

File No. 210687

Committee Item No. 6

Board Item No. 36

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Government Audit and Oversight

Date: July 1, 2021

Board of Supervisors Meeting:

Date: July 13, 2021

Cmte Board

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

OTHER

- | | | |
|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Port Presentation – July 1, 2021</u> |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <u>Port Commission Reso No. 21-17 – April 13, 2021</u> |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Prepared by: John Carroll

Date: June 25, 2021

Prepared by: John Carroll

Date: July 9, 2021

Prepared by: John Carroll

Date: _____

1 [Accept and Expend State Grant - California State Ocean Protection Council - Heron's Head
2 Park Shoreline Resilience Project - \$1,667,000]

3 **Resolution authorizing the Port of San Francisco to accept and expend a grant in the**
4 **amount of \$1,667,000 from the California State Ocean Protection Council to fund the**
5 **Heron's Head Park Shoreline Resilience Project for the period of July 15, 2021, through**
6 **May 31, 2025.**

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

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

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

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

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

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

1 WHEREAS, Proposition 68, The California Drought, Water, Parks, Climate. Coastal
2 Protection and Outdoor Access for All Act (“Proposition 68”) was passed by the voters
3 in 2018; and

4 WHEREAS, The Ocean Protection Council, a division of the California Natural
5 Resources Agency, is charged with awarding and administering grant funds generated by
6 Proposition 68 for projects that implement nature-based solutions and other sea-level rise
7 adaptation strategies to build coastal resiliency; and

8 WHEREAS, On November 13, 2020, the Port submitted an application for grant funds
9 from the Ocean Protection Council to construct a natural infrastructure-based shoreline to
10 prevent erosion and enable sea-level rise adaptation at Heron’s Head Park; and

11 WHEREAS, At its February 21, 2021, meeting, the Ocean Protection Council adopted
12 a resolution authorizing a grant to the Port in the amount of \$1,667,000 (“Grant Agreement”)
13 for the Heron’s Head Park Shoreline Resilience project; the resolution was adopted by the
14 Ocean Protection Council pursuant to, and is included in, the Ocean Protection Council’s
15 February 21, 2021 staff recommendation, a copy of which is on file with the Port of San
16 Francisco, the Ocean Protection Council, and the Clerk of the Board of Supervisors; and

17 WHEREAS, The Ocean Protection Council grant agreement provides
18 approximately 52% of the estimated cost to construct the Heron’s Head Park shoreline
19 stabilization and living shoreline elements of the project; and

20 WHEREAS, The Ocean Protection Council grant does not require matching funds fund
21 from the Port; and

22 WHEREAS, Port staff continue to seek additional funds in order to begin construction
23 of this important project; and

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

1 WHEREAS, On April 13, 2021, the San Francisco Port Commission through Resolution
2 No. 21-17 authorized Port to accept and expend the grant and the Port Executive Director or
3 her designee to negotiate and execute the Grant Agreement and all other instruments
4 necessary to obtain and expend the grant monies on behalf of the Port; now, therefore, be it

5 RESOLVED, That the Board of Supervisors authorizes the Port to accept and expend a
6 grant in the amount of \$1,667,000 from the Ocean Protection Council to fund Heron's Head
7 Park Shoreline Resilience Project; and, be it

8 FURTHER RESOLVED, That, pursuant to Charter, Section 9.118, the Board of
9 Supervisors approves the Grant Agreement in substantially the form as on file with the Clerk
10 of the Board of Supervisors in File No. 210687 and authorizes the Port Executive Director or
11 her designee to conduct all negotiations, and execute and submit all documents, including but
12 not limited to applications, agreements, amendments, payment requests, and so on, that may
13 be necessary for acceptance and expenditure of the grant and fulfillment of the grant terms
14 that the Port Executive Director determines, in consultation with the City Attorney, are in the
15 best interests of the City and do not materially increase the obligations or liabilities of the City,
16 are necessary or advisable to effectuate the purposes of the grant or this Resolution, and are
17 in compliance with all applicable laws, including the City's Charter; and, be it

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

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

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Recommended:

_____/s/_____

Executive Director, Port of San Francisco

Approved:

_____/s/_____

Mayor

Approved:

_____/s/_____

Controller

Heron's Head Park Shoreline Resilience Project

Accept & Expend Ocean Protection Council Grant

Accept Donation of Materials

Item 5. Accept and Expend Gift of Material for Beach Construction

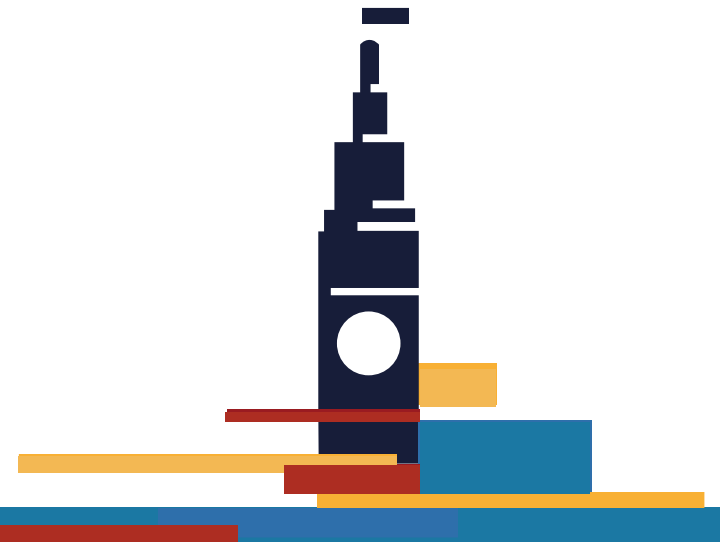
Item 6. Accept and Expend Grant from the California Ocean Protection Council.

July 1, 2021

Presented By: Carol Bach

Environmental Affairs Manager

Port of San Francisco



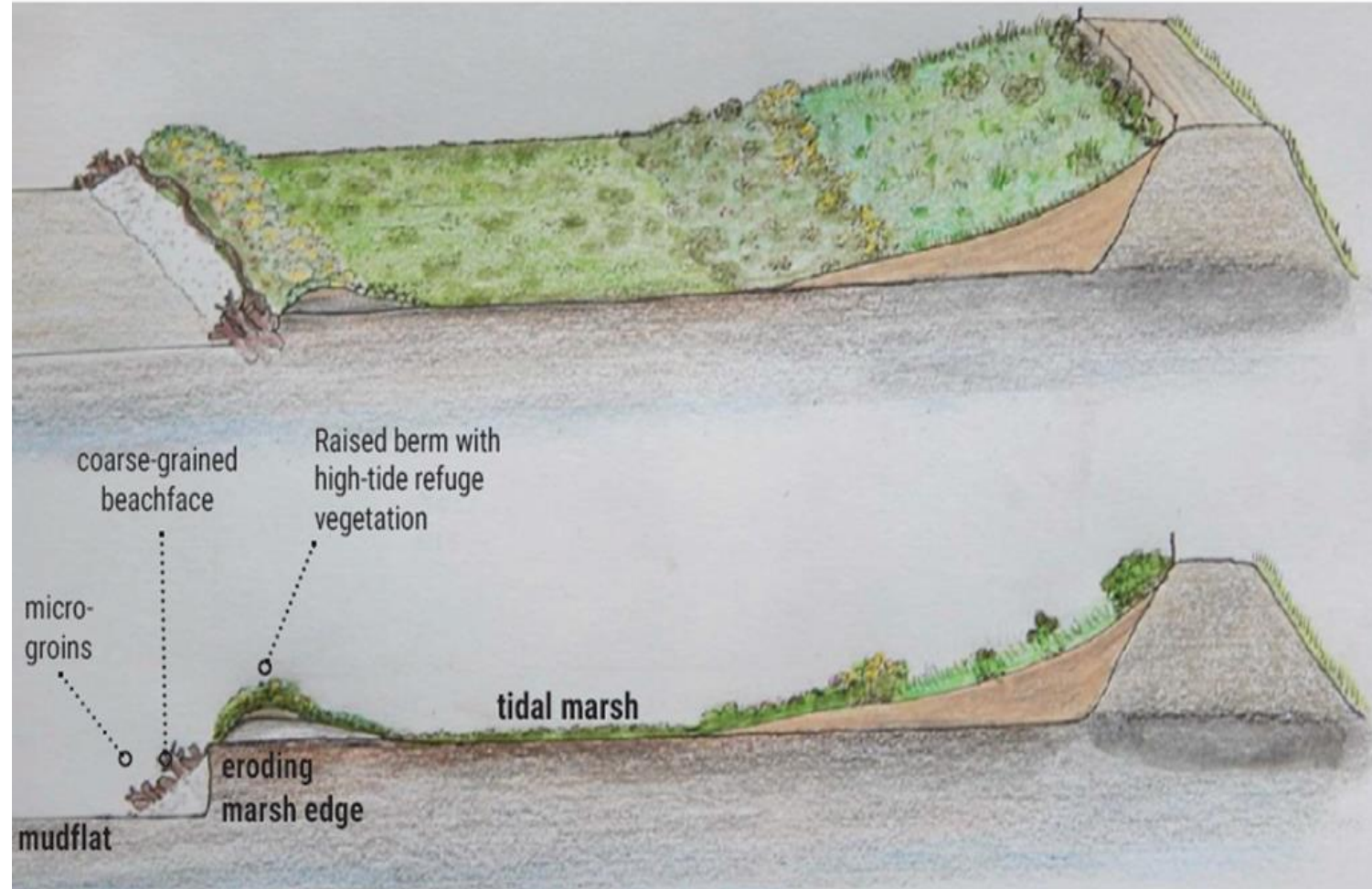
HERON'S HEAD PARK

- Constructed 1999, Includes tidal salt marsh and upland open space with trails, picnic and barbeque areas.
- The EcoCenter, created to house public programs, opened in 2015



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.



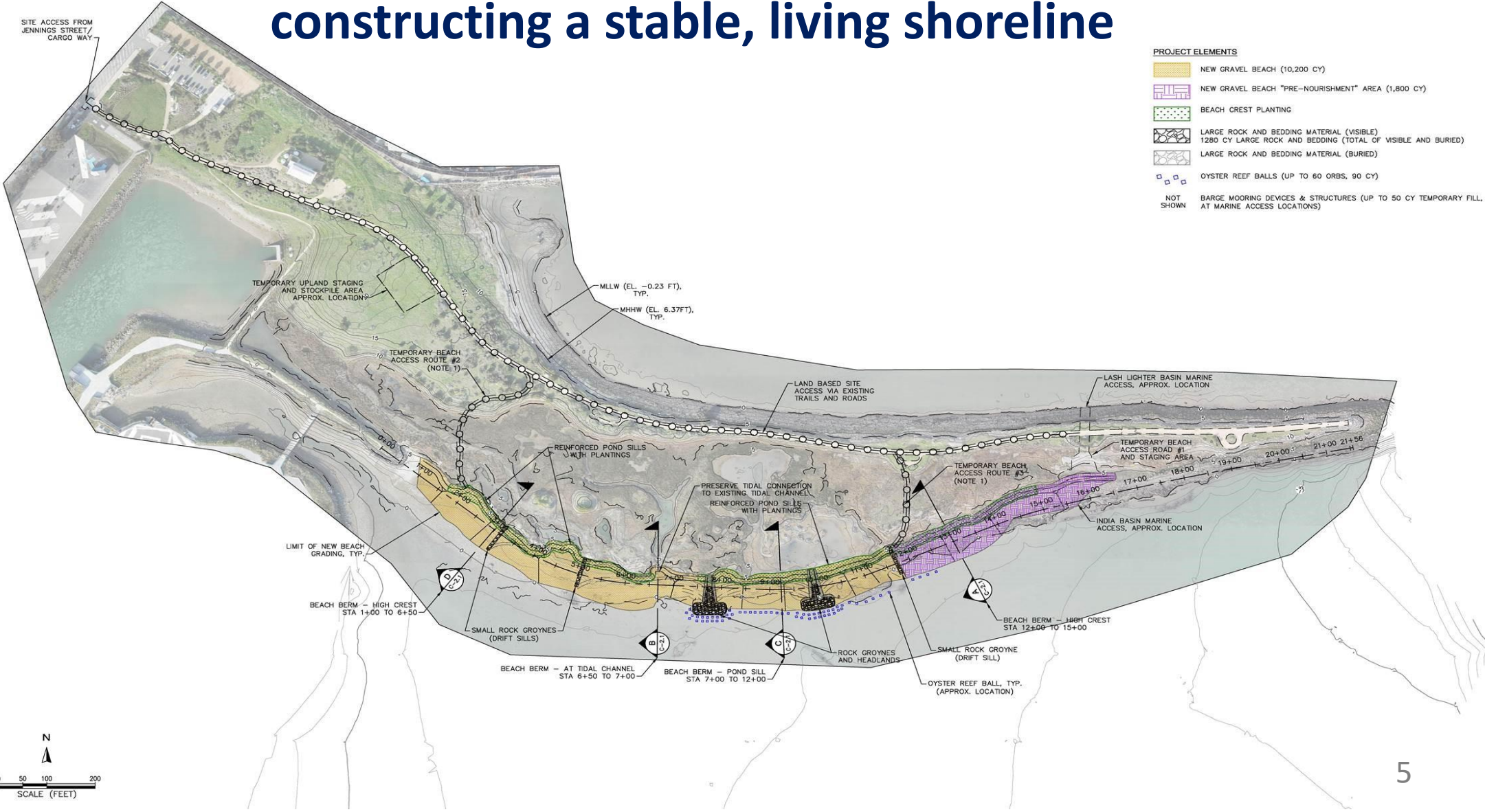
Heron's Head Park Shoreline Resilience Project








Project Elements:

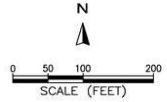
- Dynamically stable sand and gravel beach.
- Oyster reef balls.
- Wetland revegetation.
- Youth employment in hands-on habitat restoration and community outreach.
- Post-construction monitoring and habitat stewardship.



Protect southern shoreline from erosion by constructing a stable, living shoreline

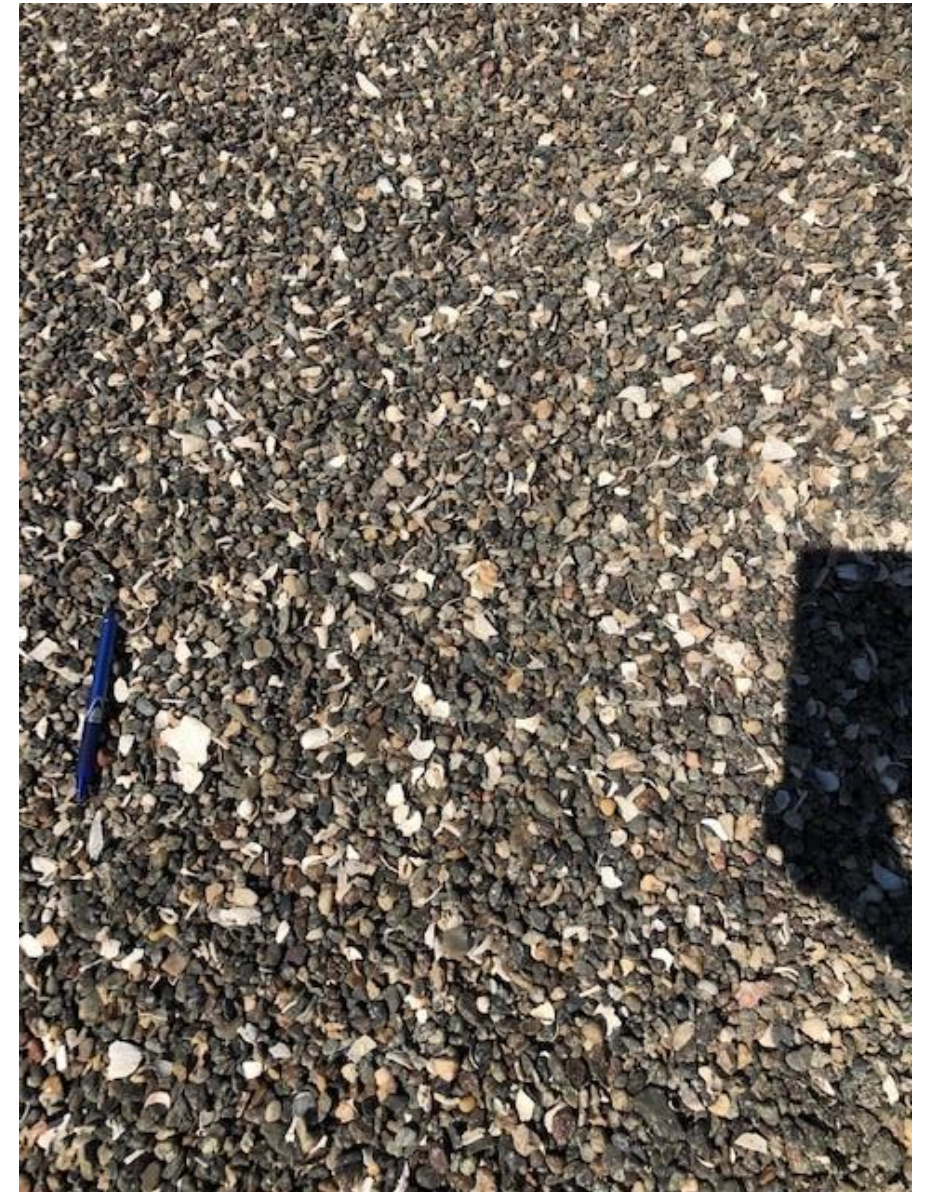


- PROJECT ELEMENTS**
-  NEW GRAVEL BEACH (10,200 CY)
 -  NEW GRAVEL BEACH "PRE-NOURISHMENT" AREA (1,800 CY)
 -  BEACH CREST PLANTING
 -  LARGE ROCK AND BEDDING MATERIAL (VISIBLE)
1280 CY LARGE ROCK AND BEDDING (TOTAL OF VISIBLE AND BURIED)
 -  LARGE ROCK AND BEDDING MATERIAL (BURIED)
 -  OYSTER REEF BALLS (UP TO 60 ORBS, 90 CY)
 -  NOT SHOWN BARGE MOORING DEVICES & STRUCTURES (UP TO 50 CY TEMPORARY FILL AT MARINE ACCESS LOCATIONS)



Hanson Aggregates Operations

Dredged material is unloaded at the “Pier 92 San Yard”, washed, and sorted.





OCEAN PROTECTION COUNCIL - COASTAL RESILIENCE PROGRAM

OPC approved award of \$1,667,000

- For partial funding of shoreline construction
- Subject to Port Commission Approval
- Subject to Board of Supervisors Approval

Grant Terms and Conditions Include:

- Obligation to monitor maintain through Grant Term of 4 years
- Indemnification and Insurance
- Acknowledgement



Project Phases, Funding and Next Steps

Scope	Schedule	Budget	Funding Status
Wetland habitat restoration Phase 1	Fall 2020 through Fall 2022.	\$297,000	Funded by San Francisco Bay Restoration Authority
Shoreline Construction	August 2022 - January 2023	\$3,160,000	\$1,667,000 award approved by Ocean Protection Council, subject to Board of Supervisors approval.
			\$1,493,000 recommended for award by the California Dept. of Fish & Wildlife, subject to Port Commission and Board of Supervisors approval.
Wetland habitat restoration Phase 2	After shoreline construction	\$493,000	Recommended for funding, subject to SFBRA Board, Port Commission, Board of Supervisors approval.
Post-Construction Monitoring: five years	Start at completion of shoreline construction, continue for five years.	\$310,000	Recommended SFBRA funding, subject to SFBRA Board, Port Commission and Board of Supervisors approval.
Total Estimated Project Budget		\$4,260,000	

File Number: _____
(Provided by Clerk of Board of Supervisors)

Grant Resolution Information Form
(Effective July 2011)

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

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

1. Grant Title: Heron's Head Park Shoreline Resilience Project
2. Department: Port
3. Contact Person: Carol Bach Telephone: 415-274-0568
4. Grant Approval Status (check one):
 Approved by funding agency Not yet approved
5. Amount of Grant Funding Approved or Applied for: \$1,667,000
6. a. Matching Funds Required: None
b. Source(s) of matching funds (if applicable):
7. a. Grant Source Agency: Ocean Protection Council
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 about half of the funds needed to construct the shoreline stabilization and living shoreline elements of the project.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

Start-Date: May 2021 End-Date: May 2025

10. a. Amount budgeted for contractual services: \$1,667,00
b. Will contractual services be put out to bid?
c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements?
d. Is this likely to be a one-time or ongoing request for contracting out?
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)

Senior Architect & ADA Coordinator

(Title)

Date Reviewed: May 5, 2021



(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Elaine Forbes

(Name)

Executive Director

(Title)

Date Reviewed: May 5, 2021



(Signature Required)

Attachment 8. Heron's Head Park Shoreline Resilience Project Construction Cost Detail

Construction	Estimated Cost	Notes
1. Mobilization	\$116,000	10% of itemized construction costs
2. Build temp access roads	\$63,000	On-site construction labor
3. Earthwork	\$8,000	Excavate up to 500 cy [E] material, place to form pond sills
4. Gravel & Sand beach (purchased)	\$517,000	Purchase and deliver gravel & sand (11,500 cy)- transportation
4. Gravel beach		Transport donated gravel from Pier 92 (11,100 cy)
5. Sand	\$55,000	Purchase and deliver clean sand (460 cy)
6. Place beach material	\$287,000	On-site construction labor
7. Rock groynes	\$157,000	Purchase, deliver, and place large rock, bedding rock, fabric.
8. Drift sills	\$48,000	Purchase, deliver, and place large rock, cobble
9. Wood habitat features	\$25,000	Lump sum, up to 50 cy.
<u>Repair temporary impacts from construction</u>		
10. repave DG and asphalt path	\$367,000	
11. high marsh plants	\$3,000	Assumes 0.1 ac. high marsh impacted by construction
12. Upland plants	\$14,000	Assumes 0.32acres upland vegetn. impacted by construction
<u>Surveys</u>	\$30,000	
13. Environmental Protection	\$116,000	10% of itemized construction costs
Subtotal	\$1,806,000	
14. Contingency	\$278,000	
Shoreline Construction	\$2,084,000	\$417,000 value of donated material - cost to transport it
15. Construction Inspection	\$250,000	15% of Construction Cost with donation, excluding contingency
16. Biological Monitor	\$110,000	90 days, 10 hr/day, \$120/hr + expenses
17. Oyster Reef Balls (ORBs)	\$60,000	Fabricate 60 ORBs @ \$1,000 ea.
18. Transport	\$120,000	Mobilize marine installation
19. Place ORBs in subtidal	\$60,000	Place ORBs, \$1,000 ea.
Subtotal ORBs	\$350,000	
20. Marsh Planting	\$610,000	purchase, cultivate, plant. 5 yrs. SFBRA grant
21. Post-construction Monitoring*	\$308,000	Monitoring & Adaptive Mngmnt Plan, 5 yrs, SFBRA grant
22. Habitat Stewardship*	\$180,000	Maintain plantings, remove invasives, 5 yrs. SFBRA grant
Subtotal SFBRA Tasks	\$1,098,000	
Total Project Cost	\$3,892,000	

* Currently recommended for award, subject to future project-specific SFBRA Board approval

**State of California
The Natural Resources Agency – GRANT AGREEMENT**

GRANTEE NAME: Port of San Francisco
PROJECT TITLE: Heron’s Head Park Shoreline Resilience
AUTHORITY: California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018
PROGRAM: Ocean Protection Council
AGREEMENT NUMBER: C0875001

PROJECT COMPLETION DATE IS: date that agreement is executed + 4 years

PROJECT TERMINATION DATE IS: completion date + 3 months

Under the terms and conditions of this agreement, the applicant agrees to complete the project as described in the project scope described in Exhibit A, and any subsequent amendments, and the State of California, acting through the Natural Resources Agency pursuant to the Budget Act of 2016, agrees to fund the project up to the total state grant amount indicated.

PROJECT DESCRIPTION: See project description on Page 1 and Exhibit A of the Agreement

Total State Grant not to exceed **\$1,667,000.00** (or project costs, whichever is less)

The Special and General Provisions attached are made a part of and incorporated into the Agreement.

Port of San Francisco

**STATE OF CALIFORNIA
THE NATURAL RESOURCES AGENCY**

By: _____
Elaine Forbes

By: _____
Mark Gold

Title Executive Director, Port of San Francisco

Title Deputy Secretary for Ocean and Coastal Policy

Date _____

Date _____

CERTIFICATION OF FUNDING

AMOUNT OF ESTIMATE FUNDING	AGREEMENT NUMBER	FUND					
\$1,667,000.00	C0875001	6088 - California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Fund of 2018					
ADJ. INCREASING ENCUMBRANCE							
\$							
ADJ. DECREASING ENCUMBRANCE	FUNCTION						
\$	Local Assistance						
UNENCUMBERED BALANCE	Ref Number	Fund	Enactment Year (ENY)	Account Number	Alt Account		
\$	001	608800002	2018	5432000	000000000		
Program	PCBU	Project	Activity	RPTG Structure	SVC Loc	Agency Use	Budget Period
0320	0540	05400C0875XX	31875	05400001	31875	B7601	2019

I hereby certify upon my personal knowledge that budgeted funds are available for this encumbrance

SIGNATURE OF ACCOUNTING OFFICER

DATE

GRANT AGREEMENT

State of California - The California Natural Resources Agency/Ocean Protection Council

Grantee Name: Port of San Francisco

Project Title: Heron’s Head Park Shoreline Resilience

Agreement Number: Agreement No. C0875001

Authority: Proposition 68, the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018, Public Resources Code section 80000, implementing Public Resources 35500 *et seq.*, and 35650.

Program: California Ocean Protection Council

PROJECT DESCRIPTION

Heron’s Head Park is owned and managed by the Port of San Francisco (Port) and located in the economically disadvantaged Bayview Hunters Point neighborhood. It is an approximately 21-acre peninsula comprised of 14 acres of public open space, including an environmental education center, and approximately 7 acres of tidal wetlands, tidal ponds, mudflats, and rocky intertidal shoreline. Heron’s Head Park provides valuable tidal marsh habitat for wildlife and equitable, convenient, and affordable access to natural coastal open space, education, and recreation in a neighborhood where such resources are scarce.

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

- Construct a dynamically stable coarse beach along the eroding shoreline.
- Fabricate and install oyster reef structures.
- Restore tidal salt marsh plant habitat.
- Monitor project outcomes, share findings, and take adaptive management measures.

The Project will restore former type and extent of habitat at Heron’s Head Park and provide new habitat in the form of coarse sand/gravel beach, new wetland vegetation to reinforce shoreline and pond edges, and subtidal oyster reefs. The coarse material shoreline will enable wetlands to migrate with rising sea level so that some wetland habitat and key public access features remain through mid-century. With the proposed monitoring and stewardship, including ongoing removal of non-native species and replanting with locally-adapted native wetland/transition zone plants, the Project will combat a significant infestation by invasive Algerian sea lavender, employ local youth, and provide volunteer opportunities for visitors and students. The Project will engage the surrounding community in implementation and demonstrate how marsh-fringing beach and other living shoreline elements can be integrated to create a

resilient shoreline, thereby contributing to statewide efforts to develop technical understanding and implementation of natural systems-based approaches to shoreline stabilization.

Scope of Work

A Scope of Work, Project Schedule and Project Budget (“Work Program”) are described in **Exhibit A** and attached to this Grant Agreement and incorporated by reference. Grantee will fully perform all work necessary to complete the Project, as identified in the Work Program. A Work Plan describing the project at a more detailed scale may be developed by the Grantee and Project Manager as necessary to ensure proper completion of grant deliverables.

Project Budget Details

The Grantee shall expend Grant Funds in the manner described in the Work Program, including the Project Budget, approved by the State. The Grantee may propose adjustments to the Project Budget, as described in section C. 4., below, if the total amount of the grant remains the same. If the proposed adjustments are approved by the State, they will be self-executing and will automatically be part of the Agreement and binding on Grantee, and incorporated into the Project Budget in Exhibit A.

TERMS AND CONDITIONS OF GRANT

Special Provisions

1. Recipients of Grant Funds shall include acknowledgement of grant funding in all materials produced with grant funds. The California Natural Resources Agency and California Ocean Protection Council (“OPC”) shall have the right to republish any material generated by this grant.
2. Recipients of Grant Funds shall ensure that materials produced for online posting and distribution are accessible for people with disabilities, including, but not limited to, blindness and low vision, and deafness and hearing loss, in compliance with Web Content Accessibility Guidelines 2.0 Level AA, or a subsequent version, and section 508 of the Rehabilitation Act.

General Provisions

A. Definitions

1. The term “Act” means Proposition 68, the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018.
2. The term “Agreement” means this Grant Agreement.
3. The term “Application” means the individual application form, its required attachments for grants pursuant to enabling legislation and/or program and any applicable materials supplied to by the application to the OPC or California Natural Resources Agency prior to award.
4. The term “Authorization” means the OPC adopted resolution included in the staff recommendation attached as Exhibit B. This agreement is executed under that authorization.
5. The term “Benchmark” means specific tasks or project deliverables identified in the project Work Plan as approved by the state.
6. The term “Completion Date” means the date by which all activity for the project must be concluded. Work performed after this date cannot be reimbursed.
7. The term “Executive Director” means the Executive Director of OPC, who is also the California Natural Resources Agency’s Deputy Secretary for Ocean and Coastal Policy.

8. The term "Grant" or "Grant Funds" means the money provided by the State to the Grantee in this Agreement.
9. The term "Grantee" means an applicant who has a signed agreement for Grant Funds.
10. The term "Nonprofit Organization" means any nonprofit corporation qualified to do business in California, and qualified under Section 501(c)(3) of the Internal Revenue Code.
11. The term "Other Sources of Funds" means cash or in-kind contributions that are required or used to complete the project beyond the Grant Funds provided by this Agreement.
12. The term "Project" means the activity described in the Work Program to be accomplished with Grant Funds.
13. The term "Project Budget" means the State approved cost estimate submitted to the Executive Director of OPC ("Executive Director") as part of the Work Program. The Project Budget shall describe all labor and materials costs of completing each component of the Project. The Project Budget may contain either itemized amounts, or ranges permissible for each item or task described in Project Scope and Work Plan. The Project Budget must include the set administrative and indirect costs agreed upon by the Parties if applicable. For each project component, the Project Budget shall list all intended funding sources including the State's grant and all other sources of monies, materials or labor.
14. The term "Project Manager" means the representative of the State given authorization by the Executive Director to administer and provide oversight of the Grant.
15. The term "Public Agency" means any State of California department or agency, a county, city, public district or public agency formed under California law.
16. The term "Request for Disbursement Form" means the form that will be submitted requesting payment.
17. The term "State" means the California Natural Resources Agency, the OPC or their representatives, or other political subdivision of the State, and includes their officers, agents and employees.
18. The term "Termination Date" means the date by which all invoices and other reporting requirements must be complete.
19. The term "Work Plan" means the description of tasks and related work to be accomplished by the Project.
20. The term "Work Program" means the State approved Work Plan, Project Schedule and Project Budget, as described in Exhibit A.

B. Project Execution

1. Pursuant to the OPC Proposition 68 Grant Guidelines, the Grantee shall comply with all applicable project execution procedures.
2. Subject to the availability of funds, the State hereby grants to the Grantee the sum **\$1,667,000** (Grant Funds) not to exceed the amount stated on the signature page in consideration of and on condition that the sum be expended in carrying out the purposes as set forth in the description of Project in this Agreement and its attachments and under the Terms and Conditions set forth in this Agreement.
3. Grantee shall furnish any and all additional funds that may be necessary to complete the Project.
4. Grantee shall complete the Project before the Completion Date as set forth on the signature page, unless an extension has been granted by the State, and under the Terms and Conditions of this Agreement. Grantee shall complete invoicing and reporting requirements by the Termination Date as

set forth on the signature page, unless an extension has been granted by the State and under the Terms and Conditions of this Agreement.

In the event of circumstances beyond the control of the Grantee, extensions may be requested in advance and will be considered by the OPC, at its sole discretion.

5. Grantee certifies that the Work Program does and will continue to comply with all current laws and regulations which apply to the Project, including, but not limited to, environmental laws, including, but not limited to, California Environmental Quality Act, health and safety codes, and disabled access laws.
6. Prior to the commencement of any work, Grantee agrees to submit in writing to the State for prior approval any deviation from the original Work Program per Exhibit A and/or the Application. Changes in the Work Program must continue to meet the need cited in Exhibit B or they will not be approved. Any modification or alteration in the Work Program on file with the State must be submitted to the State for approval.
7. Grantee shall provide status reports of the work at the request of the State.

C. Project Costs

1. Any Grant Funds provided to Grantee under this Agreement will be disbursed for eligible costs as outlined in OPC General Conditions and Budget Guidelines for Grantees, on a reimbursement basis, as follows, but shall not exceed in any event the amount set forth on the signature page of this Agreement:
 - a. Up to Ten percent (10%) of the reimbursement amount will be held back and issued as a final payment upon completion of the Project and receipt by the State of a detailed summary of Project costs from the Grantee found to be satisfactory by the State and a copy of the final products generated with Grant Funds.
 - b. If all or any part of the project to be funded under this agreement will be performed by third parties under contract with the Grantee, then the Grantee should, prior to executing an agreement for services, seek the approval of the Executive Director or designee on the selection of the third party. The Grantee shall then comply with the above paragraph regarding submission and approval of a work program prior to project commencement.
2. Payment Documentation:
 - a. All payment requests must be submitted using a completed Request for Disbursement Form. 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. The expenses shall be organized by task number from the work plan. The form shall also indicate, per task number from the Work Plan, cumulative expenditures to date, expenditures during the reporting period, and the unexpended balance of funds under the grant agreement. Each payment request must also include proof of payment such as receipts, paid invoices, canceled checks or other forms of documentation demonstrating payment has been made. An authorized representative of the Grantee shall sign the form.
 - b. In connection with submission of each form, the Grantee shall also submit, unless the Executive Director makes a specific exemption, the following:
 - (1) An itemized ledger, in a form approved by an authorized representative, detailing all direct expenditures incurred by the Grantee and any subgrantee.
 - (2) Receipts, travel expense vouchers and claim forms for travel expenses incurred by the Grantee and any subgrantee. The State will reimburse the Grantee for expenses necessary to the

project when documented by appropriate receipts. The State 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, 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 State 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.

- (3) Receipts or any other source documents for direct expenditures for any purchase of equipment or materials by the Grantee and any subgrantee.
 - (4) A supporting progress report from the Grantee summarizing the work that was completed during the invoice period and the current status of the work for which disbursement is sought, including work by any subgrantee, and comparing it to the status required by the Work Program (e.g. budget, timeline, tasks).
- c. Notwithstanding the foregoing, the Executive Director may request and the Grantee shall provide receipts or other source documents for any other direct expenditure or cost as described in the ledger, as and when necessary to resolve any substantial issue concerning reimbursement.
 - d. The Grantee's failure to fully execute and submit a Request for Disbursement form, including attachment of supporting documents, may relieve the State of its obligation to disburse funds to the Grantee unless and until the Grantee corrects all deficiencies.
 - e. Any payment request that is submitted without the required itemization and documentation will not be authorized. If the payment request package is incomplete, inadequate or inaccurate, the State will inform the Grantee and hold the payment request until all required information is received or corrected. Grantee shall submit a payment request no more frequently than monthly but no less frequently than quarterly (assuming activity occurred within that quarter). Any penalties imposed on the Grantee by a contractor, or other consequence, because of delays in payment will be paid by the Grantee and is not reimbursable under this Agreement.
3. Grant Funds in this award have a limited period in which they must be expended. Grantee expenditures funded by the State must occur before the Completion Date as indicated on the signature page of this Agreement.
 4. Except as otherwise provided herein, the Grantee shall expend Grant Funds in the manner described in the Work Program, including the Project Budget, approved by the State. The Grantee is permitted to adjust any of the ranges in the Project Budget, other than administrative and indirect costs, upwards or downwards for a total of 10% of the amount of the Grant, so long as the sum of the whole Project Budget does not exceed the approved amount of funding for the Work Program. Grantee will provide notice of any such adjustment to the State explaining how it plans to account for and manage the adjustment.

However, if Grantee seeks to adjust the allocations within the Budget ranges upwards or downwards more than 10%, create or amend the ranges, or to delete ranges entirely, a request must be submitted in writing to the Project Manager. The Project Manager, along with the Project Manager's supervisor, will consider whether to approve the Grantee's request for new allocations and ranges. Upon approval of such a request by OPC staff, the new budget ranges and allocations will become self-executing and will automatically be part of the Agreement and binding on Grantee, and incorporated into the Project Budget in Exhibit A. In any event, the total amount of the Grant Funds may not be increased, except by written amendment to this agreement.

D. Project Administration

1. Grantee shall promptly provide Project reports with payment requests and upon request by the State. In any event Grantee shall provide the State a report showing total final Project expenditures with the final Request for Disbursement and required closing documents.
2. Grantee shall submit all documentation for Project completion, as applicable, and final reimbursement by the Termination Date.
3. Final payment is contingent upon State verification that Project is consistent with Project Work Program as described in Exhibit A, together with any State approved amendments.
4. This Agreement may be amended by mutual agreement in writing between Grantee and State. Any request by the Grantee for amendments must state the amendment request and reason for the request. The Grantee shall make requests in a timely manner and in no event less than sixty (60) days before the effective date of the proposed amendment.
5. Grantee must report to the State in the Project Budget all sources of other funds for the Project.

E. Project Termination

1. Prior to the completion of the Project, either party may terminate this Agreement by providing the other party with thirty (30) days' written notice of such termination. The State may also immediately terminate this Grant for any reason at any time if it learns of or otherwise discovers that there is a violation of any state or federal law or policy by the Grantee which effects performance of this or any other grant agreement or contract entered into with the State.
2. If the State terminates without cause the Agreement prior to the end of the Completion Date, the Grantee shall take all reasonable measures to prevent further costs to the State under this Agreement. The State shall be responsible for any reasonable and non-cancelable obligations incurred by the Grantee in the performance of the Agreement prior to the date of the notice to terminate, but only up to the undisbursed balance of funding authorized in this Agreement.
3. If the Grantee fails to complete the Project in accordance with this Agreement, or fails to fulfill any other obligations of this Agreement prior to the Termination Date, the Grantee shall be liable for immediate repayment to the State of all amounts disbursed by the State under this Agreement, plus accrued interest and any further costs related to the Project. The State may, at its sole discretion, consider extenuating circumstances and not require repayment for work partially completed provided that the State determines it is in the State's best interest to do so. This paragraph shall not be deemed to limit any other remedies available to the State for breach of this Agreement.
4. Failure by the Grantee to comply with the terms of this Agreement or any other Agreement may be cause for suspension of all obligations of the State hereunder.
5. Failure of the Grantee to comply with the terms of this Agreement shall not be cause for suspending all obligations of the State hereunder if, in the judgment of the State, such failure was due to no fault of the Grantee. At the discretion of the State, any amount required to settle at minimum cost any irrevocable obligations properly incurred shall be eligible for reimbursement under this Agreement.
6. Because the benefit to be derived by the State, from the full compliance by the Grantee with the terms of this Agreement, exceeds to an immeasurable and unascertainable extent the amount of money furnished by the State by way of Grant Funds under the provisions of this Agreement, the Grantee agrees that payment by the Grantee to the State of an amount equal to the amount of the Grant Funds disbursed under this Agreement by the State would be inadequate compensation to the State for any breach by the Grantee of this Agreement. The Grantee further agrees therefore, that the appropriate

remedy in the event of a breach by the Grantee of this Agreement shall be the specific performance of this Agreement, unless otherwise agreed to by the State.

F. Hold Harmless

1. Grantee shall waive all claims and recourses against the State, including the right to contribution for loss or damage to persons or property arising from, growing out of or in any way connected with or incident to this Agreement.
2. Grantee shall reimburse the State for legal costs, including judgments, incurred in defending any claims brought by third-parties arising out of Grantee's work on the Project, including CEQA challenges.
3. Grantee and State agree that in the event of judgment entered against the State and Grantee because of the gross negligence of the State and Grantee an apportionment of liability to pay such judgment shall be made by a court of competent jurisdiction.

G. Audit Requirements and Financial Records

1. OPC projects are subject to audit by the State annually and for three (3) years following the payment of Grant Funds. Grantee shall maintain satisfactory financial accounts, documents and records consistent with the policies outlined in Appendix E of the OPC Proposition 68 Grant Guidelines and to make them available to the State for auditing at reasonable times. Grantee shall also retain such financial accounts, documents and records for three (3) years after final payment and one (1) year following an audit on site. OPC shall maintain all grant records for 35 years at the State Records Center and in perpetuity if funds are granted for acquisition of real property, in accordance with all applicable protocols as updated and required by the State Treasurer's Office.
2. Grantee agrees that during regular office hours, the State and its duly authorized representatives shall have the right to inspect and make copies of any books, records or reports of the Grantee pertaining to this Agreement or matters related thereto. Grantee shall maintain and make available for inspection by the State accurate records of all of its costs, disbursements and receipts with respect to its activities under this Agreement.
3. Grantee shall use applicable generally accepted accounting principles, unless otherwise agreed to by the State.
4. If Grantee stated in the Application for funding and/or Work Plan that other sources of funding will be used to complete the Project, the Grantee shall establish internal systems to track expenditures of matching or in-kind funds on a regular basis and will make the documentation available to the State upon request.

H. Subcontractors

1. The State's contractual relationship is with Grantee, and not any of its subcontractors. Grantee is entitled to make use of its own staff and subcontractors, as identified in Exhibit A and will comply with its own competitive bidding and sole sourcing requirements for subcontracts that arise out of or in connection with this Grant Agreement. Grantee shall manage, monitor, and accept responsibility for the performance of its own staff and subcontractors, and will conduct Project activities and services consistent with professional standards for the industry and type of work being performed under this Grant Agreement.
2. Nothing contained in this Grant Agreement or otherwise, shall create any contractual relation between the State and any subcontractors, and no subcontract shall relieve Grantee of its responsibilities and obligations hereunder. Grantee agrees to be as fully responsible to the State for the acts and

omissions of its subcontractors and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Grantee. Grantee's obligation to pay its subcontractors is an independent obligation from the OPC's obligation to make payments to Grantee. As a result, the State shall have no obligation to pay or to enforce the payment of any moneys to any subcontractor.

I. No Third-Party Beneficiaries

1. This Grant Agreement is not intended for the benefit of any person or entity other than the parties, and no one other than the parties themselves may enforce any of the rights or obligations created by this Grant Agreement.

J. Work Products

1. The Grantee agrees that all data, plans, drawings, specifications, surveys, studies, and other written or graphic work produced in the performance of this Agreement, herein referred to as "materials" are subject to the rights of the State as set forth in this section. The State shall have the right to reproduce, publish, and use all such work, or any part thereof, in any manner and for any purposes whatsoever and to authorize others to do so.
2. Grantee agrees that the Grantee shall use the materials developed with grant funds under this agreement only for the purpose for which the grant funds were requested and no other use of the materials shall be permitted except by written permission.
3. Grantee must certify the materials developed with grant funds under this agreement shall remain available for public review. This Agreement shall not prevent the transfer of the materials from the Grantee to a Public Agency, if the successor Public Agency assumes the obligations imposed by this Agreement.
4. If the use of the materials is changed to a use that is not permitted by the Agreement, or if the materials are sold or otherwise disposed of, at the State's sole discretion, an amount equal to (1) the amount of the Grant, or (2) the proceeds from the sale or other disposition, whichever is greater, may be reimbursed to the State.

K. Nondiscrimination

1. The Grantee shall not discriminate against any person on the basis of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status, and denial of family care leave in the use of any property or facility acquired or developed pursuant to this Agreement.
2. The Grantee shall not discriminate against any person on the basis of residence except to the extent that reasonable difference in admission or other fees may be maintained on the basis of residence and pursuant to law.
3. The completed products shall be available to members of the public generally.

L. OPC General Conditions and Budget Guidelines and Funding Request Incorporation

1. With the exception of adjustments as discussed above, the OPC General Conditions and Budget Guidelines for Grantees, and any subsequent changes or additions to the Work Plan approved by the State are hereby incorporated by reference into this Agreement as though set forth in full in this Agreement.

M. Severability

1. If any provision of this Agreement or the application thereof is held invalid, that invalidity shall not affect other provisions or applications of this Agreement which can be given effect without the invalid provision or application, and to this end the provisions of this Agreement are severable.

N. Waiver

1. No term or provision hereof will be considered waived by either party, and no breach excused by either party, unless such waiver or consent is in writing and signed on behalf of the party against whom the waiver is asserted. No consent by either party to, or waiver of, a breach by either party, whether expressed or implied, will constitute consent to, waiver of or excuse of any other, different or subsequent breach by either party.

O. Assignment

1. Except as expressly provided otherwise, this Agreement is not assignable by the Grantee either in whole or in part.

P. Disputes

1. If the Grantee believes that there is a dispute or grievance between Grantee and the State arising out of or relating to this Agreement, the Grantee shall first discuss and attempt to resolve the issue informally with the Project Manager. If the issue cannot be resolved at this level, the Grantee shall follow the following procedures:
 - a. If the issue cannot be resolved informally with the Project Manager, the Grantee shall submit, in writing, a grievance report together with any evidence to the Deputy Director of the OPC. The grievance report must state the issues in the dispute, the legal authority, or other basis for the Grantee's position and the remedy sought. Within ten (10) working days of receipt of the written grievance report from the Grantee, the Deputy Director shall make a determination on the issue(s) and shall respond in writing to the Grantee indicating the decision and reasons therefore. Should the Grantee disagree with the Deputy Director's decision, the Grantee may appeal to the Executive Director.
 - b. The Grantee must submit a letter of appeal to the Executive Director explaining why the Deputy Director's decision is unacceptable. The letter must include, as an attachment, copies of the Grantee's original grievance report, evidence originally submitted, and the response from the Deputy Director. The Grantee's letter of appeal must be submitted within ten (10) working days of the receipt of the Deputy Director's written decision. The Executive Director shall, within twenty (20) working days of receipt of Grantee's letter of appeal, review the issues raised and shall render a written decision to the Grantee. The decision of the Executive Director shall be final.

Q. Executive Director's Designee

1. The Executive Director shall designate an OPC Project Manager who shall have authority to act on behalf of the Executive Director with respect to this agreement. The Executive Director shall notify the Grantee of the designation in writing.

R. Insurance

1. Throughout the term of this agreement, for the life of any asset funded by the grant monies awarded pursuant to this agreement, or for any period of project implementation after the termination date of this agreement, the Grantee shall maintain insurance, as specified in this section, against claims for

injuries to persons or damage to property that may arise from or in connection with any activities by the Grantee or its agents, representatives, employees, volunteers, or contractors associated with the project undertaken pursuant to this Agreement.

2. Grantee that is a governmental organization may provide evidence of self-insurance to satisfy this requirement.
3. If Grantee is not a governmental organization or is a governmental organization that is unable to provide evidence of self-insurance, then it shall obtain and keep in force for the term of this Agreement the following insurance policies that cover any acts or omissions of Grantee, its subcontractors, or its employees engaged in the provision of service specified in this Agreement. Grantee must maintain coverage limits no less than:
 - a. General Liability: \$1,000,000 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. (Including operations, products and completed operations, as applicable)
 - b. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
 - c. Watercraft Liability: If the Grantee, subgrantee or contractor uses watercraft in the performance of the agreement, then:
 - \$1,000,000 combined single limit per accident (watercraft liability). Such insurance must cover liability arising out of a watercraft accident including owned hired, and non-owned watercraft.
 - Worker's compensation policy must provide coverage for all its employees for any injuries or claims under the U.S. Longshoremens' and Harbor Workers' Compensation Act, the Jones Act or under laws, regulations, or statutes applicable to maritime employees
4. Coverage shall be at least as broad as:
 - a. Insurance Services Office ("ISO") Commercial General Liability coverage (occurrence Form CG 0001) or ISO Comprehensive General Liability form (1973) or comparable with Broad Form Comprehensive General Liability endorsement.
 - 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.
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. If such insurer is not reasonably available, Grantee may utilize an alternative insurer only requested in advance and approved by the OPC, at its sole discretion.

6. The State of California, its officers, agents, and employees are included as additional insured, but only with respect to work performed for the State under this Grant Agreement. The additional insured endorsement must accompany the certificate of insurance.
7. Grantee shall submit proof of insurance documents referencing this Grant Agreement number to the OPC electronically within thirty (30) days of signing this Grant Agreement.
8. Grantee shall notify OPC in writing within five (5) working days of any cancellation, non-renewal, or material change that affects required insurance coverage.
9. Grantee shall submit proof of new or updated policy based on insurance requirements within thirty (30) days of policy cancellation or substantial policy change. Failure to provide proof of insurance may result in termination of this Grant Agreement.



OCEAN PROTECTION COUNCIL

OPC Proposition 68 Chapter 10: Coastal Resilience Grant Funding

1. Full Proposal Application Cover Page

Contact Information:					
Organization	Port of San Francisco				
Organization Type	Municipality				
Contact Person	Carol Bach	Title	Environmental Affairs Manager, Port of San Francisco		
Email	carol.bach@sfport.com	Phone	415.819.8065 (mobile) 415.274.0568 (office)		
Mailing Address	Port of San Francisco Pier 1 – The Embarcadero San Francisco, CA 94111				
Federal Tax ID#	94-1705778				
Project Information:					
Project Name	Heron’s Head Park Shoreline Resilience				
Project Type	Construction, monitoring and adaptive management:				
Amount Requested	\$1,667,000	Total Project Cost	\$3,893,000	Non-State Matching Funds	\$2,226,000
Location Information:					
County	San Francisco	Specific Location	Heron’s Head Park Cargo Way at Jennings St. San Francisco, 94124		
Latitude	37°44'15.7"N	Longitude	122°22'20.6"W		
What point is represented by the latitude and longitude (center of site)?	Center of tidal marsh at Heron’s Head Park				

2. Project Scope

Project Summary

Heron's Head Park is owned and managed by the Port of San Francisco (Port) and located in the economically disadvantaged Bayview Hunters Point neighborhood (**Figs. 1 & 2**). It is an approximately 21-acre peninsula comprised of 14 acres of public open space, including an environmental education center (The EcoCenter), and approximately 7 acres of tidal wetlands, tidal ponds, mudflats, and rocky intertidal shoreline (**Fig. 3**). Heron's Head Park provides valuable tidal marsh habitat for wildlife and equitable, convenient, and affordable access to natural coastal open space, education, and recreation in a neighborhood where such resources are scarce.

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

- Construct a dynamically stable coarse beach along the eroding shoreline.
- Fabricate and install oyster reef structures.
- Restore tidal salt marsh plant habitat.
- Monitor project outcomes, share findings, and take adaptive management measures.

The Project will restore former type and extent of habitat at Heron's Head Park and provide new habitat in the form of coarse sand/gravel beach, new wetland vegetation to reinforce shoreline and pond edges, and subtidal oyster reefs. The coarse material shoreline will enable wetlands to migrate with rising sea level so that some wetland habitat and key public access features remain through mid-century. With the proposed monitoring and stewardship, including ongoing removal of non-native species and replanting with locally-adapted native wetland/transition zone plants, the Project will combat a significant infestation by invasive Algerian sea lavender, employ local youth, and provide volunteer opportunities for visitors and students. The Project will engage the surrounding community in implementation and demonstrate how marsh-fringing beach and other living shoreline elements can be integrated to create a resilient shoreline, thereby contributing to statewide efforts to develop technical understanding and implementation of natural systems-based approaches to shoreline stabilization.

Project Need

In the 20 years since the Port expanded and enhanced the wetlands at Heron's Head Park, the shoreline has experienced subsidence of the fill soils, erosion from wind-waves and tidal flows, and a low supply of ambient suspended sediment. These forces have caused a loss of both habitat acreage and ecological function. In the most impacted area, the shoreline has retreated up to 50 feet from its 1998 location, and one of the tidal ponds is consistently flooded rather than tidally flushed. 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 Project will create a living shoreline that will enhance and preserve the physical, biological, and community benefit functions at Heron’s Head Park for a design life of 30 years.

In addition to improving ecological resilience, the Project will address an important community need for access to open space. Parks and natural areas can improve public health and social well-being, providing space for outdoor recreation and places to bring neighbors together, strengthening communities’ social resilience. Due to its location in an urban area where direct public access to the bay is limited and armored shorelines predominate, Heron’s Head Park is uniquely well-suited to provide access to natural shoreline habitat that many neighbors and Bay Area residents might not otherwise reach. It is within walking distance (approx. 0.3 miles) of the largest public housing complex in San Francisco and easily accessible by municipal transit. Through a partnership between the Port and the San Francisco Recreation and Parks Department (RPD), the EcoCenter at Heron’s Head Park offers free, culturally relevant environmental education (many bilingual) and recreation programs for a diversity of participants. A significant part the Project site’s value to habitat conservation is the opportunity for public education and engagement with the type of natural shoreline that once encircled San Francisco Bay.

Disadvantaged Community

The adjacent Bayview Hunters Point neighborhood has been historically disenfranchised and under-served by open space and other public investment. Project area statistics and description of community context are presented in **Attachment 2**. Block group level data indicates that the neighborhood around Heron’s Head Park is an Economically Disadvantaged Community, with average income less than 80% of Area Median Income. Social vulnerability, which results from characteristics such as age, income, and language barriers, makes communities like the one around Heron’s Head Park more vulnerable to hazards, whether they be sudden disasters or long-term adaptation challenges. The [City of San Francisco’s Climate and Health Program](#) has examined contributors to climate-related risk, including social vulnerability, to identify vulnerable communities and engage them in reducing risk in their own neighborhoods. The resultant [Climate and Health Vulnerability Assessment](#) analyzed environmental, demographic and socioeconomic factors that contribute to community vulnerability and found that the community surrounding Heron’s Head Park will be disproportionately affected by climate change.

The Project will meet OPC’s goals for technical assistance to disadvantaged communities by providing training, workforce development and education as described in **Partnerships** below.

Project Description: Nature-based approach to achieve multiple benefits

The Project will achieve multiple benefits and specific outcomes that advance the Ocean Protection Council’s (OPC’s) strategic plan goals for coastal protection as follows:

Construct a dynamically stable beach along the marsh edge. The Project will beneficially reuse a byproduct of sandmining to construct a dynamic coarse-material beach comprised of natural sand and gravel, stabilized by rock and cobble sills, along the existing tidal marsh. The Port will

competitively bid construction, with specifications for experience and expertise in restoration work, that includes importing and placing 12,000 cu. yd. of natural sand and gravel from the Bay and 1,300 cu. yd. rock and cobble to construct the beach and groynes over 2.06 acres along 1,600 linear feet of shoreline (see **Fig. 4** and **Attachment 3. Design Plans**). The beach and groynes will minimize habitat loss by preventing scarps at the marsh edge and restore tidal ponds that formerly existed at the site. The rock sills and groynes are low-profile features, largely subtidal, that are designed to mitigate lateral migration of the beach material exposed to the forces that have eroded the existing shoreline, and they do not represent grey infrastructure in this context.

Enhance ecological function with physical structures that provide diverse and connected habitat. Construction of the intertidal beach and groynes will provide habitat structure and complexity that enhance biodiversity. Rock/earth sills placed along the high intertidal beach crest will provide substrate for high-intertidal plants. The gravel beach berm and rock groynes will provide foraging, roosting, and high tide refugial habitat for shorebirds. The physical structure of gravel beaches is more variable than the fine-grained mudflat substrate that currently dominates much of the shoreline. This structural variability offers invertebrates a greater array of microhabitats and a more sheltered microclimate, thus, the addition of coarse material may support a more diverse invertebrate population and potentially improve food resources for shorebirds. Ecologically, tidal flat foraging habitat and high tide roost habitat function together: The beach berm provides high tide refuge where shorebirds rest and conserve energy when the tidal flats are submerged.

Incorporate Living Shoreline elements for habitat diversity and ecological function. Shoreline construction will include fabrication and placement of up to 60 oyster reef elements along the subtidal ends of the groynes, creating up to 0.02 acres of subtidal surface area for oysters and other native epifauna, including mussels, crabs, shrimp, and seaweed. This new subtidal habitat is anticipated to provide nursery habitat for juvenile fish, foraging opportunities for fish and birds, and clean, hard substrate for herring spawning. The Project also includes placement of up to 20 cubic yards of large woody debris such as tree limbs and branches within the intertidal beach to provide additional high tide refugial habitat.

Restore native marsh and transition zone vegetation. The Port will contract with Literacy for Environmental Justice (“LEJ”, see **Partnerships** below) to propagate, plant and maintain native salt marsh plant species. The project’s revegetation workplan anticipates planting nearly 17,000 plants or propagules over 0.07 acres in the first two years, and planting approximately 30,000 additional plants/propagules over the subsequent three years, restoring tidal salt marsh vegetation on up to 1.2 acres over the 5-year wetland plant restoration effort. Species include marsh gumplant (*Grindelia stricta*), salt grass (*Distichlis spicata*), alkali heath (*Frankenia salina*), and the endangered California seablite (*Suaeda californica*). Marsh gumplant is an ecologically important native shrub that occurs in tidal marshes and provides food resources, vertical cover, and high tide refuge for multiple species. California seablite was extirpated from San Francisco Bay in the 1960s and is now found only in Morro Bay and a few reintroduction sites in San Francisco Bay. It was formerly abundant at the Project site but has been significantly impacted by erosion of its preferred coarse sand and shell substrate.

Remove critical mass of invasive species, reducing percent cover by invasive species in the tidal marsh to less than 30% by the end of the 5-year revegetation effort. The Project includes 6-8 weeks/year of labor by trained habitat restoration crews (LEJ’s “Eco-Apprentices”) to remove invasive species. This intensive mass removal and replacement with native species will restore robust tidal marsh vegetation and related ecological function.

Other significant components of the Project, monitoring outcomes to inform adaptive management at the Project site and sharing information broadly, are discussed in **Monitoring effectiveness and informing coastal resource management strategies** below.

Methodology

The Project will be a demonstration of the developing science and practice of creating living shorelines for habitat value, shoreline stabilization and sea level rise adaption. The Project design has been informed by a team (described below) that brings expertise and experience in these disciplines, including design, construction, and monitoring similar projects in San Francisco that have proven successful at stabilizing eroding marsh edges and improving abundance and diversity of wildlife ([SFEI and Baye, 2020](#)). The Project conceptual design, alternatives analysis, Basis of Design Report, and 65% design plans (provided in **Attachment 3.**) have been reviewed for technical/scientific merit and feasibility by the Technical Advisory Committee (“TAC”), the Port’s Engineering Division, and a 3rd-party engineering peer reviewer, the Bay Restoration and Regulatory Integration Team (“BRRIT”) and State Coastal Conservancy (see **Partnerships** below).

Project Management and Readiness

Partnerships

The Project is a collaboration between local (Port), regional, and State agencies and other Project partners, including:

- **The California State Coastal Conservancy** provides technical assistance regarding living shoreline project design, permitting, and construction and serves as project manager for the San Francisco Bay Restoration Authority grant.
- **Technical Advisory Committee (TAC):** The Project’s TAC has guided planning and design. TAC members include Kathy Boyer, faculty and research scientist at the **Estuary and Ocean Science (EOS) Center** at San Francisco State University, and Chela Zabin from the **Smithsonian Environmental Research Center**, who bring specialized expertise in ecology and habitat restoration for the native tidal marsh plants and native oysters respectively. The TAC includes ecologist and botanist Peter Baye, lead author of the **San Francisco Estuary Institute’s** New Life for Eroding Shorelines report. The TAC will be retained to continue providing expert guidance during construction, monitoring, and adaptive management.
- **The San Francisco Bay Restoration Authority** is a regional agency and key stakeholder, providing \$1.1M in funding for tidal marsh habitat restoration and monitoring as well as technical assistance through participation with the TAC.
- **Literacy for Environmental Justice (LEJ):** LEJ is a community-based, non-profit environmental education and youth empowerment organization created specifically to address the ecological and health concerns of Bayview Hunters Point and communities of southeast San

Francisco. LEJ operates a native plant nursery in Hunters Point that specializes in growing locally adapted native species for shoreline and coastal upland habitats. The Port has contracted with LEJ to cultivate, install, monitor, and maintain the tidal salt marsh plants that will be installed over a 5-year period, beginning November 2020 (see **Phasing** below). This work will be conducted by LEJ's "Eco-Apprentices", low-income, predominantly minority transitional-age youth (age 18-26) with an interest in habitat restoration. The Eco-Apprentices and other LEJ youth will also develop and deliver community outreach, under contract to the Port and with technical support from the Project team.

The Project also benefits from being among the first projects reviewed by the BRRIT, comprised of representatives from the U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, Bay Conservation and Development Commission, U.S. Fish & Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife. The BRRIT members bring experience and expertise to the Project review and permitting process, and their review has resulted in valuable refinements to the Project design.

Organizational Capacity

The Port has the organizational capacity to deliver major capital projects, including experienced engineers, environmental regulatory specialists, accountants, contract managers, and administrative support staff. We have completed large, in-water, construction projects such as the Brannan St. Wharf (\$24M, 2013), the James R. Herman Cruise Terminal (\$75M, 2014), and Crane Cove Park (\$37M, 2020). The Port has designed and constructed shoreline habitat and public access projects similar to the Heron's Head Park Shoreline Resilience Project, including wetland enhancement at Heron's Head Park (\$3M, 1999) and Pier 94 Wetlands (\$0.5M, 2004).

The Project team's capacity includes the resources of our agency, academic, and community partners listed above as well as Port staff and consultants:

- **Port Staff:** Carol Bach, the Port's Environmental Affairs Manager will manage the Project. Rod Iwashita, Chief Harbor Engineer, provides senior engineering review and will lead the Port's in-house construction management group to solicit bids and award and administer the contract. The Port will contract for qualified 3rd party construction management personnel to manage construction in the field.
- **Environmental Science Associates**, under contract to the Port, include Project Manager Eddie Divita, a Hydrologist and Civil Engineer with experience in engineering design of coastal, wetland, and estuarine restoration projects in San Francisco Bay; Senior Engineer, Bob Battalio, who brings over 30 years of experience in coastal engineering and multi-benefit restoration project design; and Anne Borgonovo, who has provided engineering and construction oversight to several coastal stabilization and restoration projects, including one of the first natural system based sea level rise adaptation projects in San Francisco Bay.

Qualifications of Project team members are provided in **Attachment 4**.

Project Readiness

Permits. The Project has received the following permits:

- City and County of San Francisco Planning Department Notice of Exemption from CEQA. was filed with the SF County Clerk 11/12/20 and runs 30 days. (see **Attachment 5**).

- Army Corps of Engineers authorization under Nationwide Permit 27 for Aquatic Habitat Restoration, Enhancement, and Establishment Activities (Authorization letter dated 10/15/20).
- San Francisco Bay Regional Water Quality Control Board CWA Section 401 Water Quality Certification dated 10/2/20.

The Bay Conservation and Development Commission will vote on BCDC Staff’s recommendation to authorize construction of the Project at its December 17, 2020 meeting.

Phasing. The first phase of the Project was initiated in early November 2020 with invasive species removal and seed collection. The shoreline construction component of the Project is seasonally restricted to August through January to protect endangered species, nesting birds and migrating and spawning fish. Shoreline construction is ready to begin during the next permitted construction window, August 2021 through January 2022, subject to availability of funds by March 2021.

Project phases include:

Scope	Schedule	Funding Status
Wetland plant restoration, Phase 1: First two of total of five years of wetland plant habitat restoration	Fall 2020 through Fall 2022.	Funds awarded by the San Francisco Bay Restoration Authority
Shoreline stabilization contract: Advertise construction contract opportunity, complete bid solicitation process, secure Port and City approvals, and award contract.	March through July of any year.	Executed by Port staff with no cost to the Project budget.
Shoreline stabilization: Construct stabilized coarse sand/gravel shoreline, beach crest, pond sills, and oyster reef elements.	August through January of any year.	Proposed for funding by OPC Coastal Resilience Grant.
Wetland plant restoration, Phase 2: Three additional years of wetland habitat restoration will follow construction of stabilized shoreline.	Upon completion of shoreline construction	Funds designated by the SF Bay Restoration Authority, subject to approval of Phase 2 work plan and budget.
Post-Construction Monitoring: Port will monitor physical and ecological performance in accordance with <i>Monitoring and Adaptive Management Plan</i> .	Completed construction through 10 years post-construction	SFBRA designated grant funding for 5 years of monitoring, subject to approval of work plan and budget. Port to fund remaining years.

The proposed schedule assumes that OPC and Port can complete approvals and execute a grant agreement expeditiously, potentially concurrent with solicitation of construction contract bids. If administrative approvals required precedent to use of grant funds prevents advertising for bids in March 2021 and commencement of construction in August 2021, then seasonal restrictions on construction will delay project commencement until August 2022.

Alignment with Prop 68 and OPC's Priorities and California's Climate Policies

Findings & Declarations of Public Resources Code Section 80001(a)

The Project realizes the intent of Prop. 68 as described in the following findings and declarations of the public resource code:

- The Project protects a park that offers the neighboring economically disadvantaged community opportunity to experience the outdoors, improve physical and emotional health, and strengthen the community's social resilience.
- It invests capital to protect and enhance natural resources by protecting the park, wetlands, wildlife habitat, and urban green space in a way that will enable resilience to sea level rise for decades.
- It provides these benefits in an area that has experienced historic underinvestment in parks, trails, and outdoor recreation opportunities.
- It includes active outreach to diverse populations, particularly minority and low-income residents, to increase awareness of the social, educational, and natural resource assets that the Project site offers.
- It coordinates with and builds upon existing youth engagement and empowerment programs, including fostering the partnership between the Port and LEJ, a community-based organization serving local, predominantly minority and low-income, youth.
- It creates an employment and mentoring opportunity for young environmental, outdoor recreation, and conservation leaders working with Project partner, LEJ, to increase diverse representation across these areas.
- The Project engages local youth in developing and presenting culturally appropriate public outreach to their own community.

Consistency with Chapter 10 funding priorities (PRC Section 80133(a))

The Project aligns with OPC's priorities for Chapter 10 funding by protecting habitat in San Francisco Bay, a critical stopover for hundreds of thousands of birds on the Pacific Flyway. The U.S. Shorebird Conservation Plan for the Southern Pacific Region (2003) identifies San Francisco Bay as a wetland of highest importance along the California Coast, and San Francisco Bay is recognized as a Western Hemisphere Shorebird Reserve Network site of Hemispheric Importance for shorebirds. One of the few remaining wetlands in the County of San Francisco, the marsh at Heron's Head Park supports a diverse range of birds, 193 species recorded on the citizen science website eBird.org, including many coastal-dependent and migratory species.

Alignment with priorities of Prop. 68 Coastal Resilience Program solicitation

The Project advances priorities of the Prop. 69 Coastal Resilience grant program as follows:

- It will construct a nature-based shoreline to conserve habitat, promote biodiversity, and protect natural and recreational resources for the 30-year design life of the Project.
- It will beneficially reuse coarse sediment extracted from San Francisco Bay to create a resilient shoreline that protects an adjacent wetland with a diversity of habitat types.
- It will demonstrate the feasibility and effectiveness of a stabilized coarse beach as a form of living shoreline, with long-term monitoring, adaptive management, and reporting to the

scientific community, resource and regulatory agencies, and wetland restoration practitioners that will inform future projects' plans and adaptive management strategies.

- The Project is informed by an expert TAC and will be presented to community stakeholder groups, including the Port's Southern Waterfront Advisory Committee and the EcoCenter Advisory Committee.
- The Project utilizes a managed retreat approach, enabling the protected wetland behind the stabilized shoreline to migrate upland with sea level rise and creating the capacity for future adaptation measures to raise elevation. The Project design balances the goals of preventing erosion and habitat loss without over-building in the near term, while minimizing the need for disruptive maintenance and related environmental impacts in the future.
- The Port is ready to start work upon availability of funds and will be able to be complete the Project within three years.

Alignment with California's Climate Policies

Erosion and sea level rise pose the greatest climate-related risks at the Project site. The Project design used site-specific modelling to determine the type, quantity and location of material needed to prevent flooding and erosion and maintain habitat for decades. The vertical capacity of the constructed shoreline is designed to +2 ft., and shoreline creates capacity for adaptation to sea level rise of up to 3.5 ft. by mid-century. This design for adaptive capacity provides the greatest habitat benefit and long-term resilience to sea level rise with the least environmental impact.

The [2018 Safeguarding California Plan](#) calls for nature-based adaptation measures to mitigate impacts of erosion and sea level rise. It cites the value of living shorelines to stabilize the shoreline and create habitat for coastal species using a variety of structural and organic materials such as wetland plants, oyster reefs, sand fill, fiber, and stone. The Heron's Head Park Shoreline Resilience Project is exactly such a measure.

The Project will provide multiple benefits by implementing varied recommendations of the 2018 Safeguarding California Plan:

- It engages a local non-profit partner, whose mission is to advance environmental justice, in hands-on planting and habitat stewardship.
- It supports a training/employment program that develops job readiness skills and ensures maintenance of wetland habitat.
- It involves individuals, organizations, and academic institutions in improving coastal habitat in their community.
- It uses nature-based shoreline infrastructure to protect and enable future adaptation at coastal salt marsh, a priority habitat considered highly vulnerable to climate change.
- It implements recommendations of the San Francisco Bay Ecosystem Habitat Goals Report, which serves as a guide for conserving important habitat
- It will remove invasive species that contribute to degradation of habitat quality and resilience.
- Post-construction monitoring and information sharing will contribute to establishing goals and success criteria for living shorelines and contribute to the conservation community's and

the general public's understanding of the value of living shorelines, particularly coarse gravel beaches, as climate-smart shoreline protection and habitat enhancement measures.

The [San Francisco Bay Shoreline Adaptation Atlas](#), identified by the 2018 Safeguarding California Plan as an ongoing effort, was subsequently published by the San Francisco Estuary Institute in May 2019. The Adaptation Atlas sets forth a science-based framework for identifying sea level rise adaptation strategies that take advantage of natural processes and are appropriate for the various landscape types and locations. The Adaptation Atlas identifies areas where nature-based adaptation strategies, including living shorelines, can help create a resilient shoreline with multiple benefits, including habitat, recreation, and other benefits. Heron's Head Park is within the Adaptation Atlas' "Mission-Islands" unit, where floodable spaces and nature-based infrastructure such as the proposed Project, are recommended to reduce flood risk restore ecological value.

Effectiveness and Innovation

The Project design builds on a growing body of knowledge emerging from living shoreline projects in the Bay, benefitting from lessons learned from other habitat enhancement projects such as the State Coastal Conservancy's [San Francisco Bay Living Shorelines Project](#) and the Richardson Bay Audubon Center's habitat enhancement project at [Aramburu Island](#).

After construction, the Port will monitor and report on the physical and ecological effectiveness of the Project for 10 years in accordance with the "*Monitoring and Adaptive Management Plan*", which has been approved by the BRRIT, and includes:

- Beach performance (elevation, horizontal movement)
- Shoreline erosion
- Preservation of tidal marsh and pond habitat
- Colonization of oyster reef balls
- Abundance of California Seablite
- Habitat utilization by birds

The project team, including the TAC, consultants, and agency partners will present findings of post-construction monitoring to restoration agencies and practitioners and the general public to disseminate information gained from the Project, inform future nature-based designs, and contribute to the restoration community's and the public's understanding of the role of living shorelines as a feasible and ecologically functional approach to shoreline stabilization. Outreach will be accomplished through various venues as opportunities allow. With growing interest in nature-based solutions to coastal resource conservation, there are many such opportunities. During the past year, various aspects of the Project approach have been addressed in the San Francisco Estuary Institute's [New Life for Eroding Shorelines Project](#) report and at a State Coastal Conservancy "Climate Read Webinar – Living Shorelines 101", a workshop on beneficial reuse of coarse sediment hosted by the San Francisco Bay Joint Venture, and a symposium on Coarse Grain Beaches as a natural intervention for shoreline resilience organized by The Exploratorium and Coastal Conservancy.

Community Support

Local, Regional, State Support

Since Heron's Head Park opened to the public in 1998, it has become a well-loved resource for visitors from the surrounding community and throughout the Bay Area. The Port partners with San Francisco RPD to offer public programs in the park and at the EcoCenter, and many local community-based organizations, use the site for environmental education, community meetings, and volunteer opportunities. Over the course of the Project's planning and engineering design process that began in 2018, the Port has presented plans for the Project to its Southern Waterfront Citizens' Advisory Committee, Golden Gate Audubon Society's Conservation Committee, the EcoCenter Advisory Committee, and the San Francisco Biodiversity Working Group. For the convenience of participants, these meetings were all held in the evening, at the location and regularly scheduled meeting time of the various stakeholder groups. The Port has found enthusiastic local support as well as the support of regional agencies such as the San Francisco Bay Joint Venture and San Francisco Estuary Institute, and State Support, as evidenced by the letters of support and commitments of funding accompanying this proposal (**Attachment 6**).

Community Engagement Plan

The Port has developed a robust [Waterfront Resilience Program \(WRP\) Communications and Engagement Plan](#) that now has capacity to include community engagement about the Heron's Head Park Shoreline Resilience Project. The WRP Communications and Engagement Plan includes both community outreach and stakeholder engagement: Community outreach refers to general education about the WRP that engages, informs, and educates residents via activities at in-person outreach events, webinars, online engagement tools, and other tools. Stakeholder engagement is distinguished from community outreach by creating two-way communication with stakeholders who have a particular and vested interest in the project or program. Inclusion in the WRP Communications and Engagement plan will provide more resources for community engagement and enable meaningful stakeholder input in addition to dissemination of information about the Project. Port staff will also continue to leverage its existing environmental education and public outreach programs at Heron's Head Park and other public meetings and events to engage community stakeholders and the public in the project.

Leverage

The Project leverages funding from many sources: A private business is donating construction material. The Port, a local government agency, has invested approximately \$500,000 and countless hours of staff time to plan, permit, design, create construction plans and specifications, and fund the Project. The San Francisco Bay Restoration Authority, a regional agency has allocated \$1.1M to support the Project. Commitments to provide matching funds are provided in **Attachment 7**. The State Coastal Conservancy has partnered with the Port as co-applicants for federal funding from the National Coastal Wetlands Conservation grant program (currently under review). This broad coalition demonstrates the value that a wide range of constituents place on the project and enables the Port to request an amount from the OPC Coastal Resilience Project estimated to be 42% of the total implementation cost.

3. Budget

	Construct Shoreline	Fabricate & Install Oyster Reef Balls	Restore Tidal Marsh Plant Habitat	Monitor, Inform & Adapt	Total
Subcontractor: Competitively bid construction contract will include all labor, materials, overhead, and other costs incidental to completion of the work, excluding donated material	\$1,667,000	\$350,000			\$2,017,000
Subcontractor: 3 rd party Construction Management; Biological monitoring	\$310,000	\$50,000			\$360,000
Match: Donated beach material, other grant funds	\$417,000 Donated by Project Partner		\$790,000/5 yrs. Funded by San Francisco Bay Restoration Authority	\$308,000/5 yrs. Funded by SF Bay Restoration Authority	\$1,515,000
Task Total	\$2,394,000	\$400,000	\$790,000	\$308,000	\$3,892,000
Total Estimated Project Cost					\$3,892,000
Total Amount Proposed for OPC Agreement:					\$,1667.000

Notes:

Additional budget detail, including breakdown of shoreline construction costs, is included in **Attachment 8**.

Signage informing the public that the project received funds from the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018 is not included in construction cost estimate. If grant funds are awarded, cost to fabricate and install acknowledgement signs will be added to Port’s contribution to total project cost.

4. Task Description and Schedule¹

Task Number and Title	Description of task relative to OPC funds	Start Date	End Date	Deliverable(s)
Task 1: Project Management	All project management will be conducted by Port staff at no cost to the Project implementation budget.	In progress	12/31/22	Grant administration, engineering contract administration, new construction contract solicitation and award, administrative approvals, construction contract administration, community engagement.
Task 2: Construct Shoreline	OPC funds are requested to pay for the estimated cost of shoreline construction, excluding donated materials	8/1/21	1/31/2022	Deliverable is completed shoreline construction. Port will competitively bid and award a construction contract that includes all work incidental to construction of the stabilized coarse beach shoreline, including mobilization, earthwork, transportation and placement of beach material, rock groynes and drift sills, wood habitat features, planting on beach crests and pond sills, and restoration of areas impacted by construction such as temporary access routes. Start and end dates are dictated by seasonal restrictions on construction to avoid environmental impacts.
Task 3: Fabricate and Install Oyster Reef Balls	To be funded by Port or grant funds other than OPC.	8/1/21	8/31/22	Deliverable is up to 60 oyster reef balls (ORBs) comprised of a mix of native sand and shell, concrete, and gravel formed into spherical shape and placed in the shallow subtidal zone along the groynes and drift sills. ORBs will be custom fabricated per design informed by previous living shoreline projects. Seasonal factors indicate that oyster recruitment is most successful if ORBs are installed in late summer/early fall. Since this installation would ideally occur months after completion of the shoreline construction, it may be included in the shoreline construction contract or bid as a separate contract.
Task 4: Restore Tidal Marsh Plants	Funded by grant from the San Francisco Bay Restoration Authority	11/1/20	10/31/25	Deliverable is up to 47,000 specified tidal salt marsh plants installed and maintained over a 5-year period. This work will be contracted to community-based non-profit organization.
Task 5: Monitor, Inform, Adapt	Funded by grant from the San Francisco Bay Restoration Authority and Port of San Francisco	2/1/22	1/31/32	Deliverables are Annual reports during 10 years of monitoring in accordance with <i>Monitoring and Adaptive Management Plan</i> and communication with scientists, resource and regulatory agencies, habitat restoration practitioners and the public.

¹ See discussion of schedule in Section 2. Scope: **Phasing**.

5. Supplemental Documents

The following supplemental documents are attached to this proposal:

Attachment 1. Figures and Photos

Attachment 2. Community Context: California State Parks Community FactFinder

Attachment 3. Design Plans

Attachment 4. Resumes, Curricula Vitae, Qualifications of Project Team

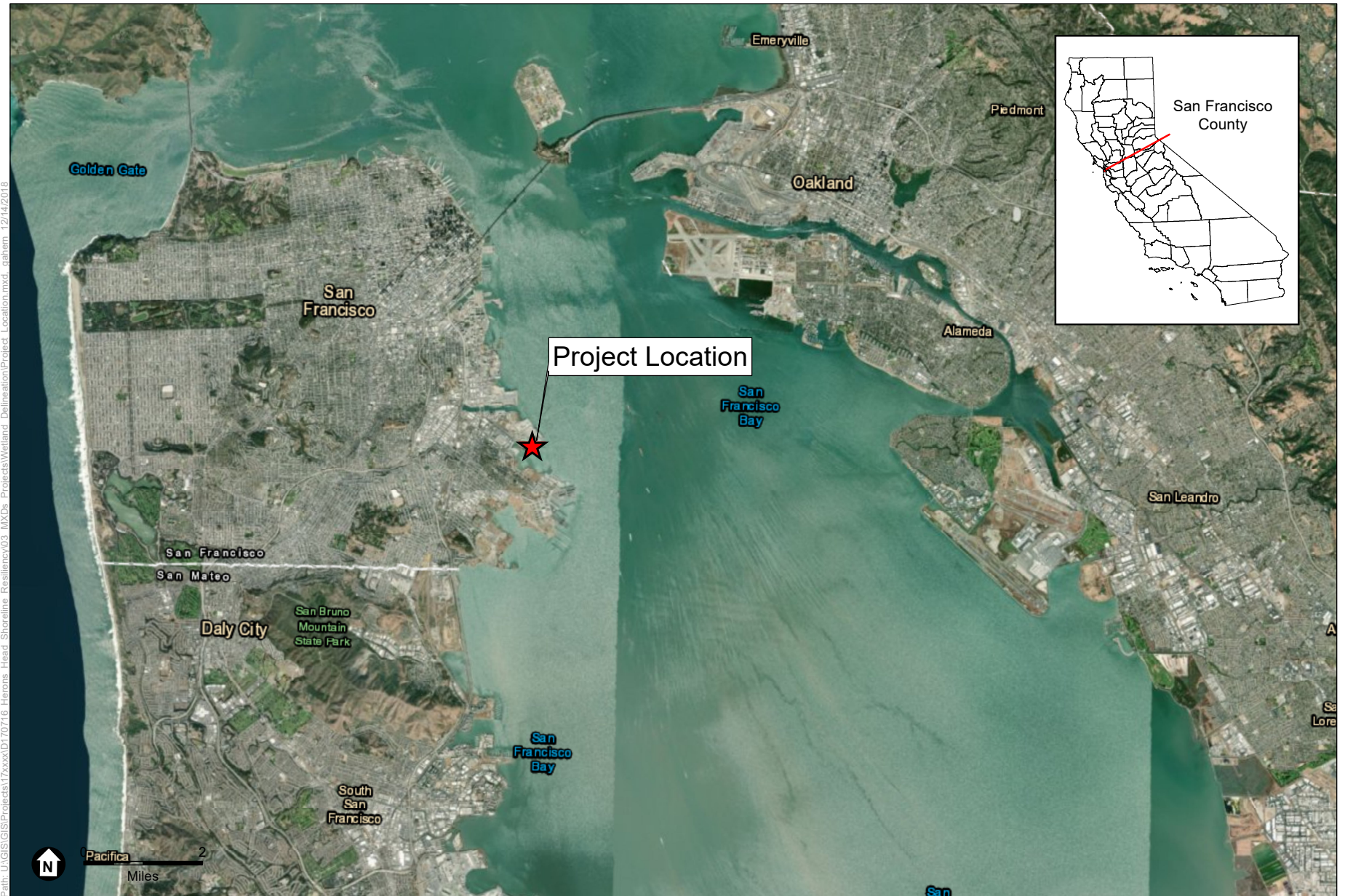
Attachment 5. CEQA and Environmental Compliance Form

Attachment 6. Letters of Support

Attachment 7. Matching Funds

Attachment 8. Construction Cost Detail

Attachment 9. California Conservation Corps Review



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

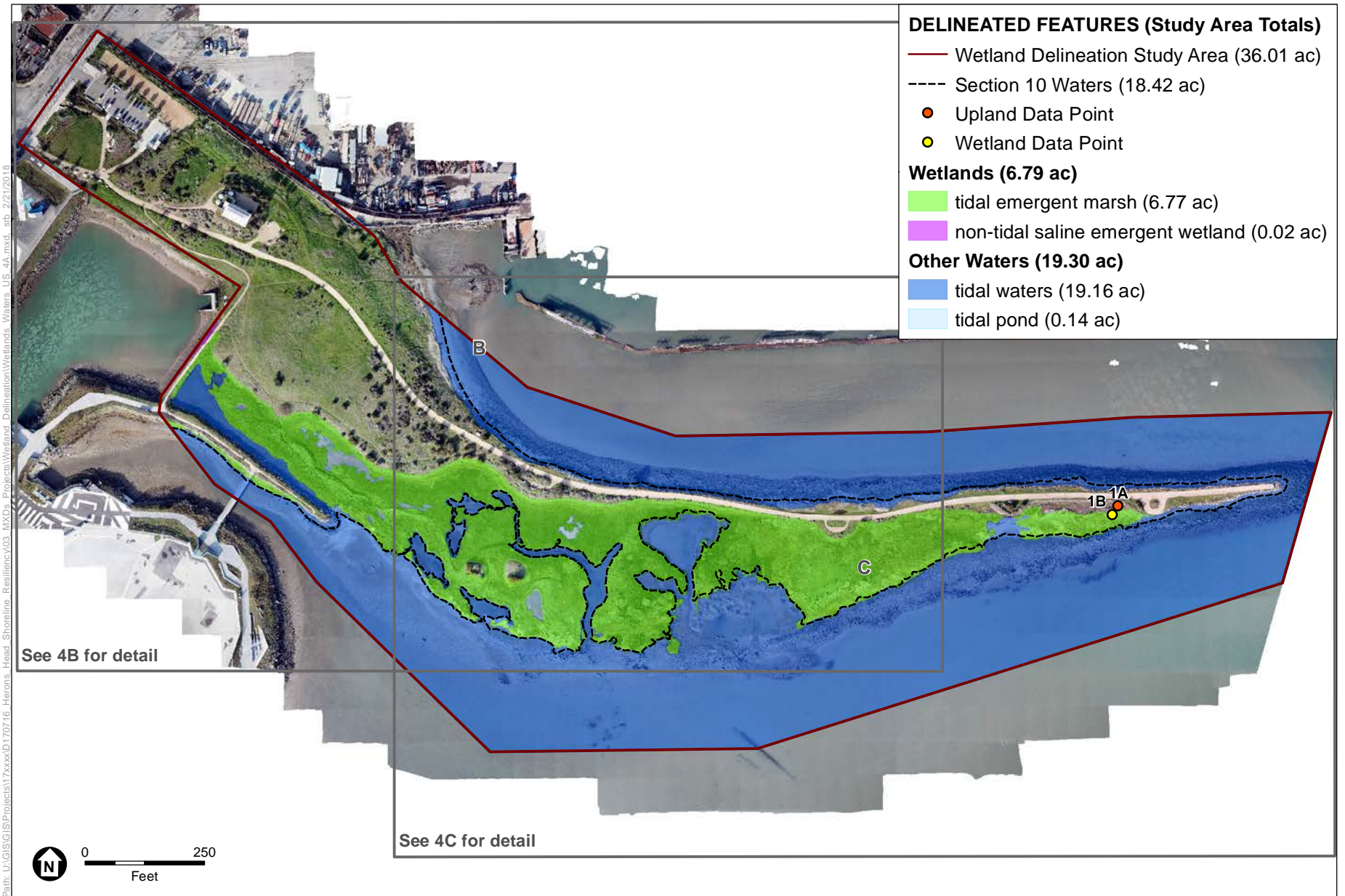
Figure 1
Project Location



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

Heron's Head Shoreline Resiliency Project

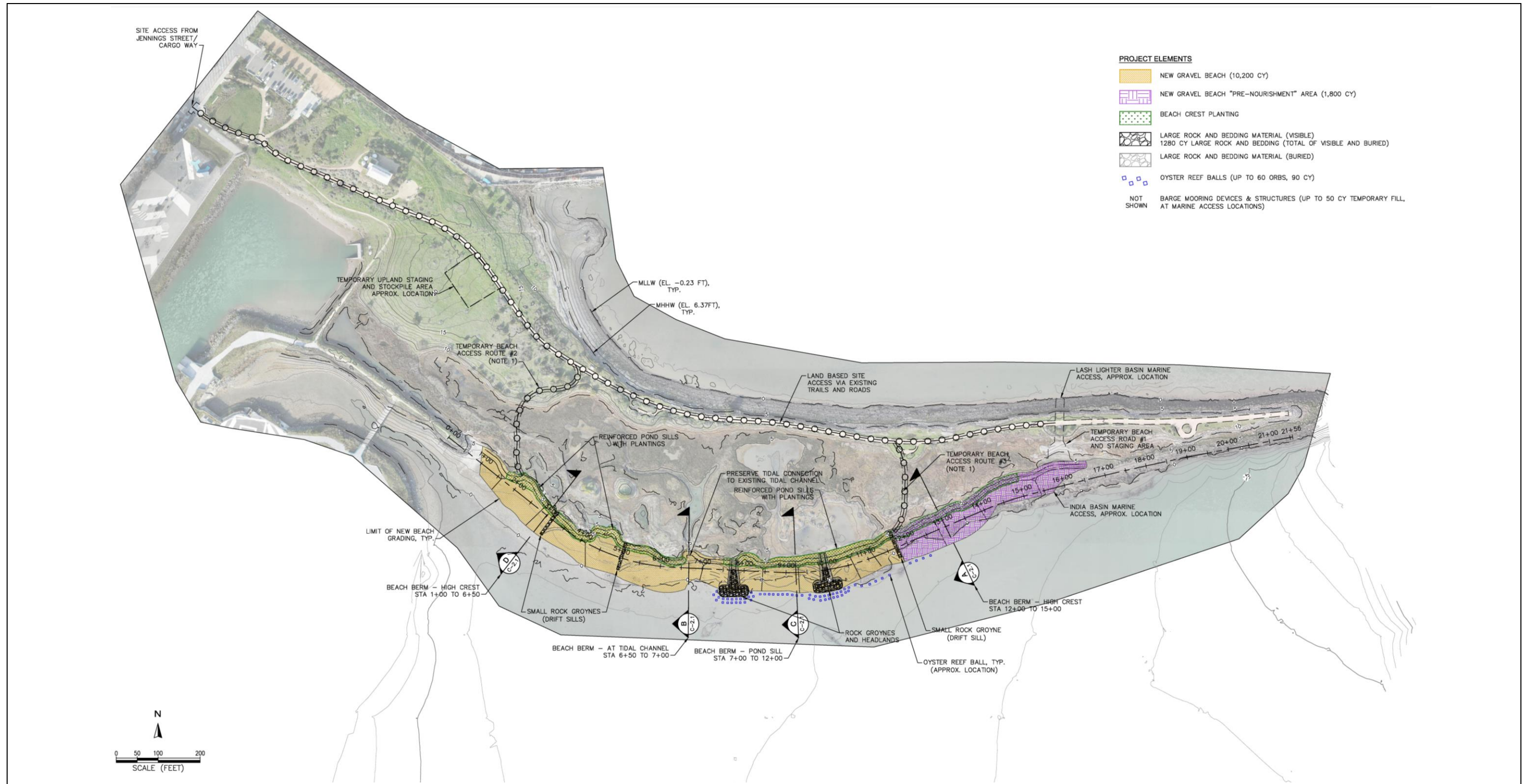
Figure 2
Project Area



SOURCE: aerial (SOA 2018), wetlands and waters (ESA 2018)

Heron's Head Shoreline Resiliency Project

Figure 3
Overview of Potentially Jurisdictional Waters of the U.S.



SOURCE: ESA, 2019

Notes:

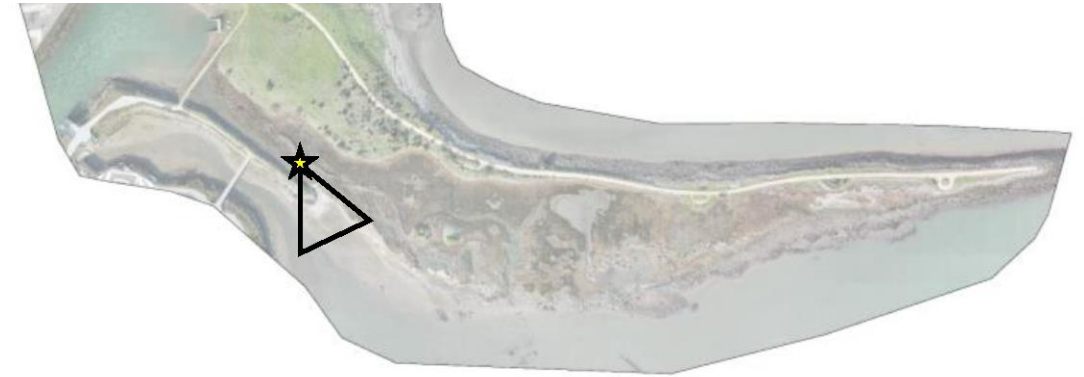
- 1) Contractor would be allowed to use Temporary beach access route #1, and if using land-based approach for material delivery, would have the option to use either Temporary beach access routes #2 or #3.

Heron's Head Shoreline. D170716

Figure 4
Project Overview



Attachment 1. Site Photo 1



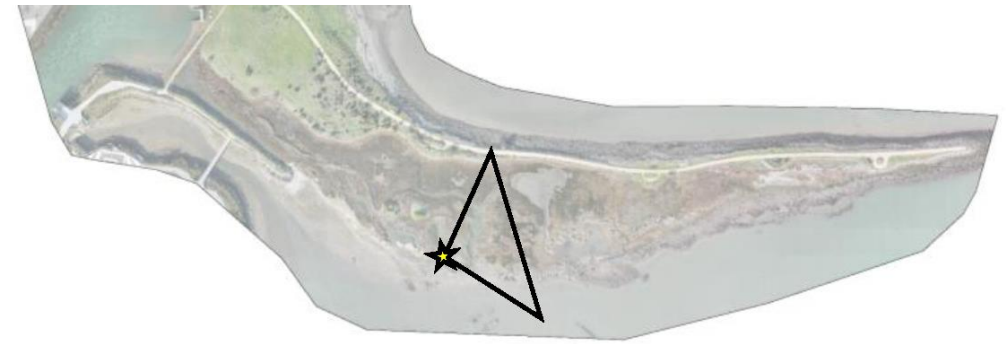
IMAGES TAKEN: 01/26/2018



IMAGE TAKEN: 01/26/2018



IMAGE TAKEN: 01/26/2018



IMAGES TAKEN: 01/26/2018



Staff Recommendation
February 16, 2021

Consideration of Authorization to Disburse Proposition 68 Funds for Projects Advancing Statewide Coastal Resilience

Michaela Miller, Climate Change Sea Grant Fellow

RECOMMENDED ACTION: Staff recommends that OPC approve the disbursement of \$8,056,761 to various grantees for projects advancing statewide coastal resilience through implementation, planning and design, adaptation planning and coordination, and research, as follows:

\$2,957,901 for Implementation Projects:

- 5a. \$1,667,000 to the Port of San Francisco for "Heron's Head Park Shoreline Resilience"
- 5b. \$1,290,901 to the Elkhorn Slough Foundation for "Elkhorn Slough Tidal Marsh Restoration: Phase III"

\$784,000 for Planning and Design Projects:

- 5c. \$339,000 to Marin County Parks for "Bollinas Lagoon Wye Wetlands Project"
- 5d. \$445,000 to the City of Imperial Beach for "Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach"

\$3,275,170 for Adaptation Planning and Coordination Projects:

- 5e. \$250,000 to the Wiyot Tribe for "Wiyot Climate Change Adaptation Plan Phase 1".
- 5f. \$214,500 to Orange County Parks for "South Orange County Regional Coastal Resilience Strategic Plan"
- 5g. \$607,376 to Coastal Quest for "Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District"
- 5h. \$591,813 to San Diego Regional Climate Collaborative for "Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment"
- 5i. \$396,000 to the County of Marin Community Development Agency for "Stinson Beach ARC: Adaptation and Resilience Collaboration".
- 5j. \$440,000 to the City of Trinidad for "Trinidad Community Coastal Resiliency Planning Project"
- 5k. \$450,800 to Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) for "BEACON Regional Coastal Resilience Sediment Pilot Program"

- 5l. \$324,681 to Richardson’s Bay Regional Agency (RBRA) for “Richardson’s Bay Eelgrass Protection & Management Plan – Phase 1 Implementation”

\$1,039,690 for Research Projects:

- 5m. \$346,290 to University of California Santa Cruz (UCSC) for “Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise”
- 5n. \$294,798 to Audubon California for “Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay”
- 5o. \$398,602 to University of California Santa Barbara (UCSB) for “Evaluating Adaptation Planning in Coastal California”

LOCATION: Statewide; see Exhibits for more detailed project specific locations.

STRATEGIC PLAN OBJECTIVE(S): 1.1: Build Resiliency to Sea-Level Rise, Coastal Storms, Erosion, and Flooding; 2.1: Enhance Engagement with Tribes; 2.2: Enhance Engagement with Underserved Communities; 2.3: Improve Coastal Access; and 3.1: Protect and Restore Coastal and Marine Ecosystems.

EXHIBITS:

Item 5a: Heron’s Head Park Shoreline Resilience

- 5a1 Project Location Map and Project Area Map
- 5a2 Notice of Exemption
- 5a3 Draft Design Plans
- 5a4 Letters of Support

Item 5b: Elkhorn Slough Tidal Marsh Restoration: Phase III

- 5b1 Project Location Map and Project Area Map
- 5b2 Notice of Determination
- 5b3 Letters of Support

Item 5c: Bolinas Lagoon Wye Wetlands Project

- 5c1 Project Location Map and Project Area Map
- 5c2 Letters of Support

Item 5d: Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach

- 5d1 Project Location Map and Project Area Map
- 5d2 Letters of Support

Item 5e: Wiyot Climate Change Adaptation Plan Phase I

- 5e1 Project Location Map
- 5e2 Letters of Support

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings and direct it to file relevant notices of determination or exemption:

“Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

- 1) The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act.
- 2) The proposed projects are consistent with OPC's Proposition 68 Grant Guidelines, adopted May 2019.
- 3) The proposed projects address the California Environmental Quality Act (CEQA), as follows:

Heron's Head Park Shoreline Resilience: OPC has determined that this project is a small habitat restoration project which is categorically exempt from CEQA pursuant to Public Resources Code section, section 15333. A Notice of Exemption (Categorical Exemption 15333) was filed with the State CEQA Clearinghouse on November 12, 2020 (Case number 2019-003714ENV). OPC has reviewed and considered this exemption and agrees that the exemption satisfies CEQA requirements.

Elkhorn Slough Tidal Marsh Restoration: Phase III: OPC has reviewed CEQA documents as follows: A Mitigated Negative Declaration for this project was prepared by the California Department of Fish and Wildlife, which is the lead agency for CEQA compliance, and it was certified in August 2015. OPC staff recommends that the mitigation and avoidance measures identified in the MND (Exhibit 2b3) be adopted as a condition of OPC's approval.

Bolinas Lagoon Wye Wetlands Project: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.”

Wiyot Climate Change Adaptation Plan: Phase I: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

South Orange County Regional Coastal Resilience Strategic Plan: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Stinson Beach ARC: Adaptation and Resilience Collaboration: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Trinidad Community Coastal Resiliency Planning Project: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

BEACON Regional Coastal Resilience Sediment Pilot Program: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Richardson’s Bay Eelgrass Protection and Management Plan: Phase I Implementation: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Evaluating Adaptation Planning in Coastal California: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

“OPC hereby approves the disbursement of \$8,056,761 up to the following amounts to the following grantees:

- \$1,667,000 to the Port of San Francisco for “Heron’s Head Park Shoreline Resilience”
- \$1,290,901 to the Elkhorn Slough Foundation for “Elkhorn Slough Tidal Marsh Restoration: Phase III”
- \$339,000 to Marin County Parks for “Bollinas Lagoon Wye Wetlands Project”.
- \$445,000 to the City of Imperial Beach for “Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach”
- \$250,000 to the Wiyot Tribe for “Wiyot Climate Change Adaptation Plan Phase 1”
- \$214,500 to Orange County Parks for “South Orange County Regional Coastal Resilience Strategic Plan”
- \$607,376 to Coastal Quest for “Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District”
- \$591,813 to San Diego Regional Climate Collaborative for “Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment”
- \$396,000 to the County of Marin Community Development Agency for “Stinson Beach ARC: Adaptation and Resilience Collaboration”
- \$440,000 to the City of Trinidad for “Trinidad Community Coastal Resiliency Planning Project”
- \$450,800 to Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) for “BEACON Regional Coastal Resilience Sediment Pilot Program”
- \$324,681 to Richardson’s Bay Regional Agency (RBRA) for “Richardson’s Bay Eelgrass Protection & Management Plan – Phase 1 Implementation”
- \$346,290 to University of California Santa Cruz (UCSC) for “Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise”
- \$294,798 to Audubon California for “Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay”
- \$398,602 to University of California Santa Barbara (UCSB) for “Evaluating Adaptation Planning in Coastal California”

This authorization is subject to the condition that prior to disbursement of funds, all of the above-referenced grantees shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery.”

with the Pacific Flyway”. The proposed projects are an appropriate use of Proposition 68 funds because they each will improve coastal resiliency and adaptation to climate change.

Summary of Recommended Proposition 68 Coastal Resilience Projects:	Prop 68 Funding:
Heron’s Head Park Shoreline Resilience	\$1,667,000
Elkhorn Slough Tidal Marsh Restoration: Phase III	\$1,290,901
Bolinas Lagoon Wye Wetlands Project	\$339,000
Bayshore Bikeway Resiliency Project - Creation of a Coastal Resilience Corridor in Imperial Beach	\$445,000
Wiyot Climate Change Adaptation Plan Phase 1	\$250,000
South Orange County Regional Coastal Resilience Strategic Plan	\$214,500
Planning Regional Coastal Resiliency for California State Parks	\$607,376
Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment	\$591,813
Stinson Beach ARC: Adaption and Resilience Collaboration	\$396,000
Trinidad Community Coastal Resilience Planning Project	\$440,000
BEACON Regional Coastal Resilience Sediment Pilot Program	\$450,800
Richardson’s Bay Eelgrass Protection & Management Plan– Phase 1 Implementation	\$324,681
Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea level rise	\$346,290
Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay	\$294,798
Evaluating Adaptation Planning in Coastal California	\$398,602
Total:	\$8,056,761

The recommended projects were selected through a competitive process under OPC’s Proposition 68 Grant Guidelines, which were adopted in May 2019. OPC staff assembled a Proposition 68 Coastal Resilience Review Committee that consisted of OPC staff. The Review Committee scored complete eligible applications for this Proposition 68 funding round according to Scoring Criteria for Chapter 10 provided on page 16 of the Proposition

68 Grant Guidelines. After all proposals were scored and ranked, the Review Committee recommended which projects should be selected for funding. Final staff recommendation funding decisions were made by OPC's Executive Director.

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

The proposed projects have different statuses under CEQA as follows:

5a: Heron's Head Park Shoreline Resilience:

This project is a small habitat restoration project which is categorically exempt the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15333. A Notice of Exemption (Categorical Exemption 15333) was filed with the State CEQA Clearinghouse on November 12, 2020 (Case number 2019-003714ENV).

5b: Elkhorn Slough Tidal Marsh Restoration: Phase III

A Mitigated Negative Declaration for this project was prepared by the California Department of Fish and Wildlife, which is the lead agency for CEQA compliance, and it was certified in August 2015.

5c: Bolinas Lagoon Wye Wetlands Project:

This planning-only project does not trigger CEQA but will include preparation of CEQA documents.

5d: Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach:

This planning-only project does not trigger CEQA but will include preparation of CEQA documents.

5e: Wiyot Climate Change Adaptation Plan Phase I:

This planning-only project does not trigger CEQA.

5f: South Orange County Regional Coastal Resilience Strategic Plan:

This planning-only project does not trigger CEQA.

5g: Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District:

This planning-only project does not trigger CEQA.

5h: Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment:

This planning-only project does not trigger CEQA.

5i: Stinson Beach ARC: Adaptation and Resilience Collaboration:

This planning-only project does not trigger CEQA.

5j: Trinidad Community Coastal Resiliency Planning Project:

This planning-only project does not trigger CEQA.

5k: BEACON Regional Coastal Resilience Sediment Pilot Program:

This planning-only project does not trigger CEQA.

5l: Richardson’s Bay Eelgrass Protection & Management Plan – Phase I Implementation:

This planning-only project does not trigger CEQA.

5m: Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise:

The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.

5n: Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay:

The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.

5o: Evaluating Adaptation Planning in Coastal California:


The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.



MEMORANDUM

April 9, 2021

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

FROM: Elaine Forbes
Executive Director 

SUBJECT: Request authorization to accept and expend \$1,667,000 in grant funds from the California State Ocean Protection Council for the Heron's Head Park Shoreline Resilience Project and approve the grant agreement, subject to Board of Supervisors' approval. (Resolution 21-17); and Request authorization to apply for \$1,517,000 in grant funds from the Wildlife Conservation Board Pacific Flyway Conservation Program for the Heron's Head Park Shoreline Resilience Project. (Resolution 21-18)

DIRECTOR'S RECOMMENDATION: Approve Attached Resolutions Nos. 21-17 and 21-18

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 addition of the EcoCenter in 2010 and expansion and improvement of the park in 2012. 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.

In 2020, the San Francisco Bay Restoration Authority authorized a grant award of \$297,000 to Port to support the wetland plant habitat enhancement element of the Project, and the Port Commission and Board of Supervisors authorized Port staff to

accept and expend the grant. In November 2020, Port staff applied for \$1.667 Million from the Ocean Protection Council (“OPC”, a division of the California Natural Resource Agency) Coastal Resilience Grant Program to support the shoreline stabilization element of the Project. In February 2021, the OPC voted to award the requested amount to support construction of the stabilized shoreline element of the Project. The OPC grant award provides 52% of the estimated cost to construct the shoreline. Port staff now requests the Port Commission’s authorization to accept and expend \$1,667,000 in OPC grant funds for construction of the Project and approval of the grant agreement and authorization to seek Board of Supervisors’ approval to accept and expend the grant from OPC. The OPC grant would provide about half of the funds needed to construct the shoreline stabilization and living shoreline elements of the project. Additional funds will be required in order to begin construction.

Port staff have continued efforts to identify other grant fund opportunities for this important project. The California Wildlife Conservation Board (WCB) Pacific Flyway Conservation Program supports multi-benefit climate adaptation and resiliency projects that protect or restore migratory bird habitat and improve habitat diversity and quality. The Port submitted a pre-application for funding and has been short-listed to submit a full application. The WCB requires Port Commission authorization to apply for funding. Port staff request approval of the attached resolution to support this grant application submittal.

Strategic Objectives

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

Goal #3 Engagement, Objective #2: Partner with City departments and government agencies, Port tenants, and stakeholders to educate and promote waterfront projects and activities. Port staff has presented the Project to the Port’s Southern Waterfront Advisory Committee and the EcoCenter Advisory Committee (staffed by the San Francisco Recreation and Parks Department) on multiple occasions over the past four years, and the Project has support from Committee members and members of the public attending those meetings. Additional community engagement in the Heron’s Head Park Shoreline Resilience project and outreach regarding the potential for nature-based infrastructure to serve as shoreline protection and adaptation to sea level rise will be led by community-based organization Literacy for Environmental Justice (LEJ) and funded by the San Francisco Bay Restoration Authority grant to Port in Fall 2021.

Goal #4 Equity: Ensure Port activities advance equity and public benefit and attract a diversity of people to the Waterfront. Protecting and enhancing the shoreline and wetland habitat at Heron’s Head Park will preserve a valuable public asset that is enjoyed by a diversity of users seeking healthy activities and connection to nature in an area of the City where there is less access to such benefits.

Goal #5 Sustainability, Objective #2: Enact measures to protect the Bay and its ecosystems:

- a) *Explore natural infrastructure alternatives (e.g. wetlands, horizontal levees, and “living shorelines”) in all shoreline stabilization and improvement projects.*
- b) *Implement City Biodiversity Goals and best sustainable practices in all open space improvement projects.*

The Project will achieve a natural infrastructure solution to shoreline stabilization, and it will protect and enhance biodiversity at Heron’s Head Park.

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 with park amenities including a 1/3-mile spur of the San Francisco Bay Trail, picnic areas, an off-leash dog play area and the EcoCenter. Heron’s Head Park is a highly valued resource for both wildlife and people: it is home to or visited by over 100 species of migratory and resident birds, two endangered species, and serves thousands of visitors each year.

As detailed in an August 11, 2020 Port Informational Memorandum to the Port Commission, the shoreline at Heron’s Head Park has experienced subsidence, erosion from wind-driven waves and tidal flows, and a low supply of suspended sediment in Bay waters that is needed to replenish the marsh. These forces have caused loss of both habitat acreage and ecological function. Without protection from erosion and capacity to adapt to sea level rise, Heron’s Head Park is expected to lose an estimated additional 80,000 sq. ft. over the next 30 years.

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

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

Regulatory Approvals

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

¹ A groyne is a shoreline protection structure build perpendicular to the shoreline to reduce longshore drift and trap sediments.

Francisco Bay Regional Water Quality Control Board, and the US Fish & Wildlife Service.

Funding Efforts

San Francisco Bay Restoration Authority (SFBRA); Grant Secured. The San Francisco Bay Restoration Authority (“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 a Port Memorandum to the Port Commission of August 25, 2020, the SFBRA authorized disbursement of \$297,000 to the Port for the first phase (the first two of a total of five years with a total grant award of up to \$1.1M) of the wetland plant restoration and community outreach components of the project. Through Resolution 20-42, the Port Commission authorized acceptance of the grant and a sole-source contract with Literacy for Environmental Justice to use the grant funds for Wetland Habitat Restoration at Heron’s Head Park. The Board of Supervisors authorized the Port to accept and expend SFBRA grant funds in September 2020 by Resolution 446-20. This wetland plant habitat restoration work is now underway.

Request authorization to accept and expend Ocean Protection Council Grant; Grant Awarded. Proposition 68, The California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act (Prop. 68), passed by the voters in 2018, generated funding for a wide variety of projects and initiatives, including projects that implement nature-based solutions and other sea level rise adaptation strategies to build coastal resiliency. In November 2020 Port staff applied to the OPC Coastal Resilience Grant Program for \$1.667M to support construction of the stabilized shoreline that will protect the marsh along Heron’s Head Park’s southern shoreline from erosion². On February 16, 2021, the OPC voted to award \$1.667M to the Port to construct the stabilized shoreline at Heron’s Head Park.

The OPC requires the grant recipient (“grantee”) to make certain findings, which are included in the proposed resolution accompanying this staff report, and execute a grant agreement (Grant Agreement) that specifies that the grantee will:

- Maintain the improvements for the duration of the grant term or reasonable life of the improvements. The shoreline is designed to mitigate erosion and provide capacity to adapt to sea level rise for approximately 30 years, through 2050 based on moderate projections for level of sea level rise, without maintenance. Regulatory agency permits to construct the Project obligate the Port to monitor the performance of the stabilized shoreline and implement adaptive management measures as needed to maintain the shoreline stabilization and habitat enhancement functions of the shoreline for 10 years.
- Comply with applicable laws and regulations including, but not limited to CEQA,

² The shoreline construction is described in detail the Port Memorandum to the Port Commission, Item 13A, February 9, 2021.

building codes, health and safety codes, the California Labor Code, disabled access laws, and project-specific permits.

- Certify that it will work towards the State’s priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety.
- ensure that its accounting practices are in accordance with the guidelines of “Generally Accepted Accounting Principles”
- Indemnify and hold harmless the State from liability connected with the project. Such requirement that the grantee indemnify the grantor is typical in grant agreements. Section 1.24 of the City’s Administrative Code requires the City’s Risk Manager’s approval in order for the City to indemnify another party; the City’s Risk Manager has approved these provisions of the Grant Agreement.
- Procure and maintain specified insurance and require the same of its contractors executing the grant-funded work.
- Acknowledge the OPC and the Coastal Resilience Grant Program in written, verbal, and digital communications about the project. OPC is currently developing guidance for grantees regarding acknowledgement, as well as specifications for how to use the new OPC logo in project signage, displays and interpretive aids.

All OPC grant funds will be used to construct the resilient shoreline at Heron’s Head Park. The \$1.667M award from OPC comprises approximately 52% of the current estimated cost to construct the shoreline. The OPC grant does not require any matching funds from the Port, but additional funding from other sources will be required to implement the Project. Port staff will continue to pursue grants from State and Federal funding sources. When the project is fully funded, the Port will contribute project management, grant and contract administration, and potentially construction management services.

Seeking funding from Wildlife Conservation Board. The Wildlife Conservation Board (WCB) is an independent state board that supports wildlife conservation. Along with building coastal resilience and other goals, Prop. 68 also made funding available to the WCB for projects that protect and enhance wildlife habitat associated with the Pacific Flyway³. In December 2020, Port staff submitted a pre-application for WCB Pacific Flyway Conservation Program grant funds. In February 2021, after screening 71 pre-applications for a combined aggregate total of \$58 million in grant funds, the WCB invited a shorter list of 32 applicants, including the Port, to submit full applications by April 8, 2021. If awarded, the WCB grant would provide the remaining funds required to construct the stabilized shoreline.

The application for WCB’s Pacific Flyway Conservation Program grant requires a resolution from applicant’s governing board that authorizes staff to file the application and commits the applicant to:

³ The Pacific Flyway is a major north-south route for migratory birds in America, extending from Alaska to Patagonia. San Francisco Bay is one of the most important stopovers for birds migrating along the Pacific Flyway.

- Comply with all federal, state and local environmental, public health, and other applicable laws and regulations
- Obtain all applicable permits
- Agree to execute a project specific grant agreement including terms and conditions consistent with state grant funding requirements
- Designate a representative authorized to negotiate and execute agreements, amendments, and other documents that related to the project.

If the Port's application is successful, staff will return for Port Commission authorization to accept and expend grant funds subject to Board of Supervisors approval.

Project Cost and Phasing

At the Port Commission's August 11, 2020 meeting, Port staff presented an informational item regarding the entirety of the Project, including wetland habitat restoration and maintenance, shoreline construction, and five years of post-construction monitoring of both wetland and shoreline performance. At that time, the total estimated cost to implement all elements of the Project, based on 65% engineering design, and assuming use of donated sand and gravel, was \$3.35 Million.

The design is now complete, and the construction documents are ready to bid for construction. The cost estimate has been refined, and the Port has obtained 3rd-party peer review of the design engineer's estimate. The current estimate to complete all elements of the Project, including a 10% contingency on shoreline construction and incorporating revised cost estimating recommendations from the 3rd-party review is \$4.284M, of which \$1.1M is for marsh habitat restoration, maintenance, and monitoring, and \$3.184M is for shoreline construction. The increased estimate of construction cost results from more accurate quantities in the 100% design and more thorough research on cost of labor and materials. It includes a cost for contracted construction management and retaining the engineering design team during construction. It is important to note that this marine work is non-standard construction and poses greater construction risk for bidders (i.e. tidal windows, ground conditions, protection of species and natural resources during construction, work during winter and related impact of weather conditions, etc.). Consequently, a larger variation in bid costs than a standard building remodel project should be expected.

The estimated cost, funding status, and schedule for implementing the project in phases are summarized below.

Scope	Schedule	Estimated Cost	Funding Status
Wetland revegetation, Phase 1: First two of proposed five years of wetland plant habitat restoration	Fall 2020 through Fall 2022.	\$297,000	Grant agreement between SFBRA and Port executed November 10, 2020.
Shoreline stabilization	August through January of any year, pending funding.	\$3,184,000	Partially funded pending Port Commission and Board of Supervisors approval of \$1.667M grant from OPC. Additional funds from WCB grant or other source are required to construct the stabilized shoreline.
Wetland revegetation Phase 2: Three additional years of wetland habitat restoration	Upon completion of shoreline stabilization.	\$495,000	Recommended for SFBRA grant funding. Task-specific award is subject to future SFBRA Governing Board, Port Commission, and Board of Supervisors approval.
Post-Construction Monitoring	From completion of shoreline construction through five years after completion.	\$308,000	Same as above.
Total Estimated Project Cost		\$4,284,000	

Schedule for Shoreline Stabilization

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

Port Commission Authorization to Accept and Expend OPC Grant.	April 13, 2021
Board of Supervisors Authorization to Accept and Expend OPC Grant.	May 25, 2021
Execute Grant Agreement with OPC	June 2021
Secure additional funding for construction	Ongoing through March 2022.
Advertise, bid, and award construction contract, subject to availability of funds for shoreline	March – July 2022.

construction, estimated at
\$3.184M

Construct shoreline

August 2022 – January
2023

Recommendation

Port staff requests Port Commission approval of the two attached resolutions:

- Subject to Board of Supervisors' approval, (1) authorization to accept and expend \$1,667,000 in grant funds from the OPC, (2) approval of the Grant Agreement; and (3) upon Board of Supervisors' approval, authorization for the Executive Director to execute and implement the Grant Agreement with OPC to partially fund construction of the shoreline stabilization element of the Heron's Head Park Shoreline Resilience Project.
- Authorization to apply for \$1,517,000 in grant funds from the WCB Pacific Flyway Grant Program to provide additional funding for construction of the shoreline stabilization element of the Heron's Head Park Shoreline Resilience Project.

Prepared by: Carol Bach
Environmental Affairs Manager

For: Diane Oshima
Deputy Director, Planning &
Environment Division

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

RESOLUTION NO. 21-17

- WHEREAS Proposition 68, The California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act (“Proposition 68”) was passed by the voters in 2018; and
- WHEREAS the Ocean Protection Council, a division of the California Natural Resources Agency, is charged with awarding and administrating grant funds generated by Proposition 68 for projects that implement nature-based solutions and other sea-level rise adaptation strategies to build coastal resiliency; and
- WHEREAS on November 13, 2020, the Port applied for grant funds from the OPC to construct a natural infrastructure-based shoreline to prevent erosion and enable sea level rise adaptation at Heron’s Head Park; and
- WHEREAS at its February 16, 2021 meeting, the OPC adopted a resolution authorizing a grant to the Port in the amount of \$1,667,000 for the Heron’s Head Park Shoreline Resilience Project; the OPC’s resolution was adopted by the OPC pursuant to, and is included in, the OPC’s February 16, 2021 staff recommendation, and
- WHEREAS the OPC requires execution of a grant agreement that includes terms and conditions customary for State grants as further described in the Memorandum to the Port Commission dated xx, 2021 (“Grant Agreement”); 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 the Grant Agreement is subject to Board of Supervisor’s approval under Charter Section 9.118;
- WHEREAS the shoreline stabilization to be funded by OPC grant is categorically exempt from the California Environmental Quality Act; now therefore be it
- RESOLVED that the Port Commission authorizes Port to accept and expend \$1,667,000 in grant funds from the California State Ocean Protection Council for the Heron’s Head Park Shoreline Resilience Project and approves the Grant Agreement and authorizes its Executive Director to seek Board of Supervisors' approval to approve the request to accept and expend the grant from the OPC and to approve the Grant Agreement; and be it further
- RESOLVED that, upon Board of Supervisors' approval, the Port Commission authorizes the Executive Director or her designee to act as a

representative of the Port and to negotiate and execute the Grant Agreement and all other agreements and instruments necessary to obtain and expend the grant monies on behalf of Port, in such form approved by the City Attorney.

I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of April 13, 2021.

DocuSigned by:

Carl Nauta

Secretary

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

RESOLUTION NO. 21-18

- WHEREAS Proposition 68, The California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act (Proposition 68) was passed by the voters in 2018; and
- WHEREAS Proposition 68 made funds available to the Wildlife Conservation Board for the enhancement or restoration of fish and wildlife habitat and for the development of public access facilities for hunting, fishing or other wildlife-oriented recreational uses; and
- WHEREAS Port staff proposes to apply for WCB Pacific Flyway Grant Program funds to support construction of the Heron’s Head Park Shoreline Resilience Project; now therefore be it
- RESOLVED, that the Port Commission approves the filing of an application for funding from the Wildlife Conservation Board; and be it further
- RESOLVED, that the Port will comply with all federal, state and local environmental, public health, and other appropriate laws and regulations applicable to the project; and be it further
- RESOLVED, that the Port has or will obtain all appropriate permits applicable to the project; and be it further
- RESOLVED, that Port will commit to compliance with terms and conditions customary for State grants as will be specified in a future grant agreement with the Wildlife Conservation Board; and be it further
- RESOLVED, that the Port Commission authorizes its Executive Director or her designee to conduct negotiations, execute, submit and sign all documents including but not limited to applications, agreements, amendments, payment requests, and other documents which may be necessary to apply for grant funds, and if awarded, for the completion of the grant-funded project.

I hereby certify that the foregoing resolution was adopted by the Port Commission at its meeting of April 13, 2021.

Secretary