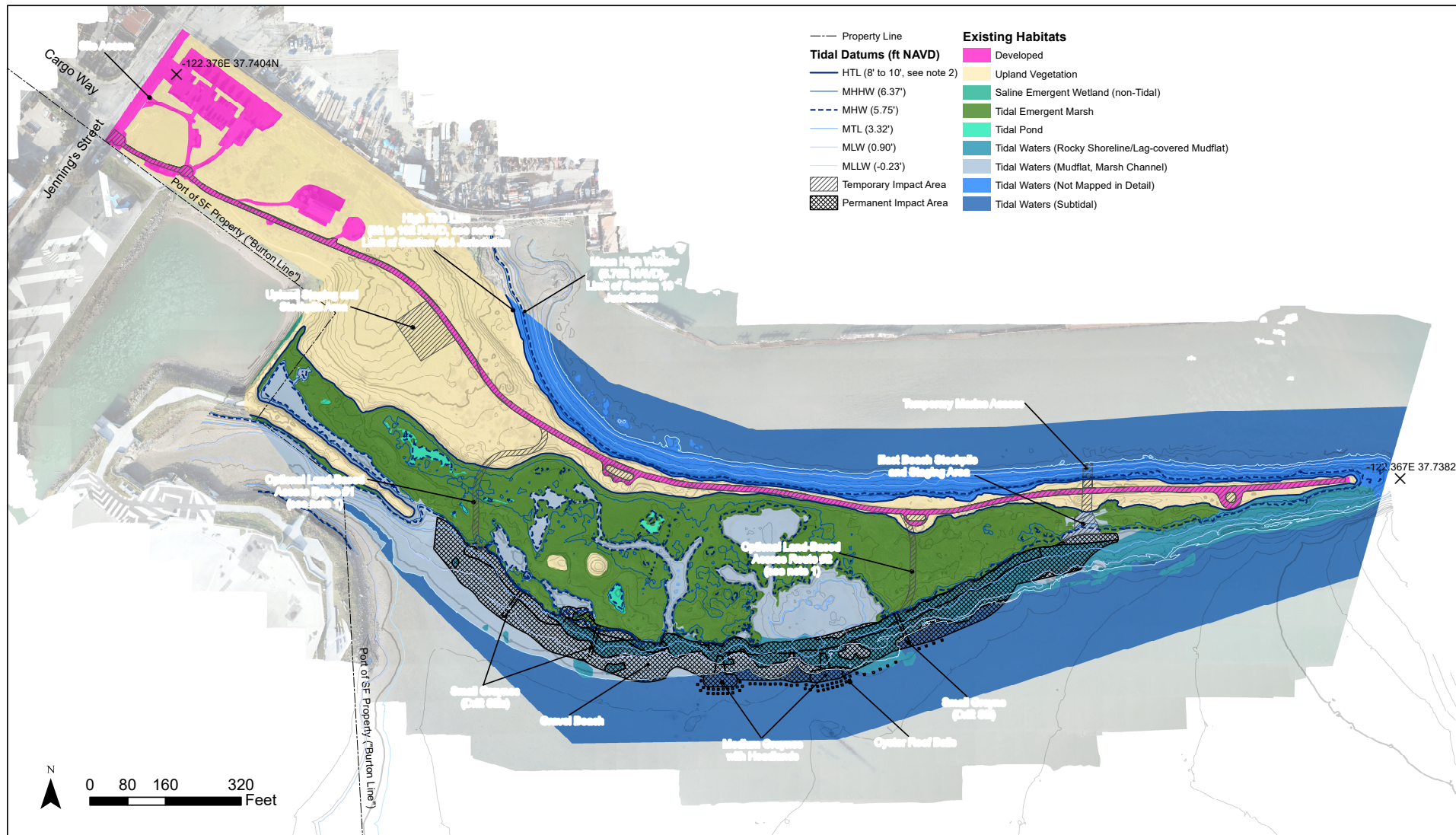
SOURCE: aerial (ESRI), study area (ESA 2018)

NOTE: project site located within USGS Hunters Point and San Francisco South Quads

Heron's Head Shoreline Resiliency Project

**Figure 1**  
Project Location

Path: I:\SF-Head\GIS\MapDocs\Monitoring\Part2\_Editing\Habitats and Project Elements\_v2.mxd, sxdms, 4/29/2020



SOURCE: ESRI (background imagery)  
 Prepared by E. Divita (ESA) on April 8, 2020. Based on Wetland Delineation Prepared by ESA (2019)

NOTES:  
 1) Contractor may use up to one of the two optional land-based access routes marked on this drawing.  
 2) High Tide Line (HTL) varies from approximately elevation 8ft to 10ft NAVD due to variation in wave exposure and tidal connectivity across the site.



Heron's Head Shoreline Resilience Project Name

**Figure 2**  
 Existing Habitats  
 and Project Elements

**Table 1: Monitoring Schedule**

<b>Monitoring Element</b>	<b>Year 0<sup>1</sup></b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>	<b>Year 7</b>	<b>Year 8</b>	<b>Year 9</b>	<b>Year 10</b>
Physical condition and processes (visual/photo-documentation)	X	X	X	X	X	X	X	X	X	X	X
Physical condition and processes (mapping, quantitative)	X		X		X		X		X		X
Oyster colonization		X	X	X	X	X		X			X
California seablite	X	X	X	X	X	X					
Avian species		X	X	X	X	X					
Marsh vegetation (qualitative)		X	X	X	X	X					
Marsh vegetation (mapping, quantitative)		X		X		X					

<sup>1</sup> Year of construction/installation

**Table 2: Monitoring Program Summary**

<b>METRICS</b>	<b>METHODS</b>	<b>EQUIPMENT</b>	<b>TIMING</b>
<b>Beach Performance, Shoreline Erosion, Tidal Marsh/Pond Preservation</b>			
Physical condition of tidal marsh, tidal ponds, beach, groynes, oyster reef elements	Visual observation/photo documentation	Camera	Post-construction (Year 0, w/in 3 months of completion)  Annual (years 1 through 10)
Occurrence of new eroding marsh scarp formation	Visual survey, mapping, photodocumentation	Mapping grade GPS, camera	Annual (years 1 through 10)
Photo-documentation of field markers to detect significant wave events	Visual observation/photo documentation	Field markers, camera	
Elevations of beach berm, groynes, and oyster reef elements	Ground survey	RTK GPS or Total Station	Post-construction (Year 0, w/in 3 months of completion)
Change in volume of beach (cubic yards per linear foot) along the length of shoreline	DEM differencing analysis	Drone or aircraft-based photography and topographic survey, CAD and/or GIS software	Years 2, 4, 6, 8 and 10 (unless off-year monitoring is triggered by a significant wave event)
Estimated rates of longshore and cross-shore transport of beach sediment	Interpretation of DEM differencing analysis and site observations		
Areal extent of beach, tidal marsh, and tidal flats; location/movement of field markers	Aerial photo and topographic survey		
Water levels in ponds at low tide	Photo documentation with coincident water surface elevation survey	RTK GPS or Total Station, camera	
<b>Colonization of Oyster Reef Elements</b>			
Density of adult and juvenile oysters	Count on 10 shells per bag and w/in quadrats	Sample shell bags, 10 cm <sup>2</sup> quadrats	June or July of years 1, 2, 3, 4, 5, 7 and 10
Size distribution of adult oysters	Measure longest shell dimension in mm	Digital caliper	
Percent cover of oysters, percent cover of other sessile epifauna	Estimate on 10 shells per bag and w/in quadrats	Sample shell bags, 10 cm <sup>2</sup> quadrat, 10 cm <sup>2</sup> point-intercept grid	
Percent cover of marine flora	Visual estimate	Visual observation	
Percent native/non-native taxa	Count on 10 shells per bag and w/in quadrats	Sample shell bags, 10 cm <sup>2</sup> quadrats	

**Table 2: Monitoring Program Summary**

<b>METRICS</b>	<b>METHODS</b>	<b>EQUIPMENT</b>	<b>TIMING</b>
<b>California Seablite</b>			
Location of assemblages	Record locations	Mapping grade GPS	Initial survey in fall after planting
Areal extent of seablite	Measure length/width in cm	Meter stick	Twice annually in late winter and fall (years 1, 2, 3, 4, and 5)
Height of plants	Measure height in cm	Meter stick	
Percent survival of plantings	Count live/dead plants w/in planted areas	Visual observation	
Proportion of flowering branches	Visual estimate	Visual observation	
Condition of arbors	Visual assessment	Visual observation	
Overall condition	Photo documentation	Camera	
<b>Avian Species</b>			
Abundance and species richness	Record number of individuals of each species observed	Spotting scope, binoculars, mapping grade GPS for mapping observation points	Quarterly (years 1, 2, 3, 4 and 5)
Behavioral observations	Record all behaviors observed; note observed species/taxonomic group associations with sub-habitats		
<b>Marsh Vegetation</b>			
Overall condition	Visual survey, photo documentation	Camera	Annual (years 1, 2, 3, 4 and 5)
Areal extent of tidal marsh vegetation by cover class	Aerial photo interpretation, ground truthing	Drone or aircraft-based aerial photography; ground survey	Bi-annual (years 1, 3 and 5)
Total percent cover	Measure in quadrats along beach crest, and w/in tidal marsh, revegetated areas, restoration plantings	1 m <sup>2</sup> quadrat	
Relative percent cover by species			
Percent native/non-native species			
Species richness			
Mean cover height			
Cover density			
Percent cover of invasive <i>Limonium</i> and other invasive plant species			



**SAN FRANCISCO BAY**  
RESTORATION AUTHORITY

April 17<sup>th</sup>, 2019

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

RE: San Francisco Bay Restoration Authority Grant Application

Dear Applicant:

Congratulations, your application for Heron's Head Park Shoreline Resilience is being recommended for partial funding! This grant round was very competitive; the San Francisco Bay Restoration Authority received 15 applications requesting over \$81 million, and we were unable to fully fund all worthy projects.

The staff recommendation will be presented to the Authority's Governing Board for approval at a public meeting. The Authority will assign a project manager to prepare the written staff recommendation. The project manager will be in touch with you in the coming weeks.

If the Authority approves a grant for this project, your assigned project manager will send you a grant agreement. You may not begin work under the grant until the grant agreement is fully executed and certain conditions have been satisfied.

We look forward to working with you on this project. If you have any questions, or would like to discuss before your project manager reaches out, please reach out to [grants@sfbayrestore.org](mailto:grants@sfbayrestore.org).

Sincerely,

Sam Schuchat  
Executive Officer



**SAN FRANCISCO BAY**  
RESTORATION AUTHORITY

**MEMORANDUM**

**DATE:** June 07, 2019

**TO:** Governing Board  
San Francisco Bay Restoration Authority

**FROM:** Sam Schuchat, Executive Officer  
Matt Gerhart, Program Manager  
San Francisco Bay Restoration Authority

**SUBJECT: Staff's Recommendation on Projects to be Considered for Funding through Grant Round 2**

In response to its second grant solicitation, the San Francisco Bay Restoration Authority (Authority) received 15 applications requesting a total of approximately \$83 million, of which \$57 million was requested by the Santa Clara Valley Water District for the South San Francisco Bay Shoreline Project. The authority has approximately \$21.5 million available to authorize for Round 2 projects.

Staff and members of the Advisory Committee reviewed and scored the applications and obtained additional information from applicants, as needed. Based on this process, staff developed the following list of projects to be recommended for funding in Grant Round 2:

- Tiscornia Marsh Restoration and Sea Level Rise Adaptation Project
- South San Francisco Bay Shoreline Project (multi-year funding of approx. \$11 million/year)
- Lower Walnut Creek Restoration Project
- Coyote Hills Restoration and Public Access Project
- Heron's Head Park Shoreline Resilience Project (partial funding)

Measure AA requires that revenue be allocated to projects throughout the region, with 50% of funds allocated to the four Bay Area regions in proportion to each region's share of the Bay Area's population, as determined in the 2010 census, and 50% allocated without regard to county. The minimum percentages that will be allocated to each of the four Bay Area regions are listed below:

- North Bay (Sonoma, Marin, Napa and Solano Counties) = 9% minimum allocation;
- East Bay (Alameda and Contra Costa Counties) = 18% minimum allocation;
- West Bay (City and County of San Francisco and San Mateo County) = 11% minimum allocation; and
- South Bay (Santa Clara County) = 12% minimum allocation.

SFBRA Grant Round 2 Staff Funding Recommendations

Organization	Partner Entities	Project Name	Project Summary	Average Score	Amount Requested	Amount Recommended: This Fiscal Year	Amount Recommended: Future Fiscal Years
Marin Audubon Society	City of San Rafael, Marin County BayWAVE, Shore Up Marin, San Francisco Bay Trail, San Francisco Bay Joint Venture, STRAW, Friends of San Rafael, Marin Community Foundation	Tiscornia Marsh Restoration and Sea Level Rise Adaptation	Prepare technical studies, refine the design, conduct CEQA review and public outreach for a sea level rise adaptation project that will expand marsh habitat and increase flood protection and provide public access for the underserved Canal community.	91	\$968,916	\$968,916	
Santa Clara Valley Water District	U.S. Army Corps of Engineers, California State Coastal Conservancy, U.S. Fish and Wildlife Service	South San Francisco Bay Shoreline: Economic Impact Area 11	The Project is a partnership between the District, U.S. Army Corps of Engineers, California State Coastal Conservancy and U.S. Fish and Wildlife Service, and is located in the City of San José, Santa Clara County. The Project aims to restore approximately 2,900 acres to its original tidal action and baylands habitat; provide 1-percent coastal flood risk management including improved shoreline resilience against projected sea level rise; and provide recreational enhancement opportunities and San Francisco Bay Trail connections.	89.33	\$57,026,673	\$11,000,000	\$46,026,673
Contra Costa County Flood Control and Water Conservation District	John Muir Land Trust	Lower Walnut Creek Restoration	The Project will restore and enhance brackish tidal wetlands and adjacent uplands along the southern shore of Suisun Bay, Walnut Creek and Pacheco Creek. The Project will improve habitat quality, diversity, and connectivity along 3.2 miles of creek channel (up to 328 acres). The Project provides flood protection that will be sustainable with natural sedimentation processes. Public trails and associated amenities will offer visitors opportunities for wildlife-compatible recreation, environmental educational and broad vistas of the Project area, Suisun Bay and Mount Diablo.	88.67	\$7,929,855	\$7,929,855	
East Bay Regional Park District		Coyote Hills Restoration and Public Access	The Coyote Hills Restoration and Public Access Project will restore rare high value habitat along the Bay margin including wet meadow, seasonal wetland, coastal prairie, willow thicket and mixed riparian forest habitat and provide public access on 306 acres expanding the eastern park boundary.	82	\$450,000	\$450,000	



SFBRA Grant Round 2 Staff Funding Recommendations

Organization	Partner Entities	Project Name	Project Summary	Average Score	Amount Requested	Amount Recommended: This Fiscal Year	Amount Recommended: Future Fiscal Years
Port of San Francisco	Literacy for Environmental Justice, San Francisco State University - Estuary & Ocean Science Center	Heron's Head Park Shoreline Resilience	The Port proposes to plan, permit, and construct a living shoreline at Heron's Head Park to control erosion, protect wetland habitat and upland public access, improve ecological function and biodiversity, and enable adaptation to sea level rise. The project will include planting, monitoring and stewardship.	84.75	\$3,456,600	\$1,100,000	
City of Palo Alto	Palo Alto Open Space, Parks and Golf Administration, and Baylands Comprehensive Conservation Plan Stakeholder Advisory Group	Renzel Marsh Restoration and Enhancement	Design and permitting for the restoration of the 160-acre Renzel Marsh complex, including enhanced tidal influence, tidal marsh restoration, and exploration of upland/transitional wetland restoration options using treated wastewater effluent for irrigation. Multiple benefits of this project include restoration and enhancement of low-quality tidal marsh; increased tidal action for improved water quality and flood risk reduction; new trails for recreation and education; and demonstration of cost-effective contaminant removal/sea level rise (SLR) adaptation strategies, via green infrastructure.	78.75	\$956,250		
East Bay Regional Park District	City of Richmond	Point Molate Shoreline Restoration and Public Access	Construct 1.0 mile of San Francisco Bay Trail on the Point San Pablo shoreline; provide improved public access to Point Molate Beach Park; remove approx. 800 liner feet of shoreline debris; and restore and enhance approx. 10,000 sq. ft. of shoreline beach, grassland and coastal scrub.	77.75	\$2,500,000		

**TO:** Angela Calvillo, Clerk of the Board of Supervisors  
**FROM:** Boris Delepine, Port of San Francisco  
**DATE:** 1/10/2023  
**SUBJECT:** Accept and Expend Resolution for Subject Grant  
**GRANT TITLE:** Heron's Head Park Shoreline Resilience Project,  
San Francisco Bay Restoration Authority Grant

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

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

X Grant information form, including disability checklist

X Grant budget

X Grant application

X Grant award letter from funding agency

NA Ethics Form 126 (if applicable)

NA 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).