

# SAN FRANCISCO WATERFRONT COASTAL FLOOD STUDY, CA

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## DRAFT APPENDIX H PUBLIC INVOLVEMENT

JANUARY 2024

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USACE TULSA DISTRICT | THE PORT OF SAN FRANCISCO



**US Army Corps  
of Engineers** USACE



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## Acronyms and Abbreviations

Acronym	Definition
BCDC	Bay Conservation and Development Commission
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CSRM	Coastal Storm Risk Management
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
IFR	Integrated Feasibility Report
IFR/EIS	Integrated Feasibility Report / Environmental Impact Statement
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NMFS	National Marine Fisheries Service
NPS	National Park Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NMFS	National Marine Fisheries Service
ORCP	Office of Resilience and Capital Planning
PDT	Project Delivery Team
POSF	Port of San Francisco
RAWG	Regulatory Agency Working Group
RWQCB	Regional Water Quality Control Board
SFWCFS	San Francisco Waterfront Coastal Flood Study

San Francisco Waterfront Coastal Flood Study

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SHPO	State Historic Preservation Office
SLC	State Lands Commission
TSP	Tentatively Selected Plan
USACE	U.S. Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WRP	Waterfront Resilience Program



## 1. Agency Coordination and Collaboration

The Project Delivery Team (PDT) has been coordinating with federal, state, and local governmental agencies throughout the plan formulation process to identify potential concerns, ways to avoid, minimize, and mitigate for adverse impacts, and where engineering with nature or other beneficial features could be incorporated into the planning and designs. Coordination with these agencies has included attendance at meetings hosted by the US Army Corps of Engineers (USACE) and other agencies including two environmental agency teams that were formed. The Resource Agency Working Group (RAWG) is hosted by the Port of San Francisco (POSF), with additional support from the USACE, that includes more than 50 members from agencies including: San Francisco Bay Conservation and Development Commission (BCDC), California Department of Fish and Wildlife (CDFW), City of San Francisco Planning Department, Environmental Protection Agency (EPA), National Park Service (NPS), National Marine Fisheries Service (NMFS), Regional Water Quality Control Board (RWQCB), California State Lands Commission, and US Fish and Wildlife (USFWS). Additionally, an Engineering with Nature Working Group (ENWG) was set up by the USACE identify where and which NNBFs should be considered within the study area and help describe how NNBFs contribute to regional habitat goals and project benefits. The ENWG included 15 individuals from Federal, state, and local agencies, universities, non-governmental organizations, and private industry who have been identified as experts in the field of Engineering with Nature and ecological restoration. The PDT will continue to engage with agencies throughout the planning process, to further refine the designs and impact analysis and in support of environmental compliance activities described in Chapter 6 of the Main Report.

National Environmental Policy Act (NEPA) regulations and processes define three types of formal roles for agencies. A Lead Agency is the federal agency preparing or having taken primary responsibility for preparing a NEPA document. A Cooperating Agency is any federal agency other than a lead agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative) for legislation or other major federal action significantly affecting the quality of the human environment. A Participating Agency is a federal or state agency that has an interest in the proposal. Cooperating and Participating Agencies must provide comments within their special expertise or jurisdiction and use the NEPA process to address any environmental issues of concern to its agency. A total of 12 invitations (5 federal agencies, 7 state agencies) were sent. Two formal acceptance letters were received from cooperating agencies and two declines were received from state agencies (California State Historic Preservation Office and Bay Area Quality Management District). Any agency who did not formally respond are assumed to have accepted the invitation to be a cooperating or participating agency. The following is a list of formal agency roles for this Study:

- **Lead Agency:** USACE
- **Cooperating Agencies:** Environmental Protection Agency Region 9 (Formally Accepted), Federal Emergency Management Agency Region IX (Planning and

Implementation Branch, National Marine Fisheries Service (Formally Accepted), National Park Service, US Fish and Wildlife Service

- **Participating Agency:** California Department of Fish and Wildlife, California Regional Water Quality Control Board, California State Lands Commission, San Francisco Bay Conservation and Development Commission, and San Francisco Planning Department

## 1.1 Regulatory Agency Working Group

USACE, along with other Federal, State, and local agencies participates in a Regulatory Agency Working Group (hosted by POSF). The RAWG serves as a forum, to strive for common objectives and goals, to develop ways to address risks that are adaptive, accountable, and transparent, and to provide for early identification of permitting and policy issues. The RAWG includes POSF, USACE, BCDC, CDFW, EPA, NPS, NMFS, RWQCB, State Historic Preservation Office (SHPO), State Lands Office (SLC), and USFWS.

## 1.2 City Agency Engagement

POSF also engaged San Francisco City partners on the Flood Study. POSF convened a group of City staff that met regularly to provide input into plan formulation, engineering, and public involvement. The City staff team included representatives from the Office of Resilience and Capital Planning (ORCP), SFMTA, SF Planning Department (Planning), SFPUC, and SF Public Works. POSF worked with City agency directors through San Francisco's ClimateSF group, which includes directors from the same agencies plus SF Environment. The ClimateSF Directors group acted as a steering committee for City confirmation of SFWCFS decisions. The focus of these presentations and ensuing discussions included: understanding more about priority assets along the waterfront, along with ideas for improving seismic and flood safety, working closely with agency staff to better understand potential impacts to infrastructure and assets, and ongoing close coordination on mid- and long-term planning to help inform plan formulation strategies.

## 2. Public Coordination

Public involvement is required by NEPA before a Federal agency undertakes an action affecting the environment. The purpose of public involvement is to enable citizen input regarding potential alternatives and effects of agency actions, and to bolster informed agency decision-making. Throughout this study, USACE and POSF have actively involved agencies, key audiences, and the public through various meetings and engagements.

## 2.1 NEPA and the Scoping Process

Scoping is the process used to identify issues, concerns, and opportunities for enhancement or mitigation associated with the proposed action. The purpose of the scoping process is to:

- Invite the participation of local, county, state, and federal resource agencies, Indian Tribes, non-government organizations (NGOs), and the public to identify significant environmental and socioeconomic issues related to the study
- Determine the depth of analysis and significance of issues to be addressed in the Integrated Feasibility Report/EIS
- Identify how the proposed alternatives would or would not contribute to cumulative effects in the study area
- Identification of any local, county, state, and federal resource plans and future project proposals in the study area, implementation schedules, as well as any data that would help to describe past and present actions, and effects of the project and other development activities, on environmental and socioeconomic resources
- Gather information, quantitative data, or professional opinions that may help define the scope of the analysis related to both site-specific and cumulative effects, and that may help identify significant environmental issues
- Solicit, from local, county, state and federal agencies, as well as the public, available information on the resources within the study area
- Identify any information sources that might be available to characterize the existing environmental conditions and analyze and evaluate impacts.

## 2.2 Scoping Period

The Study began in 2018 under the USACE San Francisco District, South Pacific Division and was transferred to the Tulsa District out of the Southwestern Division in 2021. The USACE San Francisco District and Port issued a Notice of Early Scoping in the Federal Register August 20, 2020. At that time, it was unclear if significant effects would be realized and the need for an EIS was not formally announced.

Virtual public scoping meetings were held on September 16 and 17, 2020 coinciding with the Notice of Early Scoping. During early scoping, several significant environmental and social issues were raised including but not limited to minimizing bay fill; effects of high rates of sea level rise on any alternative considered; disruptions to businesses, transportation corridors and walk paths; environmental justice impacts on historically disadvantaged communities; impacts to water quality, contaminated sites, historic resources; and the potential cost and time to implement any of the strategies. In general, there was wide support for use of nature-based measures in lieu of gray

infrastructure, preserving and increasing public access to the waterfront, and incorporating adaptation components to address uncertainties in sea level rise.

A second Notice of Intent (NOI) was published on July 27, 2023, with a scoping comment period from July 27 through August 28, 2023. No additional public meetings were held during this comment period due to the level of community engagement held between the first Early Scoping public meetings and the Waterfront Resiliency Program Community Engagements completed in the Fall of 2022 to help socialize the study and potential measures, as described in section 2.4.

During the 2023 scoping process, several scoping comment letters were received from State and Federal agencies. Many of the scoping comments were similar to the environmental and social issues that were documented during the 2020 early scoping period and during agency coordination. Scoping comments noted interest in the impacts to marine biological resources, hydrology and water quality, State and Federally listed species, aesthetics and historic resources.

All comments received during the early scoping and scoping comment periods are included in Attachment 1, along with copies of the FR notices and summaries of engagement where applicable.

## **2.3 Waterfront Resilience Program Community Engagement**

Since 2017, the Port's Waterfront Resilience Program (WRP) has connected with tens of thousands of people through robust community engagement efforts to advance work on the Embarcadero Seawall Program and the San Francisco Waterfront Coastal Flood Study (SFWCFS). This included engaging community members, businesses and merchants, advisory committees, non-profit groups and others, and educating them about the aging Embarcadero Seawall to ensure that the findings from the Multi-Hazard Risk Assessment (MHRA) about the hazards, risks and consequences would be accompanied by an understanding of the priorities, concerns and issues that mattered to community members and other key audiences.

More specifically, the Port's communication and engagement included sharing earthquake and current and future flood risks along the Embarcadero waterfront in the northern waterfront and the current and future flood risk due to sea level rise as part of the SFWCFS and the Islais Creek Adaptation Study in the central and southern waterfronts. Across all public engagement efforts, the Port presented the same messages:

- Education about the Embarcadero Seawall, known risks, and the Port's approach to address those risks
- Education and introduction to the SFWCFS, current and future risks and the assets and services that will be affected if no action is taken
- Introduction to the WRP, including life safety and emergency response as the primary Program focus

All community engagement (including community meetings, presentations to groups, tabling at local neighborhood events, and online engagement) also offered the public an opportunity to provide the Port key feedback on Program priorities as the Port and its consultants worked with city partners and others to advance the MHRA to better understand the seismic and flood hazards, the assets and services within the Program area, and the nature and consequences of the risks.

The community engagement approach included:

- Community meeting series in three geographies: Embarcadero, Mission Creek / Mission Bay and Islais Creek / Bayview;
- Participation in and hosting of community events like mixers, walking tours, and boat tours throughout the waterfront;
- Online engagement through the WRP website ([sfport.com/wrp](https://sfport.com/wrp)); and
- Presentations to and discussions with community-based organizations, community advisory committees, commissions, and boards.

Additional details on the community engagement efforts and the comments received are included in Attachment 1.

### **2.3.1 Community Meetings**

A series of community meetings were held between June 2018 and December 2022. Each community meeting focused on a topic including an introduction to the Waterfront Resilience Program; assets and risks; goals and tradeoffs; framework and vision, principles, and evaluation criteria; the Multi-Hazard Risk Assessment (MHRA) approach and findings; introduction to measures; and introduction to Embarcadero Early Projects; and Draft Waterfront Adaptation Strategies. Eight meetings were held in the Embarcadero community, four meetings in the Mission Creek / Mission Bay community, and six meetings in the Islais Creek / Bayview community.

### **2.3.2 Digital Engagement**

To provide a range of ways to participate in the WRP, the program website ([sfport.com/wrp](https://sfport.com/wrp)) has provided a number of opportunities for online engagement, as well information related to meetings, findings, explainer videos, walking tours and other engagement opportunities. Some of the online engagement has included:

- Map Your Priorities Along the Waterfront: this mapping exercise asks the public to inform how we prioritize and define projects along our waterfront. It is modified from a table-top activity at Seawall Community Meeting #2 in September 2018 and two SFWCFS Meetings in March 2019.
- It's Your Turn: Provide Feedback on the Mission Bay/Mission Creek Resilience Goals: this online engagement provides the public a way to engage and give

input on the draft Mission Bay/Mission Creek Resilience Goals that were drafted based on input from Mission Bay/Mission Creek Community Meeting #1.

- **It's Your Turn: Provide Feedback on the Waterfront Resilience Program Vision, Principles, and Evaluation Criteria:** provides a way for people visiting the WRP website to give input on the draft Program Vision, Principles and Evaluation Criteria in the Embarcadero Seawall segment to augment the feedback received in Community Meetings #3 and #4.
- **Think Big and Help the Port Envision the Waterfront in 2100 and Beyond:** this online activity paralleled our in-person outreach on the Envision effort and asked the public to imagine the waterfront in the year 2100.
- **Draft Waterfront Adaptation Strategies StoryMaps:** this virtual tour of the waterfront shows how the Draft Waterfront Adaptation Strategies would be applied in each waterfront area.
- **Draft Waterfront Adaptation Strategies Explainer Video:** created in conjunction with sfgovtv, this video provides an overview of waterfront risks and hazards and potential strategies to address these hazards (the Draft Waterfront Adaptation Strategies).

### **2.3.3 In-Language Engagement**

To make information about the Draft Waterfront Adaptation Strategies available in languages community members are most comfortable using, in-language Spanish and Chinese communications were developed as part of engagement. These in-language materials included:

- Adaptation Strategies Explainer Video (Spanish | Chinese)
- Downloadable PDF fact sheets for each of the seven Draft Waterfront Adaptation Strategies
- Webpages listing the full calendar of engagement events, with a sign-up form to register for events with a request for a translator (Spanish | Chinese)
- Waterfront posters with designated QR codes leading to the engagement page to sign up for events and review materials
- In-language social media posts

### **2.3.4 In-Person, Event Based Engagement**

Since 2017, the Port has connected with Bay Area families at over 100 in-person events. Almost all events have been staffed by a multilingual outreach team.

- **I Love the Waterfront:** The WRP led an outreach activity based at over 100 events throughout the city to connect people to the waterfront by asking them

what they love about the waterfront. These events led to more than 13,500 people contacted, 9,000 pieces of collateral distributed, and 3,500 engagement activity participants. After each event, the outreach team reported a few of the select responses to the “I love the waterfront” prompt from each event.

- **Envision Engagement:** In 2019, the Waterfront Resilience Program team led an outreach activity based on the Envision activity from Embarcadero Seawall Community Meetings #1 and #3 at twenty-two events throughout the city. These events led to almost 4,000 people contacted, 2,500 pieces of collateral distributed, and 2,000 engagement activity participants. After each event, the outreach team took a photo of the map filled with the cards and pulled out themes from the event.
- **WRP Mixers and Pop-Ups:** The Port hosted a series of free “mixers” and pop-up events in the Bayview that saw hundreds of attendees, including families, who engaged in outreach activities and shared input on the Program.
- **WRP Community Partnerships:** The Port connected with key community-based organizations to help us connect with communities across San Francisco about the WRP. Highlights include partnerships with 826 Valencia / Mission Bay, Cal Academy, WorldWideWomen Girls’ Festival, and more.
- **Waterfront Tours:** Another way in which WRP brought the program into the community and used different approaches to engage and communicate was through walking tours. The team held a series of walking tours along the Embarcadero Seawall, began a series in the Islais Creek geography and also held a boat tour to see the waterfront from the important perspective from the Bay. The walking tours allowed the WRP to share the seismic and flood risks and highlight critical assets and services along the shoreline. Some of the highlights of the Embarcadero tours included sharing some of the lowest spots along the waterfront, sharing the new Ferry Terminal expansion that was built to accommodate both seismic and flood risk and the Pier 14 sea level rise markers that demonstrate how much elevation change will need to occur to address future flood risk. The Islais Creek tour highlights included all of the small businesses, critical city and Port assets, critical mobility assets and all of the ecological benefits that persist in Islais Creek in spite of how industrial it is.
- **Draft Waterfront Adaptation Strategies community meetings:** This virtual and in-person meeting series hosted interactive workshops in each of the three outreach locations (Embarcadero, Mission Creek / Mission Bay, and Islais Creek / Bayview) to gather public feedback on the Draft Waterfront Adaptation Strategies. This feedback was used to help the PDT identify the TSP.

### **2.3.5 Community Group Engagement**

- Since 2017, the Port team coordinated over 115 community and key stakeholder presentations including 12 in-language meetings. This includes presentations and discussions with community-based organizations, neighborhood groups, and formal advisory committees, commissions, and boards. The standard format for this engagement included a 15-minute presentation describing the Waterfront Resilience Program, the hazards and potential risks and consequences relevant to the group, the adaptation planning framework, the projects within the program and community engagement approach and opportunities for input, and the Draft Waterfront Adaptation Strategies.

## **3. Future Coordination**

### **3.1 Public Coordination**

Following the release of the Draft IFR/EIS there will be a 60-day public comment review period. Comments received will then be used to inform the Recommended Plan included in the Final Report, and the Final IFR/EIS. Future coordination and outreach for the SFWCFS will include meetings with the general public and regional partners associated with the release of the Draft IFR/EIS to discuss the findings and progress of the study to date. Additionally, there will be environmental agency coordination meetings and cooperating agency meetings to be held on a regular and recurring basis.

It is critical to the success of the study that there is clear communication between the PDT and the public regarding the study schedule, the study goals and objectives. Therefore, a series of public meetings will be held within the comment review period to share information and analyses associated with the release of the Draft IFR / EIS. The public will be able to voice their concerns directly to the PDT during these meetings.

The PDT will hold at least four in-person public workshops, one for each project reach, to explain the Draft Report and gather formal public comment. PDT will provide opportunities for formal public comment at these meetings, and through other means such as online. The PDT will also develop Storymaps explaining the Tentatively Selected Plan (TSP). POSF will conduct additional outreach, including walking tours, CBO presentations, and online and social media promotion, to direct people for how to make formal comment on the plan. Additionally, there will be environmental agency coordination meetings and cooperating agency meetings to be held on a regular and recurring basis.

Public comment will be reviewed and considered as the PDT refines the TSP into a final recommended plan for the Final Feasibility Report. Comments received on the Draft IFR/EIS from the public will be used to inform the Recommended Plan and the Final IFR/EIS.



### **3.2 IFR/EIS Agency Coordination**

Following the release of the Draft IFR/EIS, POSF and USACE will continue to convene City agencies to refine the TSP, understand their comments and concerns, and work towards a final recommended plan for the Final Feasibility Report. USACE will also continue to host Cooperating and Participating Agency and RAWG meetings throughout the comment review period and after. Comments received on the Draft IFR/EIS from state and federal agencies will be used to inform the Final IFR/EIS. Additional analyses will be completed and included in the Final IFR/EIS, as the project becomes more defined. As the details for the TSP measures are more refined and analysis is performed, that analysis will be shared with the Cooperating and Participating Agencies.

# SAN FRANCISCO WATERFRONT COASTAL FLOOD STUDY, CA

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## ATTACHMENT 1 PUBLIC ENGAGEMENT FROM 2020 (EARLY SCOPING) THROUGH 2023 (SCOPING)

JANUARY 2024

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USACE TULSA DISTRICT | THE PORT OF SAN FRANCISCO



**US Army Corps  
of Engineers** CO



# Notice of Early Scoping Period

**SUPPLEMENTARY INFORMATION:** DFC is submitting its Application for DPA–DFC Loan Program (DFC–014) to OMB for review and approval. This collection was previously granted an emergency clearance by OMB on June 5, 2020. The emergency clearance expires on December 31, 2020 and DFC is now seeking a regular clearance.

#### Summary Form Under Review

*Title of Collection:* Application for DPA–DFC Loan Program.

*Type of Review:* Extension without change of a currently approved information collection.

*Agency Form Number:* DFC–014.

*OMB Form Number:* 3015–0013.

*Frequency:* Once per investor per project.

*Affected Public:* Business or other for-profit; not-for-profit institutions; individuals.

*Total Estimated Number of Annual Number of Respondents:* 100.

*Estimated Time Per Respondent:* 1 hour.

*Total Estimated Number of Annual Burden Hours:* 100 hours.

*Abstract:* DFC–014 Application for DFC–DPA Loan Program is the principal document to be used by the U.S. International Development Finance Corporation (“DFC”) to determine if the proposed transaction is eligible for DFC–DPA financing and whether it meets required underwriting criteria.

Dated: August 17, 2020.

**Nichole Skoyles,**

*Administrative Counsel, Office of the General Counsel.*

[FR Doc. 2020–18297 Filed 8–19–20; 8:45 am]

**BILLING CODE 3210–01–P**

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## DEPARTMENT OF DEFENSE

### Department of the Army, Army Corps of Engineers

#### Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers; Defense (DOD).

**ACTION:** Notice of Early Scoping.

**SUMMARY:** The San Francisco District, U.S. Army Corps of Engineers (USACE), intends to prepare a feasibility study integrated with an environmental assessment (EA) or environmental impact statement (EIS) to evaluate coastal storm and flood risk management alternatives along 7.5 miles of the San Francisco Waterfront, from

Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. The Port of San Francisco is the non-federal partner for the study. USACE will conduct early scoping to solicit public participation and input to inform the environmental analyses and to assist with determining the appropriate level of NEPA documentation required for the study.

**DATES:** USACE requests that written comments regarding the scope of the environmental analysis and alternatives that should be considered as part of the study and NEPA analysis should be received by October 21, 2020.

**ADDRESSES:** Written scoping comments or requests to be added to the mailing list can be sent by email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil), or by mail: Ms. Anne Baker, 450 Golden Gate Avenue, 4th Floor, San Francisco, California 94102.

**FOR FURTHER INFORMATION CONTACT:** Ms. Anne Baker via email or mail at (see **ADDRESSES**). Study information will also be posted periodically on the internet at: <https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/>

For inquiries from the media, please contact the USACE San Francisco District Public Affairs Officer, Mr. Brandon Beach by email: [Brandon.A.Beach@usace.army.mil](mailto:Brandon.A.Beach@usace.army.mil) or by telephone: (415) 503–6958.

**SUPPLEMENTARY INFORMATION:** The San Francisco District, U.S. Army Corps of Engineers (USACE), intends to prepare a feasibility study integrated with an environmental assessment (EA) or environmental impact statement (EIS) to evaluate coastal storm and flood risk management alternatives along 7.5 miles of the San Francisco Waterfront, from Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. The Port of San Francisco is the non-federal partner for the study. USACE will conduct early scoping to solicit public participation and input to inform the environmental analyses and to assist with determining the appropriate level of NEPA documentation required for the study.

USACE has not yet determined that an EIS will be necessary for the study, but will conduct the appropriate scoping and public outreach required for the preparation of an EIS, since it is the more stringent process. If at any time during the NEPA analysis USACE determines that there may be the potential for significant, unmitigable effects, then an EIS will be prepared. A formal Notice of Intent (NOI) to prepare an EIS would be filed in the **Federal Register** to initiate the EIS process.

Should an EIS be necessary, written comments submitted during this early scoping period will be considered in development of the EIS. Written public comments in response to a Notice of Intent (NOI) to prepare an EIS would also be accepted and considered. USACE will substitute the public meetings associated with this Notice of Early Scoping for the scoping meetings that would normally occur after the publication of a NOI to prepare an EIS. Additional scoping meetings would therefore not be held, if an NOI to prepare an EIS is released. Written comments, including those on the scope of alternatives and impacts, will still be considered through any formal scoping period initiated by an NOI to prepare an EIS. The district would also seek to ensure that key resources agencies have had an informed opportunity to weigh in on subject proposals.

Please note that the San Francisco Planning Department (Planning Department) is the California Environmental Quality Act (CEQA) lead agency for the study. The Planning Department is conducting CEQA review under a separate process, which is not part of this early scoping effort under NEPA.

1. *Study Authorization.* The San Francisco Waterfront Flood Resiliency Study was originally authorized under Section 110 of the Rivers and Harbors Act of 1950, Public Law 515, 64 Stat. 163. The project was subsequently authorized under Section 142 of the Water Resources Development Act (WRDA) of 1976, Public Law 94–587, 90 Stat. 2917, 2930, as amended by Section 705 of WRDA of 1986, Public Law 99–662, 100 Stat. 4082, 4158. Authority for the NEPA early scoping process is provided by the Council on Environmental Quality (CEQ) Regulations (Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulation, 46 FR 18026, 18030 (March 23, 1981) as amended 1986, see Question 13).

2. *Study Location.* The proposed study area being considered is approximately 7.5 miles, from Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. This area of the waterfront is highly urbanized, supporting commercial, residential, recreation, tourism, and open space land uses. The area contains a complex mix of piers, structures, and seawall—many of which are considered historic. A study area map can be found online at: <https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/>.

3. *NEPA Purpose and Need.* The purpose of the study is to determine strategies to manage the risk of impacts from future flooding in the project area, including public health and safety. Coastal storm risk management measures would seek to reduce effects to important building, utility, and transportation infrastructure and resources, as well as social and economic resources, including recreation facilities. During certain conditions such as storms, king tides, or El Niño events, water from the San Francisco Bay periodically overtops sections of the seawall along the San Francisco Embarcadero waterfront, resulting in flooding of low-lying areas. Sea level rise is expected to increase risk of flooding in the future. Flooding could result in limited or no access to the Embarcadero, Ferry Building and terminals, and portions of downtown San Francisco. Potential flooding of these areas could adversely impact building infrastructure, including historic buildings; transportation and transportation infrastructure, including the BART, Muni, and the Embarcadero roadway; recreation and tourism; government resources; local businesses and economy; and public health and safety. Therefore, with the existing and increasing risk as sea levels continue to rise there is a need to manage the risk of flooding in the study area.

4. *Alternatives.* Alternative formulation is in the early stages. USACE and the Port of San Francisco are developing preliminary alternatives that combine a broad suite of flood risk management structural, non-structural, and natural and nature-based measures in addition to a No Action Alternative. Structural measures include options such as construction of new levees and floodwalls, or improvements to the existing seawall to address coastal flooding along the waterfront. Nonstructural measures include options such as raising critical infrastructure, floodproofing structures, recommending land use or zoning restrictions, or enhancing flood warning systems. Natural and nature-based features include measures like horizontal levees, ecological seawalls or “ecotones” that reduce flood risk while improving the environment. USACE and the Port of San Francisco will coordinate with interested stakeholders to further describe and refine the alternatives and/or develop additional alternatives throughout the study process. As alternative formulation progresses, more information will be available on the project website: <https://www.spn.usace.army.mil/Missions/>

*Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/.*

5. *Scoping Process.*

a. Two virtual public scoping meetings will be held to present an overview of the San Francisco Waterfront Flood Resiliency Study, the USACE alternative formulation process, and the NEPA process. Additionally, these meetings will afford all interested parties an opportunity to comment on the scope of analysis and potential alternatives. The first virtual scoping meeting will be held on September 16, 2020, from 6:00–7:30 p.m. The second virtual scoping meeting will be held on September 17, 2020, from 2:00–3:30 p.m. Information on accessing the virtual public meetings can be found at: [https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/.](https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/)

b. USACE will be soliciting public comments throughout the 60-day scoping period (See Dates and Addresses above).

6. *Availability.* A minimum 30-day public review period will be provided for individuals, interested parties, and agencies to review and comment on the Draft NEPA document. All interested parties are encouraged to respond to this notice and provide a current address if they wish to be notified of the Draft NEPA Document’s public circulation. The Draft NEPA Document is scheduled to be available for public review and comment in spring 2022.

**PUBLIC DISCLOSURE STATEMENT:** USACE believes it is important to inform the public of the environmental review process. To assist the USACE in identifying and considering issues related to the study, comments made during formal scoping and later on the draft NEPA document should be as specific as possible. Reviewers should structure their participation in the environmental review of the proposal so that it alerts USACE to the reviewers’ position and concerns. It is very important that those interested in this study participate by the close of the scoping period so that substantive comments and objections are made available to the USACE at a time when we can meaningfully consider them for alternative development and incorporate them into the study, as appropriate.

**Paul E. Owen,**  
*Brigadier General, U.S. Army, Commanding.*  
[FR Doc. 2020–18226 Filed 8–19–20; 8:45 am]

**BILLING CODE 3720–58–P**

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Notice of Intent To Prepare an Environmental Impact Statement for construction of the Proposed Delta Conveyance Project, Sacramento, San Joaquin, Contra Costa, and Alameda Counties, CA

**AGENCY:** Department of the Army, U.S. Army Corps of Engineers, DoD.

**ACTION:** Notice of Intent.

**SUMMARY:** The U.S. Army Corps of Engineers Sacramento District (USACE), as the lead agency under the National Environmental Policy Act (NEPA), will prepare an Environmental Impact Statement (EIS) for construction of the Delta Conveyance Project. The California Department of Water Resources (DWR) is the project proponent and will be referred to hereafter as the Applicant. The EIS will analyze the Applicant’s proposed action to construct new conveyance facilities in the Sacramento-San Joaquin Delta (Delta) which includes intake facilities on the Sacramento River, tunnel reaches and tunnel shafts, a southern forebay and pumping plant, and south Delta Conveyance facilities that would connect to the existing State Water Project (SWP) infrastructure.

**ADDRESSES:** U.S. Army Corps of Engineers, Sacramento Regulatory Division, Attn: Mr. Zachary Simmons, 1325 J Street, Room 1350, Sacramento, CA 95814–2922.

**FOR FURTHER INFORMATION CONTACT:** Questions about the proposed action and EIS can be answered by Mr. Zachary Simmons, at (916) 557–6746, by email at [Zachary.M.Simmons@usace.army.mil](mailto:Zachary.M.Simmons@usace.army.mil); or mail at U.S. Army Corps of Engineers, Sacramento Regulatory Division, Attn: Mr. Zachary Simmons, 1325 J Street, Room 1350, Sacramento, CA 95814–2922. Requests to be placed on the electronic or surface mail notification lists should also be sent to this address. For further information or media inquiries, contact Mr. Paul Bruton at (916) 557–5166, or by email at [spk-pao@usace.army.mil](mailto:spk-pao@usace.army.mil).

**SUPPLEMENTARY INFORMATION:** The proposed action requires permission from USACE is required under Section 14 of the Rivers and Harbors Act (RHA). In addition, the proposed work in navigable waters and discharge of dredge or fill material into waters of the U.S. requires authorization from USACE under Section 10 of the RHA of 1899 and Section 404 of the Clean Water Act.

**From:** [Fiala, Shannon@BCDC](mailto:Fiala_Shannon@BCDC)  
**To:** [SF Waterfront](#)  
**Subject:** [Non-DoD Source] BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study  
**Date:** Wednesday, October 21, 2020 6:44:13 PM  
**Attachments:** [image001.png](#)  
[USACE EIS BCDC comments 10.20.20.pdf](#)

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Attached please find BCDC's comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study.

Best,  
Shannon

--

**Shannon Fiala** (*pronouns: she/her*)  
Planning Manager

San Francisco Bay Conservation and Development Commission  
375 Beale Street, Suite 510  
San Francisco, California 94105

Direct: 415-352-3665

Web: [Blockedwww.bcdc.ca.gov](#)



# San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600 fax 888 348 5190

State of California | Gavin Newsom – Governor | [info@bcdc.ca.gov](mailto:info@bcdc.ca.gov) | [www.bcdc.ca.gov](http://www.bcdc.ca.gov)

October 21, 2020

Ms. Anne Baker  
450 Golden Gate Avenue, 4th Floor  
San Francisco, California 94102

SUBJECT: Early Scoping Comments – San Francisco Waterfront Flood Resiliency Study (Document Citation: 85 FR 51419)

Dear Ms. Baker:

Thank you for the opportunity to comment on the preparation by the San Francisco District of the U.S. Army Corps of Engineers (USACE) of a feasibility study integrated with an environmental assessment (EA) or environmental impact statement (EIS) to evaluate coastal storm and flood risk management alternatives along 7.5 miles of the San Francisco Waterfront, from Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. The following comments provided by BCDC staff are based on the *San Francisco Bay Plan* (Bay Plan) and the McAteer-Petris Act.

**Commission Jurisdiction and Authority.** BCDC is responsible for granting or denying permits for any proposed fill (e.g., earth or any other substance or material, including pilings or structures placed on pilings, and floating structures moored for extended periods of time); extraction of materials; or change in use of any water, land, or structure within the Commission's jurisdiction. Generally, BCDC's jurisdiction over San Francisco Bay extends from the Golden Gate to the confluence of the San Joaquin and Sacramento Rivers and includes tidal areas up to mean high tide, including all sloughs, and in marshlands up to five feet above mean sea level; a shoreline band consisting of territory located between the shoreline of the Bay and 100 feet landward and parallel to the shoreline; salt ponds; managed wetlands; and certain waterways that are tributaries to the Bay. The Commission has jurisdiction over the Bay waters and the shoreline areas bayward of The Embarcadero that would be evaluated in the Feasibility Study. For projects that are within the Commission's jurisdiction, permits from BCDC may be required, depending on the nature of the activity. The Commission can grant a permit for a project if it finds that the project is either (1) necessary to the health, safety, and welfare of the public in the entire Bay Area, or (2) is consistent with the provisions of the McAteer-Petris Act and the Bay Plan.

In addition to carrying out its regulatory authority under state law, the federal Coastal Zone Management Act allows the Commission to review federal projects and projects that require federal approval or are supported with federal funds. The Commission carries out its "federal consistency" responsibilities by reviewing federal projects much like it does permit applications. However, the Commission cannot require federal agencies to submit permit applications. Nevertheless, federal agencies and applicants for federal approvals must provide the project

## BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

details, data and other material to assure that the Commission has the information it needs to evaluate federal projects. The EA and/or EIS should acknowledge and describe the Commission's jurisdiction, permit and federal consistency authority.

**Existing Permits.** There are a number of existing BCDC permits within the Feasibility Study area. The EA or EIS should discuss the effects, if any, that the potential coastal storm and flood risk management alternatives would have on existing public access or other conditions required in these permits.

**Priority Use Areas and BCDC's Seaport Plan.** Section 66602 of the McAteer-Petris Act states, in part, that certain water-oriented land uses along the bay shoreline are essential to the public welfare of the Bay Area, including ports and waterfront parks and beaches, and, as such, the San Francisco Bay Plan should make provision for adequate and suitable locations for all these uses. In Section 66611, the Legislature declares "that the Commission shall adopt and file with the Governor and the Legislature a resolution fixing and establishing within the shoreline band the boundaries of the water-oriented priority land uses, as referred to in Section 66602," and that "the Commission may change such boundaries in the manner provided by Section 66652 for San Francisco Bay Plan maps." The Feasibility Study area from Aquatic Park to Herons Head in San Francisco is included on Bay Plan Maps 4 and 5 and it includes several Port Priority Use Areas at China Basin (Piers 48 and 50), Central Basin (Pier 68), and surrounding the Islais Creek Channel (Piers 80, 90, 92, 94, and 96). Any proposals for placing fill, extracting materials, or changing the use of any land, water, or structure within those areas that are designated for Port Priority Use in the Bay Plan must be developed and managed in a manner consistent with applicable policies of the McAteer-Petris Act and the Bay Plan as well as BCDC's Seaport Plan, which is in the process of being updated. The EA or EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Priority Use Areas and the Seaport Plan.

Bay Plan Maps also include Plan Map Policies that are enforceable and have the same authority as the policies in the text of the Bay Plan. Plan Map 4 includes Policy 27, which states at Fisherman's Wharf, "improve and expand commercial fishing support facilities. Enhance public access to and economic value of Fisherman's Wharf area by encouraging development of a public fish market," which is repeated in Plan Map 5 Policy 29. Plan Map 4 also includes Policy 26, regarding the San Francisco Waterfront Special Area Plan, which states "see special area plan for detailed planning guidelines for the shoreline between the east side of Hyde Street Pier and the south side of India Basin," which is repeated in Plan Map 5 Policy 24. Finally, Plan Map 5 Policy 23 states for the Port of San Francisco, "See the Seaport Plan. Some fill may be needed." Finally, Bay Plan Map 4 includes "Commission Suggestion A" for a "possible scenic transit system from Ocean Beach to China Basin." Note that Commission suggestions are not enforceable policies. The EA or EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with the Plan Map policies and suggestions.



**BCDC's San Francisco Waterfront Special Area Plan.** The McAteer-Petris Act of 1965 provides for the Bay Plan to contain or incorporate by reference "special area plans" (SAP) with more specific findings and policies for portions of the Bay and its shoreline. BCDC developed the San Francisco Waterfront SAP in partnership with the Port and it applies the requirements of the McAteer-Petris Act and the provisions of the Bay Plan to the San Francisco waterfront in greater detail and should be read in conjunction with both the McAteer-Petris Act and the Bay Plan. BCDC first adopted the SAP in 1975. The last comprehensive amendment to the SAP (Bay Plan Amendment 7-99) was adopted in 2000 and it currently contains General Policies pertaining to the area covered by the Special Area Plan and Geographic-Specific Policies for three geographic vicinities, Fisherman's Wharf, the Northeastern Waterfront, and the Southern Waterfront, as well as Plan Maps that delineate priority use areas. Although the San Francisco Waterfront SAP is in the process of being amended, the EA or EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with the San Francisco Waterfront SAP.

### **Commission Law and Bay Plan Policies Relevant to the Project**

1. **Biological Resources.** Protection of biological resources, including wildlife and habitat, is addressed through several sections of the Bay Plan. Fish, Other Aquatic Organisms, and Wildlife Policy No. 1 states "To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased." Additional policies in these Bay Plan sections, and policies in the Subtidal Areas section, provide further requirements on protection of the Bay's natural resources. The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Policies pertaining to Fish, Other Aquatic Organisms, and Wildlife; Tidal Marshes and Tidal Flats; and Subtidal Areas.
2. **Fill for Habitat.** BCDC recently approved several new Bay Plan policies addressing Bay fill for habitat projects. Fish, Other Aquatic Organisms, and Wildlife Policy No. 3 states "In reviewing or approving habitat restoration projects or programs the Commission should be guided by the best available science, including regional goals, and should, where appropriate, provide for a diversity of habitats for associated native aquatic and terrestrial plant and animal species." Additionally, Fish, Other Aquatic Organisms, and Wildlife Policy No. 6 states, in part, that "Allowable fill for habitat projects in the Bay should (a) minimize near term adverse impacts to and loss of existing Bay habitat and native species; (b) provide substantial net benefits for Bay habitats and native species; and (c) be scaled appropriately for the project and necessary sea level rise adaptation measures in accordance with the best available science..." The EA or EIS should address if and how any fill proposed for the potential coastal storm and flood risk management alternatives meets these criteria.
3. **Water Quality.** The policies in the Water Quality section of the Bay Plan require Bay water pollution to be prevented to the greatest extent feasible. New projects are required to be sited, designed, constructed and maintained to prevent or minimize the discharge of

BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

pollutants in the Bay by controlling pollutant sources at the project site, using appropriate construction materials, and applying best management practices. More specifically, Bay Plan policies on water quality state, in part, that “water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board’s *Water Quality Control Plan, San Francisco Basin* and should be protected from all harmful or potentially harmful pollutants.” The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Policies pertaining to Water Quality.

4. **Environmental Justice.** BCDC recently approved several new Bay Plan policies on Environmental Justice and Social Equity. Policy No. 3 of the new Bay Plan Environmental Justice and Social Equity chapter says “[e]quitable, culturally-relevant community outreach and engagement should be conducted by local governments and project applicants to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented and/or identified vulnerable and/or disadvantaged communities... Evidence of how community concerns were addressed should be provided.” Policy No. 4 states “[i]f a project is proposed within an underrepresented and/or identified vulnerable and/or disadvantaged community, potential disproportionate impacts should be identified in collaboration with the potentially impacted communities.”

The EA or EIS should specify the culturally-relevant community outreach and engagement efforts that will be conducted for the Feasibility Study, identify whether the Feasibility Study area includes vulnerable communities, and if so, identify any potential disproportionate impacts that could result from the potential coastal storm and flood risk management alternatives. Additionally, as the Feasibility Study area includes areas designated for industrial uses and other uses that could affect surrounding neighborhoods, the EA or EIS should examine, in each relevant section, the potential for each coastal storm and flood risk management alternative to negatively affect community health and quality of life, including any contributions to cumulative effects. Any impacts identified should be accompanied by mitigation measures to avoid or minimize adverse effects on community health or quality of life and would ideally be informed by community outreach and engagement.

5. **Climate Change and Safety of Fills.** Climate Change Policy No. 2 states that, “When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared... based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection... for the proposed project or shoreline area. A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment.” Policy No. 3 states that where such assessments show vulnerability to public safety, projects “should be designed to be resilient to a mid-century sea level rise projection” and an “adaptive management plan” should be prepared if it is likely the project will remain in place longer than mid-century.

## BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

In addition, Policy No. 4 in the Bay Plan Safety of Fills section states that structures on fill or near the shoreline should have adequate flood protection including consideration of future relative sea level rise as determined by qualified engineers. The policy states that, “[a]dequate measure should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project.... New projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity.” These policies should be read in combination with Public Access Policy No. 6, which states in part that public access areas “should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding” and with policies on biological resource protection described above.

The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Climate Change and Safety of Fills policies and include a discussion of how the alternatives will encourage development on the waterfront that is designed to adapt to, tolerate, and/or manage sea level rise and shoreline flooding and to ensure resilience to mid-century sea level rise projections, and adaptation to end of the century projections, if it is likely the development will remain in place longer than mid-century. This analysis should include the mean higher high water level, the 100-year flood elevation, the mid- and end-of-century sea level projections, preferably using projections based on the best-available science found in the [State’s SLR guidance](#), anticipated site-specific storm surge effects, and a preliminary assessment of the project’s vulnerability to future flooding and sea level rise. Additional relevant resources include [BCDC’s Bay Shoreline Flood Explorer](#) and [BCDC’s 2020 ART Bay Area report](#), particularly the [Mission Islais Local Assessment](#).

- 6. Shoreline Protection.** The Bay Plan establishes criteria by which new shoreline protection projects may be authorized and by which existing shoreline protection may be maintained or reconstructed. Shoreline Protection Policy No. 5 requires that “all shoreline protection projects should evaluate the use of natural and nature-based features such as marsh vegetation, levees with transitional ecotone habitat, mudflats, beaches, and oyster reefs, and should incorporate these features to the greatest extent practicable. Ecosystem benefits, including habitat and water quality improvement, should be considered in determining the amount of fill necessary for the project purpose. Suitability and sustainability of proposed shoreline protection and restoration strategies at the project site should be determined using the best available science on shoreline adaptation and restoration.” Shoreline Protection Policy No. 7 states that “the Commission should encourage pilot and demonstration project to research and demonstrate the benefits of incorporating natural and nature-based techniques in San Francisco Bay.” Revised Shoreline Protection Policy 2 states equitable and culturally-relevant community outreach and

BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

engagement should be conducted to meaningfully involve nearby communities for all shoreline protection project planning and design processes – other than maintenance and in-kind repairs to existing protection structures or small shoreline protection projects – in order to supplement technical analysis with local expertise and traditional knowledge and reduce unintended consequences. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.

Finally, Water Quality Policy No. 7 requires that, whenever practicable, native vegetation buffer areas should be used in place of hard shoreline and bank erosion control methods (e.g., rock riprap) where appropriate and practicable. New shoreline protection projects are also to avoid adverse impacts to natural resources and public access, and mitigation or alternative public access must be provided when avoidance is not possible. The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Shoreline Protection policies.

7. **Dredging.** The Bay Plan includes findings and policies regarding dredging in the Bay. The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Dredging policies, if applicable.
8. **Water-Related Industry.** The Bay Plan includes policies regarding water-related industry, which state, in part, that “Sites designated for both water-related industry and port uses in the Bay Plan should be reserved for those industries and port uses that require navigable, deep water for receiving materials or shipping products by water in order to gain a significant transportation cost advantage... Water-related industry and port sites should be planned and managed so as to avoid wasteful use of the limited supply of waterfront land...” The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with relevant Bay Plan Water-Related Industry policies, if applicable.
9. **Ports.** In addition to analyzing the consistency of the potential coastal storm and flood risk management alternatives with BCDC’s Seaport Plan, as described above, the EA or EIS should also analyze the potential coastal storm and flood risk management alternatives’ consistency with Bay Plan Port policies.
10. **Transportation.** Bay Plan policies on Transportation state, in part, that “Transportation projects... should include pedestrian and bicycle paths that with either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails.” The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Transportation Policies.

11. **Public Access, Recreation, and Appearance, Design, and Scenic Views.** Section 66602 of the McAteer-Petris Act states, in part, “that maximum feasible public access, consistent with a proposed project, should be provided.” Thus, the Commission can only approve a project within its jurisdiction if it provides maximum feasible public access, consistent with the project. Bay Plan policies regarding Recreation state, in part, “diverse and accessible water-oriented recreational facilities, such as marinas, launch ramps, beaches, and fishing piers, should be provided to meet the needs of a growing and diverse population... Recreational facilities, such as waterfront parks, trails, marinas, live-aboard boats, non-motorized small boat access, fishing piers, launching lanes, and beaches should be encouraged...”

Bay Plan policies regarding Public Access state, in part, that “in addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline...Public access to some natural areas should be provided to permit study and enjoyment of these areas...Public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding. Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed...Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat.” Revised Public Access Policy No. 5 states “[p]ublic access that substantially changes the use or character of the site should be sited, designed, and managed based on meaningful community involvement to create public access that is inclusive and welcoming to all and embraces local multicultural and indigenous history and presence...” The updated policies go further to state that public access improvements should not only be consistent with the project, but also incorporate the culture(s) of the local community, and provide “...barrier free access for persons with disabilities, for people of all income levels, and for people of all cultures.”

Additionally, Bay Plan policies on Appearance, Design, and Scenic Views (ADSV) state, in part, that: “Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas...” Bay Plan ADSV Policy 5 states that “To enhance the maritime atmosphere of the Bay Area, ports should be designed, whenever feasible, to permit public access and viewing of port activities by means of (a) view points (e.g., piers, platforms, or towers), restaurants, that would not interfere with port operations, (b) openings between buildings and other site designs that permit views from nearby roads.” The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan policies regarding Public Access, Recreation and Appearance, Design and Scenic Views.

12. **Bay Fill.** The Bay Plan includes policies regarding Fill for Bay-Oriented Commercial Recreation and Bay-Oriented Public Assembly on Privately-Owned or Publicly-Owned Property, as well as policies regarding Filling for Public Trust Uses on Publicly-Owned

BCDC Comments on the Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act Compliance

Property Granted in Trust to a Public Agency by the Legislature. The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with BCDC's law and Bay Plan policies regarding fill.

13. **Mitigation.** Bay Plan policies on Mitigation require projects to “compensate for unavoidable adverse impacts to the natural resources of the Bay...” The policies provide specific criteria for how compensatory mitigation projects should be sited and designed, community involvement in providing compensatory mitigation, when compensatory mitigation should occur relative to the impacts, and how to determine whether banking or in-lieu fee programs are acceptable. The policies also state that “Mitigation programs should be coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.” The EA or EIS should discuss whether any mitigation is expected to be necessary to compensate for the potential impacts of the potential coastal storm and flood risk management alternatives, and if so, how the mitigation is consistent with Bay Plan Mitigation policies.
  
14. **Public Trust.** The Bay Plan includes policies regarding the Public Trust, which state, in part, that “when the Commission takes any action affecting lands subject to the public trust, it should assure that action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants, should also assure that the terms of the grant are satisfied and the project is in furtherance of statewide purposes.” The EA or EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Public Trust policies.

Thank you for your consideration of these comments. If you have any questions regarding this letter, please do not hesitate to contact me at (415) 352-3665 or via email at [shannon.fiala@bcdc.ca.gov](mailto:shannon.fiala@bcdc.ca.gov).

Sincerely,  
SHANNON FIALA  
Planning Manager

**From:** [Capilla, Morgan](#)  
**Subject:** [Non-DoD Source] EPA comments - Early Scoping Notice for the SF Waterfront Flood Resiliency Study  
**Date:** Monday, November 23, 2020 6:20:28 PM  
**Attachments:** [2020-11-20 EPA comments Early Scoping Notice SF Waterfront Flood Resiliency Study signed.pdf](#)

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All,

Attached is a courtesy copy of our early scoping comments for the SF Waterfront Flood Resiliency Study. Feel free to contact me if you have any questions.

Thanks!  
Morgan

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Morgan Capilla  
Environmental Review Branch  
U.S. Environmental Protection Agency, Region 9  
75 Hawthorne Street (TIP-2)  
San Francisco, CA 94105  
[capilla.morgan@epa.gov](mailto:capilla.morgan@epa.gov) | (415) 972-3504  
pronouns: she/her/hers



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX**  
**75 Hawthorne Street**  
**San Francisco, CA 94105-3901**

November 20, 2020

Ms. Anne Baker  
U.S. Army Corps of Engineers, San Francisco District  
450 Golden Gate Avenue, 4<sup>th</sup> Floor  
San Francisco, California 94102

Subject: Notice of Early Scoping for the San Francisco Waterfront Flood Resiliency Study  
National Environmental Policy Act Compliance, San Francisco County, California

Dear Ms. Baker:

The U.S. Environmental Protection Agency has reviewed the abovementioned notice issued on August 20, 2020. Our review is pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. In our November 19, 2018 letter, we accepted the U. S. Army Corps of Engineers' request to serve as a cooperating agency for this project. We appreciate the opportunity to participate in the Resource Agency Working Group meeting that took place on October 29, 2020.

The USACE and the Port of San Francisco are evaluating strategies to manage coastal storm and flood risk along 7.5 miles of the San Francisco Waterfront from Aquatic Park to Heron's Head Park. According to the early scoping notice, potential alternatives would include an array of structural, non-structural, and natural and nature-based measures. Structural measures could include new levees, floodwalls, and repairs to the existing seawall. Non-structural features could involve raising critical infrastructure, enhancing flood warning systems, floodproofing structures, and recommending land use or zoning restrictions. Natural and nature-based options for consideration include horizontal levees, ecological seawalls, and ecotones.

To assist in the early scoping process, the EPA has identified several issues for your attention, including impacts to waters, biological resources, and air quality, which are described in the attached detailed comments.

We appreciate the opportunity to review this early scoping notice and are available to discuss our comments. If you have any questions, please feel free to contact me at 415-942-3504 or [capilla.morgan@epa.gov](mailto:capilla.morgan@epa.gov).

Sincerely,

**MORGAN**  
**CAPILLA**  
Digitally signed by  
MORGAN CAPILLA  
Date: 2020.11.20  
16:15:28 -08'00'

Morgan Capilla  
Environmental Review Branch



cc: Brian Meux, National Marine Fisheries Service  
Steve Schoenberg, U.S. Fish and Wildlife Service  
Erik Buehmann, San Francisco Bay Conservation and Development Commission  
Arn Aarreberg, California Department of Fish and Wildlife  
Marilyn Latta, California State Coastal Conservancy  
Elizabeth Morrison, San Francisco Bay Regional Water Quality Control Board  
Lindy Lowe, Port of San Francisco

**EPA’S DETAILED COMMENTS ON THE SAN FRANCISCO WATERFRONT FLOOD RESILIENCY STUDY  
EARLY SCOPING NOTICE, SAN FRANCISCO COUNTY, CALIFORNIA – NOVEMBER 20, 2020**

**Alternatives and Clean Water Act Section 404**

In the draft NEPA document, evaluate a reasonable range of alternatives that fulfill the project’s purpose and need. Quantify the potential effects of each alternative to the greatest extent possible and present the benefits and adverse impacts in comparative form to assist the decision-maker and public in understanding how the alternatives differ. Discuss the reasons for eliminating alternatives that are not evaluated in detail.

The EPA encourages the USACE to integrate Clean Water Act Section 404 requirements into the NEPA process in order to streamline environmental review by using NEPA documents for multiple permitting processes. Pursuant to federal guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the CWA, the USACE must include a comprehensive evaluation of a range of alternatives and clearly and independently demonstrate that the preferred alternative is the Least Environmentally Damaging Practicable Alternative that achieves the overall project purpose. An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. The LEDPA is the alternative with the fewest direct, secondary, and cumulative impacts to aquatic resources, so long as it does not have other significant adverse environmental consequences.

The EPA supports the analysis of a range of on-site and off-site alternatives for the various flood-risk reduction solutions being considered and appreciates the recent work that has gone into identifying spatially relevant ecological measures and enhancements. Given the unique constraints associated with the San Francisco Waterfront, alternatives will range from hard-scape options to softer options, including non-structural alternatives (e.g., managed retreat). Where appropriate, we highly encourage the use of bioengineering techniques (e.g., complex ecotones, artificial reefs, beaches) and the analysis of beneficial reuse of dredged material to support horizontal levees. The EPA encourages regulatory interagency discussions regarding the potential for multi-beneficial measures to provide some level of mitigation for Bay fill from other actions taken along the seawall.

There are various bioengineering projects in the Bay Area that could help inform potential alternatives for the proposed project. For example, there are several initiatives underway regarding horizontal levees, including the Oro Loma Living Laboratory Pilot<sup>1</sup> and the Transforming Shorelines Collaborative. The TSC is a collaborative forum of researchers and practitioners of nature-based solutions. The San Francisco Estuary Partnership<sup>2</sup> can provide further information. Additionally, the State Coastal Conservancy (point of contact: Marilyn Latta) has been investigating the beneficial use of oyster reef balls for nearshore projects.<sup>3</sup>

**Sea Level Rise Projections**

We recommend that the study include designs that would, at minimum, provide long-term resiliency and flood protection up to the current sea level rise predictions for 2100 (State of California 2018). This would be consistent with the Port of San Francisco’s Resiliency Program to account for up to 7 feet of sea level rise.

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<sup>1</sup> See <https://oroloma.org/horizontal-levee-project/>

<sup>2</sup> See <https://www.sfestuary.org/transformingshorelines/>

<sup>3</sup> See <https://scc.ca.gov/2018/09/07/4-acres-of-living-shoreline-reefs-installed-in-richmond/>

## **Beneficial Use of Dredged Material**

The Port of San Francisco dredges approximately 125,000 cubic yards of material on an annual basis from the study area. As alternatives are further defined, we suggest meeting with Port dredging managers to discuss feasibility and timing. Program managers and staff for the Long Term Management Strategy for Dredging and the Dredged Material Management Office can provide further guidance to support the potential use of dredged material as practicable alternatives.

## **Impact Assessment Methodology**

### *Significance Thresholds*

The CEQ's recently updated NEPA Regulations state that, in considering whether the effects of the proposed action are significant, agencies shall analyze the potentially affected environment and the degree of the effects of the action. In addition, agencies should consider both short- and long-term effects (40 CFR 1501.3). Such analysis will assist an agency in determining the appropriate level of NEPA review. We recommend that the impact assessment methodology be identified for each resource evaluated and include one or more significance thresholds against which project impacts can be compared, which will help the reader interpret the project's impacts.

### *Environmental Consequences*

For each alternative, describe potential impacts to ecological, aesthetic, historic, cultural, economic, and social resources and values, as well as potential health effects that could result. The draft NEPA document should identify impacts that occur at the same time and place as the proposed action, as well as impacts that occur later in time or farther removed in distance from the proposed action (40 CFR 1508.1(g)). For example, describe potential effects that the proposed flood control measures may have on adjacent areas, including the potential for any hard-scape features to propagate erosion. Discuss trends and other reasonably foreseeable impacts to resources and values that would potentially be affected by the project and analyze and disclose the potential declining trends or other impacts to be exacerbated by effects from the proposed project.

The EPA offers the following recommendations for analyzing and disclosing impacts:

- Include a description of the affected environment that focuses on each affected resource or ecosystem. Identify the affected environment through perception of meaningful impacts and natural boundaries rather than predetermined geographic areas;
- Focus on resources of concern (i.e., resources that are "at risk" and/or are significantly affected by the proposed project before mitigation). Identify which resources are analyzed, which ones are not, and why;
- Identify on-going, planned, and reasonably foreseeable projects in the study area. Where studies exist on the environmental impacts of these other projects, use these studies as sources for quantifying impacts;
- Include appropriate baselines for the resources of concern and explain why those baselines were selected; and
- When impacts occur in combination with other trends and reasonably foreseeable effects, discuss what mitigation may be implemented. Clearly state who would be responsible for mitigation measures and how implementation would be ensured.

### *Consideration of other relevant projects*

The alternatives analysis should consider the potential effects and scope of other relevant projects likely to occur in the area. We appreciate that the study will lay out the relationship with the Port of San Francisco's Waterfront Resilience Program, including the Embarcadero Seawall Project (approximately

3 miles of the most seismically at-risk portion of the Embarcadero) and the USACE's larger Flood Resiliency Study scope. Our understanding is that the USACE study expands upon critical information gleaned from the Embarcadero Seawall Multi-Hazard Risk Assessment regarding flood-risk. The EPA encourages alignment with the proposed Seawall Projects (projects funded by Proposition A) for relevant flood-risk portions of the seawall that are slated to be in permitting and construction by 2023/2024.

The alternatives should be informed by sediment quality aspects given the historic and current industrial nature of portions of the San Francisco Waterfront. There are critical sediment remediation projects underway that could be affected by chosen alternatives and will need to be considered by the study: the Mission Bay Ferry Landing and the Port of San Francisco's Pier 39 to 43 ½ Sediment Remediation Program. The draft NEPA document should consider existing available physical, chemical, and biological sediment data to ascertain hotspots and guide evaluation of alternatives that may require sediment disturbance. Further sediment testing and evaluation may be warranted if dredging actions are contemplated to ensure that sediments proposed for dredging are adequately characterized to determine suitable placement options. The EPA, as part of the Dredged Material Management Office, provides suitability determinations for ocean disposal actions. Absent sediment testing and suitability determinations in advance from the DMMO agencies, the draft NEPA document should presume that a percentage of the material to be dredged will not be suitable for all placement options, and should identify how any toxic or contaminated material that does not meet placement criteria would be handled.

### **Biological Resources, Habitat, and Wildlife**

Endangered Species Act consideration will be important for alternatives development for this project. This will include marine resources under the purview of the National Marine Fisheries Service and the California Department of Fish and Wildlife. In the draft NEPA document, identify all petitioned and listed threatened and endangered species and critical habitat that might occur within the project area. Identify and quantify which species or critical habitat might be affected by each alternative and mitigate impacts to these species; emphasis should be placed on the protection and recovery of species due to their status or potential status under the federal or state ESA.

### **Air Quality**

The proposed project would take place in a federal nonattainment area for ozone (marginal) and particulate matter 2.5 (moderate). It is, therefore, important that the draft NEPA document provide a robust air quality impact analysis, including ambient air conditions (baseline or existing conditions), National Ambient Air Quality Standards, and criteria pollutant nonattainment areas. Evaluate compliance with state and federal air quality regulations and discuss the potential for impacts to air quality. The EPA recommends an evaluation of the following measures to reduce emissions of criteria and hazardous air pollutants:

- *Quantify Emissions* – Estimate emissions of criteria pollutants from the proposed project activities and discuss the timeframe for release of these emissions over the lifespan of the project. Describe and estimate emissions from potential construction activities and analyze proposed mitigation measures to minimize these emissions.
- *Specify Emissions Sources* – Specify the emission sources by pollutant from mobile sources, stationary sources, and ground disturbance. Use this source-specific information to identify appropriate mitigation measures.
- *Construction Emissions Mitigation Plan* – During the Resource Agency Working Group meeting, the USACE indicated that the project would likely require large construction areas and cause temporary disruptions. The EPA recommends including commitments to robust air quality

mitigation measures during construction and minimizing impacts to nearby communities to the fullest extent feasible. In addition to measures necessary to meet all applicable local, state, and federal requirements, the EPA recommends that the following measures be included:

#### Fugitive Dust Source Controls

- Stabilize open soil storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour. Limit speed of earth-moving equipment to 10 miles per hour.

#### Mobile and Stationary Source Controls

- Minimize use, trips, and unnecessary idling of heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Limit unnecessary idling and ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.
- Lease or buy newer, cleaner equipment using the best available emissions control technologies.
  - Use lower-emitting engines and fuels, including electric, liquified gas, hydrogen fuel cells, and/or alternative diesel formulations, where feasible.
  - *On-Highway Vehicles* - On-highway vehicles should meet or exceed the U.S. EPA exhaust emissions standards for model year 2010 and newer heavy-duty on-highway compression-ignition engines (e.g., drayage trucks, long haul trucks, refuse haulers, shuttle buses, etc.).<sup>4</sup>
  - *Marine Vessels*: Marine vessels should meet or exceed the latest EPA exhaust emissions standards for marine compression-ignition engines (i.e., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).<sup>5</sup>
  - *Nonroad Vehicles & Equipment* - Nonroad vehicles and equipment should meet or exceed the U.S. EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.).<sup>6</sup>

#### Administrative Controls

- Coordinate with appropriate air quality agencies to identify a construction schedule that minimizes project-related impacts when considered with other planned projects in the region.
- Use the minimum feasible amount of greenhouse gas-emitting construction materials.

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<sup>4</sup> See <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100O9ZZ.pdf>

<sup>5</sup> See <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA0B.pdf>

<sup>6</sup> See <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OA05.pdf>

- Use cement blended with the maximum feasible amount of industrial materials that can be reused to reduce greenhouse gas emissions from cement production.
- Recycle construction debris to the maximum extent feasible.
- Specify how impacts to sensitive receptors (e.g., schools, daycare centers, hospitals, senior centers, etc.) would be avoided. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emissions controls for each piece of equipment before groundbreaking.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.

### *Transporting Construction Materials*

The EPA recommends that the USACE avoid routing truck traffic near residences, sensitive receptors, and other vulnerable populations (e.g., communities with potential environmental justice concerns) to the fullest extent feasible. Analyze and disclose of potential impacts associated with transporting material used during construction. Include maps that illustrate any haul routes that are being considered in the draft NEPA document.

### *General Conformity*

The EPA's General Conformity Rule, established under Section 176(c)(4) of the Clean Air Act, provides a specific process for ensuring federal actions will conform with State Implementation Plans to achieve the NAAQS. Complete a general conformity applicability analysis (e.g., a comparison of direct and indirect emissions for each alternative with *de minimis* thresholds of 40 CFR 93.153) for all criteria pollutants for which the San Francisco Bay Area Air Basin is in nonattainment or attainment—maintenance<sup>7</sup> status. We recommend including a draft general conformity determination in the draft NEPA document to fulfill the public participation requirements of 40 CFR 93.156.

### **Environmental Justice and Title VI of the Civil Rights Act**

Executive Order 12898<sup>8</sup> directs federal agencies to pursue Environmental Justice to the greatest extent possible by identifying and addressing any disproportionately high and adverse human health or environmental effects that the agency's programs, policies, or activities may have on minority and low-income populations. The memorandum accompanying the EO highlights both NEPA and the Civil Rights Act of 1964 as examples of existing statutory authorities that can be used to address environmental justice.<sup>9</sup> CEQ has developed guidance<sup>10</sup> to address EJ during the NEPA process. *Promising Practices for Environmental Justice Methodologies in NEPA Reviews*<sup>11</sup> may also serve as a useful resource during the environmental review process. This document is a compilation of methodologies from current agency practices identified by the NEPA Committee of the Federal Interagency Working Group on Environmental Justice. The document focuses on the interface of EJ

<sup>7</sup> Maintenance areas redesignated to attainment more than twenty years in the past are no longer required to comply with general conformity.

<sup>8</sup> Available at: <https://www.archives.gov/files/federal-register/executive-orders/pdf/12898.pdf>

<sup>9</sup> Available at: [https://www.epa.gov/sites/production/files/2015-02/documents/clinton\\_memo\\_12898.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/clinton_memo_12898.pdf)

<sup>10</sup> Council on Environmental Quality (1997). Environmental Justice: Guidance Under the National Environmental Policy Act. Available at: [https://www.epa.gov/sites/production/files/2015-02/documents/ej\\_guidance\\_nepa\\_ceq1297.pdf](https://www.epa.gov/sites/production/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf)

<sup>11</sup> Available at: [https://www.epa.gov/sites/production/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/production/files/2016-08/documents/nepa_promising_practices_document_2016.pdf)



considerations through NEPA processes and provides recommendations on applying EJ methodologies that have been established in federal NEPA practice. In addition, recipients of federal assistance have an obligation to ensure that their programs do not result in discriminatory effects or burdens on populations protected under Title VI of the Civil Rights Act.

In the draft NEPA document, discuss potential environmental justice concerns, such as air quality, water quality, noise, vibration, odors, etc. Discuss efforts made by the lead agencies to address potential language barriers and ensure that any affected non-English speaking populations were meaningfully engaged. Describe any environmental justice issues raised during scoping meetings for this project, as well as any relevant public outreach events conducted by the Port of San Francisco. Clearly and effectively define the “reference community” and the “affected community.” These definitions are used to determine whether there are disproportionately high and adverse human health or environmental impacts by comparing the impacts to the affected community with the impacts to the reference community. A well-defined affected community will accurately reflect the demographic characteristics of the populations likely to be adversely impacted by the proposed project. A well-defined reference community will reflect the characteristics of the general population (e.g., municipal, regional, state). Disclose whether the proposed project may disproportionately and adversely affect low-income and minority populations and identify measures to mitigate adverse impacts. We encourage the USACE to use information gathered from public outreach efforts to design mitigation measures that respond to the needs of communities that would be adversely affected by the project. Efforts to reduce environmental justice impacts could assist the Port, as a recipient of federal funds, to meet its potential obligations under Title VI of the Civil Rights Act.

### **Consultation with Tribal Governments**

Executive Order 13175, “Consultation and Coordination with Indian Tribal Governments” (November 6, 2000), was issued in order to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications, and to strengthen the United States government-to-government relationships with Tribes. In the draft NEPA document, describe the process and outcome of government-to-government consultation between the USACE and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the Preferred Alternative. As a general resource, the EPA recommends the document *Tribal Consultation: Best Practices in Historic Preservation*, published by the National Association of Tribal Historic Preservation Officers.<sup>12</sup>

### *National Historic Preservation Act and Executive Order 13007*

Consultation for tribal cultural resources is required under Section 106 of the National Historic Preservation Act. Historic properties under the NHPA are properties that are included in the National Register of Historic Places or that meet the criteria for the National Register. Section 106 of the NHPA requires a federal agency, upon determining that activities under its control could affect historic properties, consult with the appropriate State Historic Preservation Officer/Tribal Historic Preservation Office. Under NEPA, any impacts to tribal, cultural, or other treaty resources must be discussed and mitigated. Section 106 of the NHPA requires that Federal agencies consider the effects of their actions on cultural resources, following regulation in 36 CFR 800.

Executive Order 13007 “Indian Sacred Sites” (May 24, 1996) requires federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners, and to avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. It is important

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<sup>12</sup> Available at: [http://www.nathpo.org/PDF/Tribal\\_Consultation.pdf](http://www.nathpo.org/PDF/Tribal_Consultation.pdf)

to note that a sacred site may not meet the National Register criteria for a historic property and that, conversely, a historic property may not meet the criteria for a sacred site. It is also important to note that sacred sites may not be identified solely in consulting with tribes located within geographic proximity of the project. Tribes located outside of the project area may also have religiously significant ties to lands within the project area and should, therefore, be included in the consultation process.

The EPA recommends that the draft NEPA document address the existence of Indian sacred sites in the project area. Explain how the proposed action would address Executive Order 13007, distinguish it from Section 106 of the NHPA, and discuss how the USACE would ensure that the proposed action would avoid adversely affecting the physical integrity, accessibility, or use of sacred sites. Provide a summary of all coordination with Tribes and with the SHPO/THPO, including identification of NRHP-eligible sites and development of a Cultural Resource Management Plan.

### **Hazardous Materials and Waste**

The EPA recommends that the draft NEPA document identify if there is evidence of hazardous materials or other materials having been buried in the proposed project area and include protocols for: (1) handling hazardous materials or refuse sites found during construction; (2) storing and disposing of hazardous wastes; and (3) remediating any spill or discharge of hazardous materials into the environment.





US Army Corps  
of Engineers®



# U.S. ARMY CORPS OF ENGINEERS SAN FRANCISCO WATERFRONT FLOOD RESILIENCY STUDY

## NEPA Early Scoping Public Meetings Transcript



**U.S. ARMY CORPS OF ENGINEERS SAN FRANCISCO WATERFRONT FLOOD RESILIENCY STUDY**

**EARLY NEPA SCOPING PUBLIC MEETING**

September 16<sup>th</sup> at 6:00 PM to 8:30 PM (PDT)

September 17<sup>th</sup> at 1:00 PM to 3:00 PM (PDT)

450 Golden Gate Avenue, 4<sup>th</sup> Floor

San Francisco California 94102

Early scoping public meeting held virtually on a web conference and teleconference line in San Francisco, California. Hosted by the U.S. Army Corps of Engineers, San Francisco District (USACE) and the Port of San Francisco

**PRESENTERS:**

JESSIE MIZIC, USACE, CO-LEAD PLANNER AND MEDIATOR

JESSICA LUDY, USACE, CO-LEAD PLANNER

ANNE BAKER, USACE, ENVIRONMENTAL LEAD


LINDY LOWE, PORT OF SAN FRANCISCO, RESILIENCE OFFICER




## PROCEEDINGS




MS. JESSIE MIZIC: Good afternoon/evening, welcome to the San Francisco Waterfront Flood Resiliency Study National Environmental Policy Act's Early Scoping public meeting to gather comments and feedback on the study. My Name is Jessie Mizic and I will be facilitating today' meeting with the United States Army Corps of Engineers and the Port of San Francisco.



## WELCOME! MEETING PURPOSE & OBJECTIVES



- Introducing USACE & Port of SF Coastal Storm Risk Feasibility Study
- Complying with National Environmental Policy Act (NEPA)
  - Solicitation for public input – scoping
- Explaining Corps Planning Process
  - Aligning study with other Port activities
- Staying informed and engaged





We're better with your voice


MS. JESSIE MIZIC: First before we begin, can everyone see the slides? If not, please respond in chat or on the phone. Thank you. The San Francisco Waterfront Flood Resiliency Study is a partnership with


USACE and the Port to address Coastal Storm risk and flood resiliency within the study area. Today we will introduce the presenters and their roles. Then we will discuss ground rule to honor everyone's time and ensure everyone has the opportunity to provide comments and feedback about this presentation and study. During the presentation, we will look at the study description and location. We will look at how this study and today's meeting is a required step in complying with the NEPA process including solicitation for public input. We will also discuss the planning process and alignment with other Port activities. Finally, we will end with information on how to stay informed and engaged as the study progresses.


**PRESENTERS**

  
Jessie Mizic, USACE  
Co-lead Planner


  
Jessica Ludy, USACE  
Co-lead Planner

  
Anne Baker, USACE  
Environmental Lead


  
Lindy Lowe, Port of San Francisco  
Resilience Officer

  
Ruzel Ednalino, USACE  
Cultural Resources Lead

MS. JESSIE MIZIC: I would like to introduce our presenters for today's meeting, starting with myself Jessie Mizic with the U.S. Army Corps of Engineers. I am a co-lead planner for this study and a facilitator. Next, we have Jessica Ludy who is a co-lead planner with the Corps. Also with the Corps is Anne Baker, who is the study's environmental lead. Lindy Lowe is the resilience officer with the Port of San Francisco. Lastly with the Corps we have Ruzel Ednalino who is the cultural resources lead.




## VIRTUAL MEETING PROCEDURES


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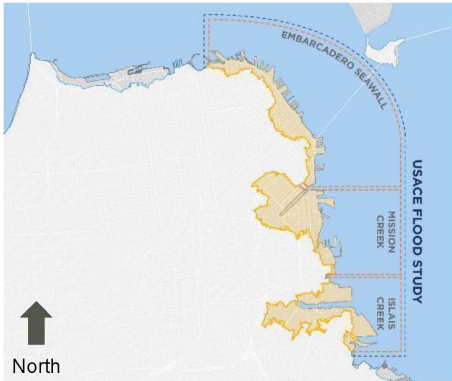
- If you have any comments during the presentation, please type them into the chat box.
  - Chat Box can only be viewed by the facilitator
- If you wish to make a verbal comment or ask a question, please hold your question to the end of the presentation.
- During the open forum for public comments, please use the “hand raise” icon to request to speak. We will notify you when it is your turn.
- The meeting and all comments are being recorded.

MS. JESSIE MIZIC: If you have any comments during the presentation, we ask that you wait until after the presentation to voice them. There is a chat function in the WebEx meeting. To have your comments addressed please make sure to include your name and contact information so that we can make sure your comment is captured. With that, I would like to again thank you for taking the time to be here today and now Jessica Ludy with the Corps will kick off the presentation.



## SF WATERFRONT FLOOD RESILIENCY STUDY

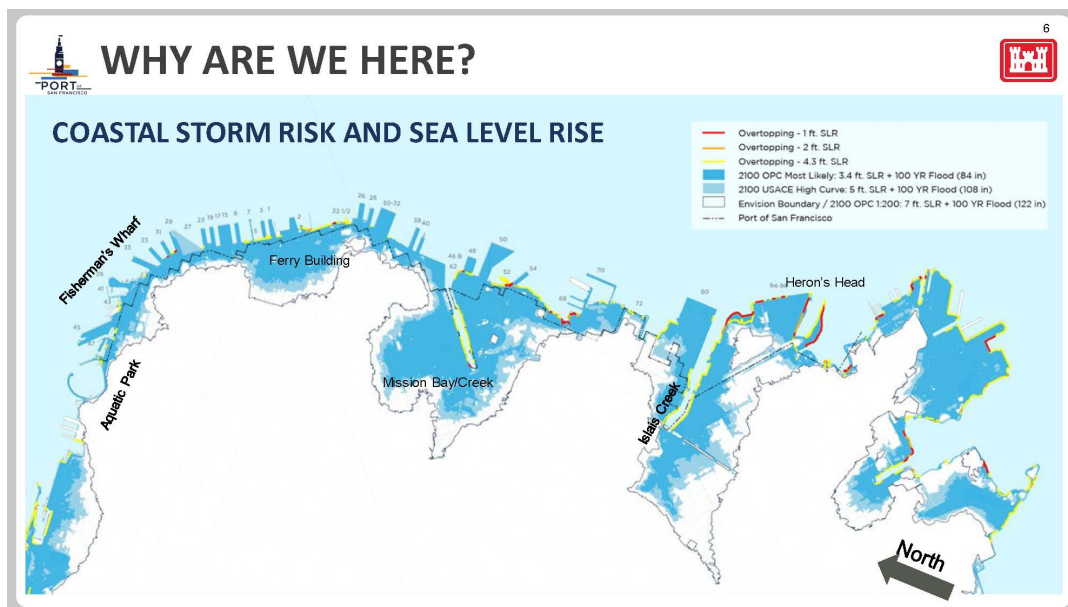
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### STUDY OVERVIEW & PROCESS

- Federal & local partnership between USACE and the Port of San Francisco
- ~3-5 years, 50/50 cost share
- Team evaluates coastal storm risk to study area, develops and assesses alternatives
- Team recommends a plan to Congress
- Design/construction of recommended plan cost shared 65% fed / 35% local

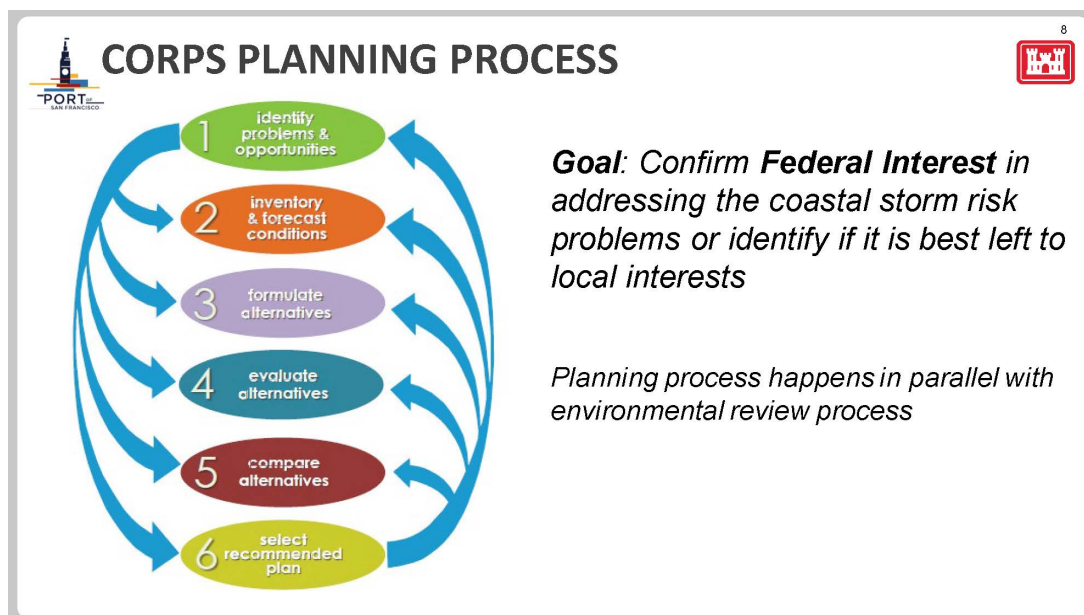
MS. JESSICA LUDY: Thank you Jessie. As part of the Waterfront Resilience Program, USACE is partnering with the Port of San Francisco for the San Francisco Waterfront Flood Resiliency Study. We share the cost of a study which is 50% paid by the Port and 50% paid by the Corps, we expect this study to take around 3 to 5 years. What we do together is evaluate flood risks to the study area over time; then we start to identify and better understand options to help us reduce that flood risk. Ultimately the study process and evaluations would culminate in a recommendation to congress of a preferred plan. If Congress approves and appropriate money for constructing the plan and projects, then the costs are covered 65% by the federal government and 35% by local governments. If the local partner, the Port of San Francisco, prefers a different plan then this is still an option. But the sponsor would need to pay any extra costs.



MS. JESSICA LUDY: Now to just give you all a sense of why we're here. What you're looking at is a map of the waterfront area. These blue areas show the potential for future flooding in the year 2100 if no action is taken. The different shades of blue represents what might occur with different sea level rise scenarios. What you see in the middle of the page is flooding extending fairly far inland in the Mission Creek and Mission Bay areas. To set the scene for the study problems, the areas that are in red, orange,




and yellow are the lowest sections of the waterfront. Therefore the first places that the shoreline is likely to overtop with water from a large storm or from very high tides. The study area shown on this slide is in all four colors. Going from Aquatic Park on the northern area of the study area on the left and Herons Head in the southern area on the right. This map is flipped sideways following the north arrow. The study area is represented through five major neighborhoods, shown as dotted lines along the bottom. The 4 reaches are shown as linear lines along the shoreline that the team is using to organize our assessment, which is further divided into 15 sub areas. This organization of the project helps us to better understand risks, characterize the areas, and think about our options.




MS. JESSICA LUDY: Now this diagram shows the Corps six step planning process, which involves identifying the problems, opportunities, objectives, and constraints, inventorying and forecasting conditions, formulating alternatives, then evaluating those alternatives, comparing those alternatives, and eventually selecting a recommended plan. With that in mind, how do we begin to address this challenge? Our goal is to confirm federal interest in addressing the coastal storm risk problems or identify if it is best left to local interests. There are three potential outcomes which involves


confirmation of federal interest. The first outcome would be no federal interest, meaning that Congress and the administration have determined the problem is best left to local interests. The second outcome is that problems and potential solutions are entirely consistent with the Corps missions, as assigned by Congress and Administrations priorities. The third outcome involves the problem having a federal interest, but solutions require implementation under multiple federal authorities and agencies, including the Corps. I'm going to hand the mic over to Anne Baker to discuss the reason why we're holding this meeting today.



## NATIONAL ENVIRONMENTAL POLICY ACT



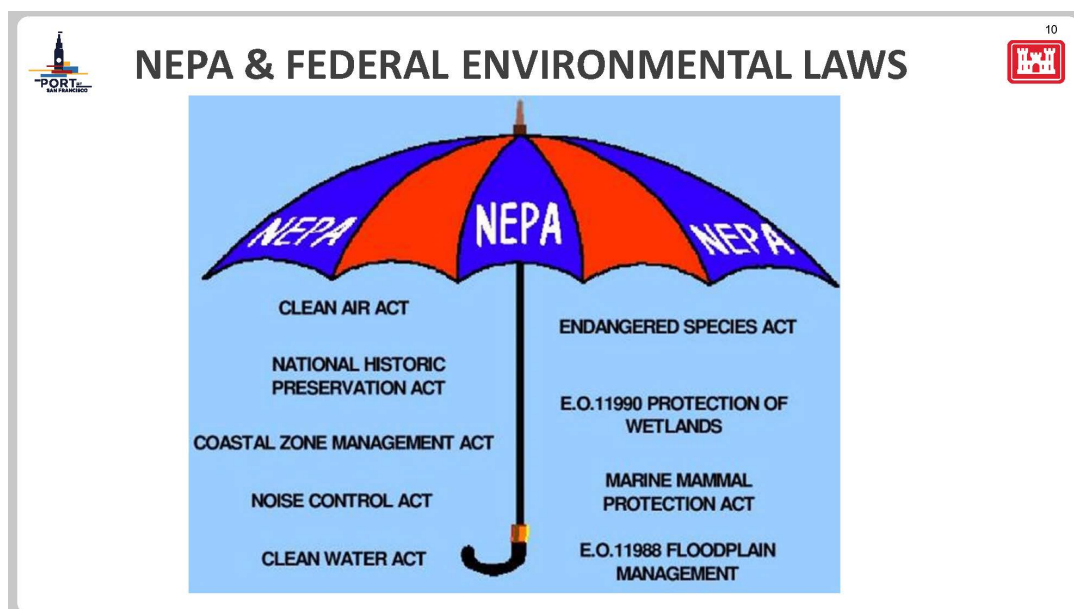
- What are the existing conditions in the area?
- What alternatives are under consideration?
- What are the impacts of the alternatives?
  - Environmental? Human? Cultural/Historical?
- What are the benefits of the alternatives?
  - Public Safety? Other environmental conditions?
- How do you minimize or compensate for impacts of the alternatives?
- How are you complying with Federal Environmental Laws?
- Public involvement & disclosure




MS. ANNE BAKER: Hi everyone. So, the reason we're here today is because of the National Environmental Policy Act, or what we call NEPA. NEPA is similar to CEQA, the California Environmental Quality Act, which you're probably a bit more familiar with. It requires Federal Agencies to assess the potential impacts of their projects on the environment and fully disclose those effects to the public. NEPA is also a process-oriented law and requires agencies to go through a structured process in order to fully comply with the law. This early scoping meeting is the beginning of that process. Should we determine that the potential alternatives being developed for this study were to have significant effects




on the environment, we would prepare an Environmental Impact Statement. Prior to initiating an EIS, we are required to conduct public scoping, in order to seek early input from the public on their priorities and concerns regarding this study. In this case, we have not made the determination yet that there would be significant effects on the environment because we really don't have defined alternatives yet. That's why we're calling this "early scoping". Because we're doing it regardless of what the eventual impacts will be, due to the fact that we're looking at a project right along the San Francisco Waterfront, and we all care a lot about this study area and we know how important it is to the community. We'll use the input gained from these meetings to help us establish the existing conditions in the study area, which is basically the baseline condition of the environmental resources in the area. We will then assess the alternatives and determine the potential effects that could occur from the action. Finally we would determine any necessary avoidance, minimization measures, or compensation required to mitigate for the environmental effects. Once this process is complete, we would come back to you all again with our draft NEPA document and request public comment on our proposal and the effects and mitigation measures disclosed in the NEPA document.



MS. ANNE BAKER: In addition, we sometimes refer to NEPA as an umbrella law, meaning that as a part of complying with NEPA, we also have to establish compliance with all of the other Federal environmental laws and regulations, like the Clean Air Act, Clean Water Act, Endangered Species Act, and many others. Our path to compliance with those laws is always documented in our NEPA document, which would be either an Environmental Assessment or an Environmental Impact Statement. The alternative formulation and evaluation process required to comply with NEPA occurs hand in hand with the Corps Planning Process, which Jessica was just describing to you. Each step of the Corps Planning Process aligns and integrates with a portion of the legally defined process required to comply with NEPA.




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### PLANNING AND NEPA CROSSWALK


Planning steps	NEPA requirements
▪ Scope for Project	▪ Scope for NEPA
▪ Specify Problems & Opportunities, Objectives & Constraints	▪ Describe Purpose & Need consistent with project scope
▪ Inventory and Forecast Conditions (Future Without)	▪ Describe existing conditions, trends, No Action alternative
▪ Formulate alternative plans to address Objectives	▪ Include reasonable range of alternatives that address Purpose and Need
▪ Evaluate effects of alternative plans	▪ Evaluate alternatives' effects to resources
▪ Compare alternative plans	▪ Compare alternatives to No Action, ID the Environmental Alternative
▪ Select a Tentative Selected Plan	▪ Identify the Agency Preferred Plan
▪ Release for Public Review	▪ Release for Public Review

MS. ANNE BAKER: While alternatives are being formulated under the planning process, they are also being disclosed and evaluated under the NEPA process at the same time. This allows both of these processes to proceed together in a single integrated decision-making process. The final result of this integrated process will be a tentatively selected plan that takes into account the potential environmental effects and associated mitigation. We would then produce an integrated Planning

Report and NEPA Document which would be released jointly for public review. This release is currently scheduled to occur early in 2022.

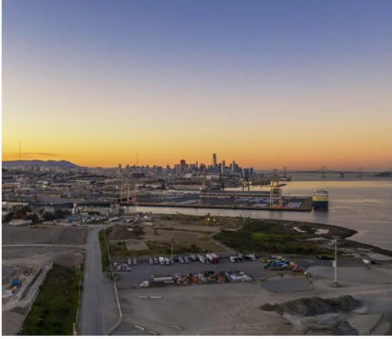


## STUDY PROBLEMS


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### Low-lying community assets are at risk of damage from coastal storms and extreme high tides


- Sea-level rise in SF Bay expected to increase frequency of coastal storm flooding along SF waterfront
- Access to critical infrastructure, emergency services, and evacuation could be limited or cut-off during storm flooding
- Century-old seawall has outlasted its design life and could fail due to age or earthquake

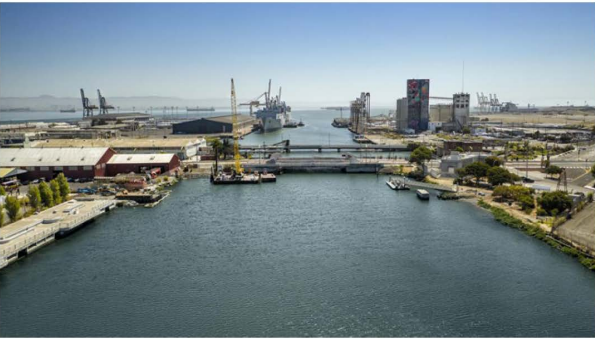


MS. JESSICA LUDY: Now this problem list and the next series of slides will discuss the objectives and constraints that are based on input that the Port received from their larger ongoing efforts with the Port's Waterfront Resilience Program. Low-lying community assets are at risk of damage from coastal storms and extreme high tides. Sea-level rise in the San Francisco bay is expected to increase the frequency of coastal storm flooding along the waterfront. Access to critical infrastructure, emergency services, and evacuation could be limited or cut-off during storm flooding. The century-old seawall has also outlasted its design life and could fail due to age or an earthquake. Our study's objectives are to reduce economic damages from coastal storm risks to businesses, residents, and infrastructures. We also want to reduce risks to human health and safety from coastal storm impacts. Our last objective would improve the resiliency of the local economy to impacts from coastal storms.



## STUDY CONSTRAINTS

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- Maintain, preserve **maritime facilities & function**; avoid impacts on Port **infrastructure & operations**
- Avoid actions that violate authority of the Port Commission to fulfill **public trust responsibilities** (Burton Act)
- Maintain required **public access and regional and citywide mobility corridors** such as the Embarcadero Roadway and the SF Bay Trail
- Maintain SF Bay **ecological function**

MS. JESSICA LUDY: The constraints we identified for this study involves maintaining and preserving maritime facilities and function while avoiding impacts on the Port's infrastructure and operations. We would also like to avoid actions that violates authority of the Port commission to fulfill public trust responsibilities under the Burton Act. Our third constraint would be maintenance of required public access and regional and citywide mobility corridors such as the Embarcadero Roadway and the San Francisco Bay Trail. Lastly, maintenance of the San Francisco bay's ecological functions.



## THIS STUDY IS PART OF THE WATERFRONT RESILIENCE PROGRAM

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MS. JESSICA LUDY: This study is just one component of the Port's larger Waterfront Resilience Program, which is broader in scope and geographic area than what we're tackling. However, the two are related and complimentary. For example, the community outreach that the Port is leading for it is Waterfront Resilience Program will help the study team more clearly understand community risks, concerns, and preferences for the alternatives. I'm going to hand it over to Lindy Lowe from the Port of San Francisco so she can cover previous outreach that the Port has covered.



## PORT OF SAN FRANCISCO OUTREACH INFORMS WATERFRONT RESILIENCE





**Agency collaboration**

The Port continues to build close partnerships with city, regional, and federal agencies to ensure accuracy and innovation in the program.





**Community and advisory engagement**

Port led 100+ events waterfront-wide, including over 115 presentations to community members and advisory groups. The goal was to solicit community input, concerns, and preferences for defining a vision and solutions for waterfront resilience.





MS. LINDY LOWE: Thank you Jessica. The Port has been engaging stakeholders over the last two years on the work that we have been doing as part of the Waterfront Resilience Program, which includes the Flood Resiliency Study. This engagement has included our city department partners, agency partners with assets within the program area such as BART and other local, regional and federal agencies.



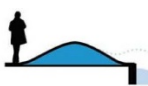



 **HOW PRIOR WATERFRONT RESILIENCE OUTREACH INFORMS THIS STUDY**  17

- 1 Community ideas on an **“inspiring an adaptable waterfront”** highlight key considerations for evaluating alternatives:
  - Do they connect us to the shoreline?
  - Is the waterfront accessible?
  - Do some measures preserve and promote jobs, housing, seniors & youth more than others?
- 2 Community feedback on **priority assets most loved by the community** help the study team:
  - Understand consequences of taking no action
  - Select projects that responsibly use tax dollars
  - Consider alternatives that preserve and protect community character
- 3 Community feedback on evaluation criteria affirmed the team should prioritize life safety and disaster response, and to **“put people first”**, with special attention to:
  - housing, disaster recovery facilities, utilities, and businesses
  - transportation assets and waterfront mobility

MS. LINDY LOWE: Additionally, we have been engaging with the public over the last two years as well, holding or participating in over 100 events across the entire waterfront, hosting a community meeting series in three locations- Embarcadero, Mission Creek and Islais Creek Bayview and providing presentations to Port and city advisory groups. This engagement has provided us with an understanding of community and stakeholder priorities as well as direct input and participation in the development of vision, principles, goals and objectives to guide the work within the Program and as well as for the flood resiliency study.

 **COMMUNITY INPUT WILL INFORM MEASURES AND ALTERNATIVES**  18


*Measures are a plan or course of action to achieve a particular purpose*

	Physical Measures
	Ecological Measures
	Earthquake-resilient Measures
	Emergency Response, Land Use

*Alternatives are sets of measures intended to reduce coastal storm risk and respond to the problems and objectives in the study area*

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MS. JESSICA LUDY: The community input that Lindy has described will better inform the measures and alternatives that the team will consider in reducing coastal storm risks. Measures are defined as a plan or course of action that achieves a particular purpose. We have four measures here that cover physical measures, ecological measures, earthquake-resilient measures, and emergency response or land use. Alternatives are sets of measures intended to reduce coastal storm risk and respond to the problems and objectives in the study area. When the team begins to consider options or measures, we are considering physical measures like seawalls, levees, raised bicycle pathways, or elevating certain buildings so they can withstand flooding and waves. We also consider ecological measures, to help maintain ecological functions while reducing coastal storm risk; this might include nourishing beaches where possible, restoring tidal marsh to help reduce waves. We will make sure that measures can withstand earthquakes, and for example like improving the foundations while building a seawall or floodwall. And we also have emergency response measures we can take like safe evacuation zones, developing emergency actions plans for our critical infrastructure like water treatment or mass transit; and we can consider land use planning so that any new development is required to be safe or resilient to floods.



## NEPA DOCUMENT – ENVIRONMENTAL IMPACT STATEMENT

### ENVIRONMENTAL CONSIDERATIONS

19

#### Human Environment

- Aesthetics
- Air Quality
- Environmental Justice
- Hazardous Waste
- Land Use
- Noise
- Recreation
- Socioeconomics
- Transportation
- Utilities



MS. ANNE BAKER: The NEPA document will likely be focused primarily on potential effects to the human environment. Since the SF Waterfront is such an urban environment, we anticipate the majority of the potential impacts would be on the resources that really affect people. So this includes looking at things like the existing and future aesthetic condition of the area, sightlines from buildings and the Embarcadero. We'll take a look at the potential effects that result when there's construction going on nearby, like air quality effects that result from construction equipment and dust, construction noise, any temporary disruptions to utility services, etc. Additionally, we'll look at the recreation and transportation systems in the study area and how construction of alternatives could affect traffic, or temporary access to the shoreline. We'll look at whether any detours or road realignments might result from the alternatives.



## NEPA ENVIRONMENTAL CONSIDERATIONS



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### Ecological Environment

- Threatened and Endangered Species
- Vegetation
- Water Quality
- Wildlife

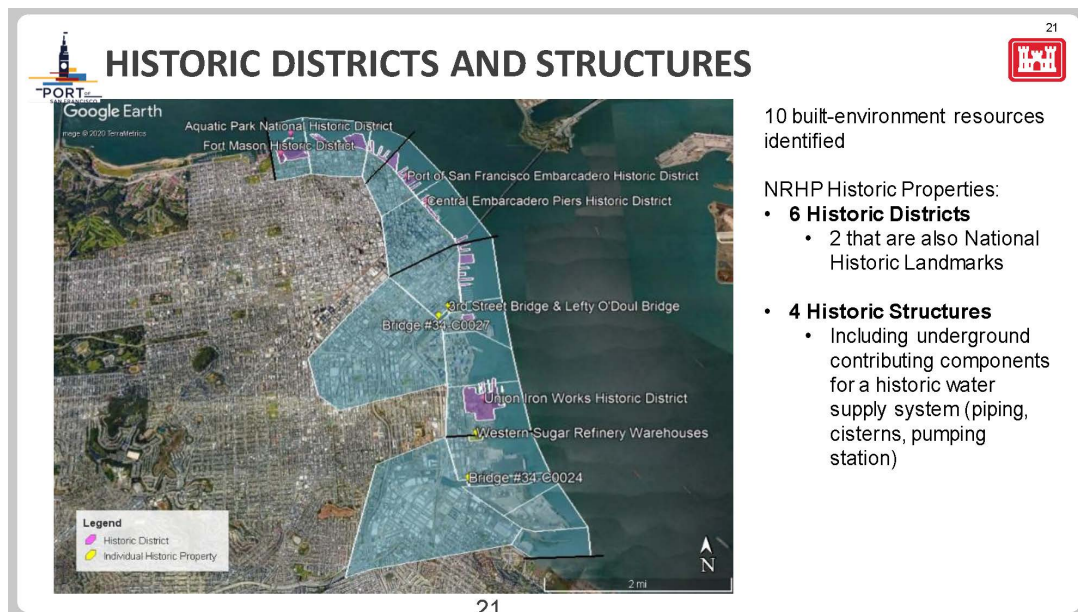


Heron's Head Park in southern San Francisco—a bit of wild in the city (photo by Cris Benton)

MS. ANNE BAKER: In addition to the human environmental conditions, we'll also study the ecological environment along the shoreline in the NEPA document. Since the shoreline itself is so urban, there really isn't a lot of existing "natural" habitat for terrestrial/land-based wildlife species or vegetation. However, the aquatic environment along the waterfront is extremely sensitive and in-water work along




the shoreline is a strong possibility for any project that could result from this study. So we expect this analysis to largely focus on aquatic or marine species and habitat, including water quality considerations in the Bay, Mission Creek, and Islais Creek. Now, I'm going to hand it over to Ruzel Ednalino so he can cover the cultural resources identified in our study area.




MR. RUZEL EDNALINO: Thank you Anne. Good afternoon/evening everyone, my name is Ruzel Ednalino and I'm an archaeologist for the Corps San Francisco District. Today, I'll be going over the cultural and historic resources throughout the study area. Now this map shows the entire study area with 10 historic properties that the team has identified early on. Historic properties are defined under the National Historic Preservation Act to be a district, site, building, structure, or even object that has achieved significance of the past in the last 50 years. Looking at the map we can see there are polygons in purple. This means that the resource is a historic district, which is an area or neighborhood that's listed on the National Register of Historic Places. Anything in yellow is an individual historic property which could be a building, object, structure, or site that's also listed or eligible for the National Register. Now currently research is ongoing to determine if there are any other cultural or historic resources for our team to address. The team does expect there to be more cultural and historic resources identified later in the


study. Overall for what we've identified, there are six historic districts in total with two districts also listed as national historic landmarks. These are located in in Reach 1 in the northwest corner of our study area, where we have the Fort Mason Historic District and the Aquatic Park Historic District. These two districts at national historic landmark districts. There are four individual historic properties, which consists of three bridges and one building from a sugar refinery in Reaches 3 and 4. The team is also considering historic underground elements for a water supply system that's spread out across the study area.



## ARCHAEOLOGICAL RESOURCES

22  



- The study team is consulting with tribal bands identified by the Native American Heritage Commission
- Documented historical and prehistoric archaeological sites are located further landward where the historic shoreline once existed
- Deposits that underlie Reach 1 and 2 consists of landfill
- Alternatives formulated will guide the need for additional archaeological/tribal monitoring, subsurface testing, and any other planning efforts




Archeologist and construction crews diligently combing through dirt at a site along San Francisco's waterfront.  
Photo from <https://abc7news.com/san-francisco-shipwreck-buried-shipwreck/>


MR. RUZEL EDNALINO: Now that I've covered the built-environment resources in the study area I'll move on to the archaeological considerations. Currently the team is consulting with several Ohlone tribal bands identified by the Native American Heritage Commission. We've begun early consultations to determine if there are any significant sites to consider in the study area as well as a records search which is currently ongoing to identify past recorded sites. Our current assumption is that most deposits that surround the waterfront area consist of bayfill, and as such, there is a low likelihood to uncover a significant archaeological site the closer we are to the present shoreline. Depending on how the


alternatives are developed, the team will continue consulting with tribal bands, historic organizations, agencies, and the State Historic Preservation Officer to see if there are any risks to disturb archaeological sites and agree on how we can best avoid these sites or minimize impacts during construction. Now that's my brief summary on the initial cultural and historic resources the team has identified. I'm going to hand it back over to Jessie, thank you.




## WE WANT TO HEAR FROM YOU

23  










*Port presentations, collaboration, and seeking input from Agency partners and the Community for the Port's Waterfront Resilience Program (2018- 2020)*

- Perspectives on study problems, objectives, and constraints of Coastal Storm Risk Feasibility Study
- Ideas for measures and alternatives
- Assets or resources that are particularly important or of concern
- Comments about the NEPA or Corps Planning processes

MS. JESSIE MIZIC: Thank you Ruzel. This concludes the presentation portion of our meeting. Now we will move into the public comment phase of the meeting. Before we do, I would like to say thank you to our presenters with a virtual round of applause. Thanks for all the hard work that you have done in putting this meeting together. This now is an opportunity to voice any comments or feedback that you all may have concerning this project. We are interested in hearing your thoughts on the perspectives on study problems, objectives, and constraints of the Coastal Storm Risk Feasibility Study. This also includes ideas for measures and alternatives, assets or resources that are particularly important or of concern to you all, and comments about the NEPA or Corps planning processes. Before we open the floor, we would like to remind the audience on how to provide comments. Please use the raise hand function or

provide comments in the chat box. All comments and feedback will be collected and used in the study process. I would like to leave this slide up as we move through the comment phase. This slide shows all the various ways and timelines for providing public comments. If you have any comments during the presentation, please type them in the chat box. The chat box can only be viewed by the facilitator. If you wish to make a verbal comment or ask a question, please hold your question until the end of the presentation. During the open forum for public comments, please use the “hand raise” icon to request to speak. We will notify you when it is your turn. The meeting and all comments are being recorded. Let’s go ahead and get started. I will leave the floor open for a few more minutes.





## PUBLIC ENGAGEMENT OPPORTUNITIES

### SAN FRANCISCO WATERFRONT FLOOD RESILIENCY STUDY

**Scoping comments due by October 21, 2020:**  
Relevant Chat Box comments provided today will be considered as written comments.

Or, **submit emails** to: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)  
Or, **send mail** to:  
Ms. Anne Baker  
450 Golden Gate Avenue, 4<sup>th</sup> Floor  
San Francisco, California 94102

**Webpage for study information:**  
<https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Projects-A-Z/San-Francisco-Waterfront-Storm-Damage-Reduction/>

**Public Review of Draft Report and NEPA Document:**

- 45 day public review and comment timeframe
- Includes public meeting and concurrent agency and other reviews

**Contact the Port of San Francisco:**  
Lindy Lowe  
Port Resilience Officer  
Port of San Francisco  
[lindy.lowe@sfport.com](mailto:lindy.lowe@sfport.com)  
[sfportresilience.com](http://sfportresilience.com)

MS. JESSIE MIZIC: Again, if you would like to provide any comments, please use the instructions on this slide. This concludes our meeting tonight. Thank you to all of you who chose to be a part of this meeting. Your time is valuable and to take time out of your busy schedule really shows how much this project and the waterfront means to you. Taking time to engage with the study team is a critical part of collaboration and team building and is a required step in the NEPA process. The Corps requests that any written comments you have regarding the scope of the environmental analysis and alternatives that we

should consider during this study and for the NEPA analysis be provided by October 21st 2020. You can send scoping comments by email to [SFWFRS@USACE.ARMY.MIL](mailto:SFWFRS@USACE.ARMY.MIL) or send physical mail to Ms. Anne Baker at 450 Golden Gate Avenue, 4<sup>th</sup> Floor, San Francisco, California 94102. You may also contact the Port of San Francisco's Port Resilience Office Lindy Lowe, who can be reached by email at [lindy.lowe@sfport.com](mailto:lindy.lowe@sfport.com). Thank you to our presenters and partners. If you would like more information, please feel free to reach out to the team through the methods posted on this slide. Thank you all once again for attending.





## NEPA scoping period begins for USACE/Port Flood Study

The USACE/Port Flood Study is one of several coordinated waterfront resilience activities part of the Port's [Waterfront Resilience Program](#) being undertaken in partnership with federal, state, and local agencies to plan for anticipated seismic activity, flooding, and future sea level rise.

As the federal study continues, USACE has initiated an early scoping period as part of the National Environmental Protection Act (NEPA) process. During this period, comments will be collected to help inform the USACE assessment of flood risk along the waterfront. Learn more about how to get involved below or on the USACE's [website](#).

### Key Dates

USACE requests written comments regarding NEPA scoping be received by **Oct. 21, 2020**. Written comments may be emailed to [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil) or mailed to: Ms. Anne Baker, 450 Golden Gate Ave, 4th Floor, San Francisco, CA 94102.

In addition, there will be two opportunities for submitting comments during a pair of USACE-led virtual public meetings on: **September 16, 6-7:30 p.m** and **September 17, 1-2:30 p.m**. If interested, please RSVP at [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil), and a WebEx meeting link will be sent to you.

Learn about the San Francisco Waterfront Flood Resiliency Study!

NEPA Early Scoping  
**PUBLIC MEETINGS**  
for Community Feedback

Wednesday, Sept 16  
6:00 - 7:30 PM  
[Click here for virtual meeting.](#)

Thursday, Sept 17  
1:00 - 2:30 PM  
[Click here for virtual meeting.](#)

Call in number: 855-204-5984  
Access Code: 3803920  
Security Code: 2020  
Questions? Contact [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)



[sfportresilience.com](http://sfportresilience.com)



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# Early Scoping -- Fall 2022

# MEMO

To: Waterfront Resilience Program  
From: Civic Edge Consulting, RDJ Enterprises, Andrea Baker Consulting, InterEthnica  
Date: February 2023  
RE: WRP Draft Waterfront Adaptation Strategies Public Engagement (Phase B) Summary Report

---

## Overview

This round of Draft Waterfront Adaptation Strategies Public Engagement (Phase B) was conducted from mid-October to early December 2022 and focused on the public rollout of the Draft Waterfront Adaptation Strategies. In addition to introducing the seven Draft Strategies (Strategies A, B, C, D, E, F, and G) and sharing how they were informed by more than five years of citywide community feedback, Phase B Engagement sought to understand public sentiment and priorities as related to the Draft Strategies.

Engagement and outreach included eight online community meetings, two in-person events in the Southern Waterfront, a series of walking tours in each waterfront geography, as well as focus groups, presentations to targeted Community Based Organizations, and presentations to Community Advisory Committees. The approved work plan for fall and winter 2022 Phase B engagement is [linked here](#).

High-level summary of engagement:

- **26** total engagement events
- **16** public engagement events
- **502** total participants to all events
- **3,023** views of Draft Adaptation Strategies webpages on sfport.com/wrp
- **3,643** views of StoryMaps (as of 12/12/22)
- **155,297** individuals who saw a social media ad
- **170,000+** people who viewed content related to the Draft Adaptation Strategies across channels

## Quick Links

- [Demographic Breakdown of Community Engagement](#)
- [What We Heard: Overall](#)
- [What We Heard: Citywide Meetings and Focus Groups](#)
- [What We Heard: Islais Creek / Bayview](#)
- [What We Heard: Mission Creek / Mission Bay](#)
- [What We Heard: Embarcadero](#)
- [Other Engagement Channels](#)
- [Recommendations For Future Engagement](#)
- [By The Numbers](#)
- [Promotion](#)
- [Appendix](#)
  - A: [Phase B Presentation Tracker with high-level event information](#)
  - B:



- C: Links to Reporting Materials from Digital Community Meetings

## Demographic Breakdown of Community Engagement

As the demography breakdown reflects, overall outreach focused on ensuring Southern Waterfront residents were aware of and in attendance at events. In addition to the two community meetings and two walking tours that were hosted in each geography, the Port hosted two in-person events in the Southern Waterfront providing additional engagement opportunities for community members in this geography. This is reflected by the higher percentage of registered participants from the Southern Waterfront (24%) as compared to Central and Northern Waterfront combined (17%). Broad citywide outreach was effective, resulting in 41% of registered participants to events coming from non-Port-waterfront adjacent neighborhoods throughout San Francisco. A large percentage of registered participants (18%) live outside the City despite no dedicated outreach to these areas. This indicates an interest in the WRP from the broader Bay Area, likely due to working or frequently visiting the San Francisco waterfront.

Phase B outreach for events resulted in higher percentages of engagement from some priority populations than in the previous round of engagement for the Program (Phase A Summer Survey). People identifying as Black/African American represented 14% of registered participants and people identifying as Asian/Pacific Islander represented 18%. The percentage of people identifying as Latino/a who registered for events (3%) was lower than engagement in previous rounds, but higher for interest in participating in focus groups (16%).

The data below is pulled from Eventbrite registration data. It shows who registered to attend events, not necessarily who attended. It does not include participants who attended events without registering or attendees at non-public facing events (Focus Groups, CBO share-out presentations, CAC meetings).

### Demographic Breakdown of Registered Participants to Public Events

What Neighborhood Do You Live In? **			
	Count	Total	
Northern Waterfront	46	548	8%
Southern Waterfront	141	548	24%
Central Waterfront	49	548	9%
Other SF Neighborhoods	216	548	41%
East Bay, North Bay, Peninsula	96	548	18%

\*\*Northern Waterfront includes: North Beach, Embarcadero, Rincon Hill, South Beach; Southern Waterfront includes: Bayview/Hunters Point, Visitation Valley; Central Waterfront includes: Mission Bay, Potrero Hill; Other SF Neighborhoods includes all other SF neighborhoods that are not Port-Waterfront adjacent.

What Is Your Race or Ethnicity?					
	Count	Total	Phase B Events	Phase B Focus Group Interest	Phase A Survey (Summer 2022)
American Indian/Native Alaskan	2	548	< 1%	<1%	<1%
Asian/Pacific Islander	97	548	18%	26%	16%

Black/African American	76	548	14%	10%	3%
Latino/a	19	548	3%	16%	6%
White/Caucasian	218	548	40%	34%	63%
Multiple Ethnicities	34	548	6%	5%	4%
Other/Prefer Not to Say	102	548	19%	<1%	7%

Phase B Outreach for community member focus groups sought to engage with citywide residents across the following segments: youth (ages 16-24), general waterfront users, and people who work along the waterfront. Outreach and recruitment efforts invited interested participants to complete a short screener that asked a series of demographic questions. This screener methodology is unique to the focus groups. Given the target segments, the reader should consider how those specific populations skew towards specific groups. The tables below show both the demographic breakdown of those who signed up for a focus group and those who were selected, invited, and participated. For a full breakdown of focus group demographics, including information on age, neighborhood, and income, refer to the Focus Group Report in the appendix.

**Demographic Breakdown of Interested Focus Group Participants**

Which of the following do you most identify with?			
Indigenous/Native American	2	280	< 1%
Asian/Pacific Islander*	80	280	26%
Black/African American	28	280	10%
Hispanic/Latino/a/x	46	280	16%
White, Non-Hispanic	96	280	34%
Middle Eastern / North African	6	280	2%
Multiracial	15	280	5%
Prefer not to state/skipped question	7	280	< 1%

**Demographic Breakdown of Selected Focus Group Participants**

	General Waterfront Users	Industry	Youth	Totals
Indigenous/Native American	0	1	0	1
Asian/Pacific Islander*	3	2	6	11
Black/African American	2	2	1	5
Hispanic/Latino/a/x	3	1	2	6

White, Non-Hispanic	2	4	0	6
Middle Eastern / North African	0	0	0	0
Multiracial	1	1	1	3
Prefer not to state/skipped question	0	0	0	0
Total Participants	11	11	10	32

\*Asian / Asian Americans includes representation from Chinese, Filipinx, Vietnamese, and East Indian backgrounds.

## What We Heard: Overall

- Waterfront wide, community members indicated that **flooding around where they live and work, impacts to community safety, and disruption to transportation or waterfront access** are their top sea level rise related concerns.
- Community members **feel connected** to the waterfront. Their questions and discussion points highlight their connection to not only live, work, and access to open space, but the **cultural value the waterfront holds** for a variety of communities.
- **Community members want to see 7' of sea level rise addressed in whatever strategies are ultimately implemented.**
  - Community members indicated that strategies that recommended **lower intervention (A and B) or used a lower projected rate of sea level rise (C and D) did not sufficiently address the risks community members were concerned about.** These strategies consistently received a lack of support across the geography-specific meetings.
  - In some instances, **there was more openness to Strategy D, which is adaptable to higher rates of sea level rise, but community members said they needed more information about how the adaptation would happen and over what timeframe.** Some community members indicated support based on an assumption that Strategy D would cost less.
  - **In the community member focus groups, participants saw C-D as good starting points and potential short-term solutions** while some combination of longer-term strategies (preference for E and F) are implemented or funded.
- **Overall, there was no strong preference for any one strategy over another when selecting between strategies E, F, and G. Community members consistently said they needed more information about all of them.**
  - Strategy E was supported overall and seen as a practical approach though there were concerns about construction impacts and whether this approach would maximize opportunities.
  - Strategy F received the most “need more information” responses mainly related to the safety and ecological impacts of the tide gates and operation of other flooding infrastructure.
  - **Strategy G received the most competing feedback. Community members overall supported aligning with nature conceptually, but had concerns about the specific applications of the strategy, its general feasibility and implications for equity. In community focus groups specifically, a combination of strategies E and F was more strongly supported. The concerns outweighed the possible benefits for Strategy G.** See below for geography-specific takeaways about each strategy.

- Community members raised many concerns in response to the draft strategies. **Common concerns ranged from equity and environmental justice implications to technical practicalities, to cost/feasibility.**
  - See below for geography-specific concerns and a list of common questions.
- Across all geographies, community members were **excited and pleased to see nature-based approaches, like eco seawalls, incorporated into all of the strategies. This remains a high priority for community members across all strategies.**
- Community members are **very focused on quantifying cost as a way to understand feasibility before commenting on preferences. Community members requested transparency in how costs would factor into decisions.** Questions related to cost were asked at every engagement event.
  - Community members expressed wanting to understand Port and City economic considerations. There were sentiments that the Port may be trying to **“sell” the community on ideas without complete information around impacts and costs.**
  - For some community members, a higher cost is associated with a more comprehensive plan and therefore is important to understand. For others, **proceeding with a plan that could never receive adequate funding was not logical** and community members asked if lower-cost options were being explored.
  - Community members also had comments and questions around the politics of protecting buildings such as Chase Center or UCSF Mission Bay and if economic factors were the reason for certain strategies being suggested in certain geographies.
  - Coupled with cost were questions and concerns about funding. Specifically, community members wanted to know **from where and how funding would be secured** (apart from USACE) and the implications to taxpayers.
- Community members were focused on the **practicalities and specifics of the implementation of the strategies and struggled to stay at a more conceptual level of discussion.**
  - Community members asked **specific technical questions** like how pumping stations would be powered and operated, how the city’s combined sewer system would be altered, and how seawalls, levees, and berms would affect groundwater rise.
  - Community members **asked for more information about the specific impacts to daily life** in their community (what transit lines would be impacted, which industries or small businesses would need to relocate) and the ways these impacts will be addressed.
  - **Community members also asked for specifics about the potential benefits** – how many jobs would be created, what kinds of specific open spaces would be available.
  - Community members were particularly **interested in data showing who and what will be affected so they can better understand equity impacts.**
- **Community members, particularly in the Southeast, are expecting a unified city/state/federal approach to sea level rise resilience.** They do not delineate between what is Port property or not and want to hear adaptation and resilience plans for the full waterfront in their neighborhoods.
- When polled about how they felt after attending an online Community Meeting, **the majority of respondents indicated they would attend another event to learn more and give feedback and that they had more questions.** Attendees at walking tours and in-person events expressed similar interest in continuing to stay involved and wanting further opportunities to give feedback.
- There was a clear desire for **community-centered decision making around implementation plans and goals.**
  - Participants want to know how their input will shape outcomes.

- There was an overall **sentiment of pride that San Francisco was taking steps to address these complicated issues and looking at long-term strategies.**
  - This was coupled with a desire to see action sooner rather than later. The 20-year time horizon before any construction would happen felt long to community members in attendance.
  - Community members also felt that smaller-scale, near-term projects should have space for community input and would help add protection while waiting for larger strategies to be completed.

**Themes for consideration in hybridization process:**

- Community members want an approach that provides defense against higher rates of sea level rise.
- Community members want an approach that is safest against risks such as infrastructure failure and contamination.
- Community members want engineering with nature principles prioritized no matter the approach.
- Community members are open to change but need more information about the specific impacts in their communities.
- Preserving roads, bridges, and buildings exactly as they are today is not a top priority overall.
- Community members want to see transportation, connectivity, and access to the waterfront expanded. Impacts to access during construction is a top concern. Concerns are very high regarding gentrification, displacement, and contamination. The hybridized strategy must address how the Port will mitigate these concerns.
  - These concerns are made more sensitive because historically promises have been made and not kept. For example, southeast residents were assured that soil contamination issues in the Hunters Point Shipyard would be addressed and that has not happened. The health issues related to contamination adversely impact low-income and black and brown communities that are the most at risk.

**Most common questions/concerns:**

These questions should have an updated/expanded response in the next rounds of community engagement.

- What resilience planning is happening beyond the Port’s southern boundary?
  - Community members, particularly in Bayview/Hunters Point, want to understand the City’s comprehensive approach.
- How will contamination be addressed or mitigated in the Southern Waterfront?
- What will be done to ensure that public realm improvements do not lead to gentrification and displacement of southeast neighborhoods?
- Why is development occurring along the waterfront in areas the Port knows have high flood and earthquake risk?
- How will opportunities for local businesses and workers be prioritized?
- What are the costs of the strategies and how will funding for adaptation be secured?
- How and why are different sea level rise estimates being used?
- How will community input affect decision-making?

## What We Heard: Citywide Meetings and Focus Groups

The two “Citywide” online community meetings received the Port Commission presentation instead of a geography-specific presentation. Given there was less detail about the specific strategies in this presentation, feedback/comments were focused on overall process and more general questions related to adaptation planning.

Feedback from the three community focus groups held in December is also incorporated below. See the appendix for the comprehensive focus group report. Among other insights, the focus group report breaks down perceived benefits and concerns by strategy across the following categories: jobs, transportation/daily life, safety/effectiveness, costs/timing, environmental/nature, equity/environmental justice, and look/feel.

- Concerns about:
  - Unified city approach and what happens beyond Port jurisdiction
  - How existing development projects are planning for sea level rise
  - Length of time until construction (2040 feels far away)
  - Equity in relation to the following:
    - community input and community-centered decision making
    - environmental justice implications
    - The level of burden/impact by area: specifically strong equity concerns were raised about providing the Embarcadero 7’ feet protection before Mission Bay/Islais Creek. Participants understood the economic importance of the Embarcadero, but still saw this as a prioritization of the wealthier, whiter neighborhoods.
  - Questions ranged from costs, lessons learned from other jurisdictions, details about sea level rise projections, details about pumping stations, and specifics around workforce opportunities.
- Excitement about:
  - San Francisco being a leader in resilience planning work along a waterfront
  - Opportunities that implementing an Adaptation Strategy could create including:
    - waterfront access, specifically community-driven ideas on how spaces could honor the history and current state of waterfront culture, be safe and useful for local communities in the present, and sustainable in the future
    - identifying existing community assets and priorities to inform changes to public space
    - adaptation planning as a potential mechanism to redress past harms and pursue racial/social equity
- As in the geography-specific meetings, attendees overall felt that strategies that recommended lower intervention (A and B) or used a lower projected rate of sea level rise (C and D) did not sufficiently address the risks community members were concerned about.
  - **In the community member focus groups, there was interest in understanding more about C-D and the associated costs. Some participants saw C-D as good starting points to provide a phased approach** while some combination of longer-term strategies are implemented or funded.
- Strategy E - Hold the Line
  - In polling during community meetings, this strategy was either generally supported or people said they needed more information.

- Focus Group participants felt this strategy would be beneficial because it would lead to a waterfront that is similar to today while having the least disruption to waterfront access once completed. However, they also expressed concerns about disruption to daily life during the length of time it would take to complete.
- Strategy F – Manage the Water
  - In polling during community meetings, the majority of people said they needed more information about this strategy before indicating preferences.
  - Focus group participants:
    - had concerns about the failure of major infrastructure like tide gates and the negative impacts to wildlife.
    - perceived this strategy to be easier or faster to implement than Strategy E.
    - noted that this strategy would have the least disruption to daily life during construction which would be a benefit, but was perceived to change access to the waterfront at completion (a concern).
- In general, focus group participants saw some combination of E and F as a logical approach across the entire waterfront. They expressed concerns about inequities related to two implementation timeframes (2040 and 2090) proposed for these strategies in the Southern Waterfront in comparison to the Embarcadero (defends against 7ft by 2040).
- Strategy G - Align with Watersheds
  - In polling during community meetings, this strategy received the most outright support.
  - For focus group participants however, this strategy posed the biggest concern and received the least support. Though working with natural water patterns was supported in concept, participants were skeptical that it provided enough defense and that it would be implemented fairly. The expressed concerns for how this strategy would negatively impact jobs, daily life, the environment, look and feel, and safety. Ultimately, the concerns they had about Strategy G outweigh potential benefits.
- Bay Fill
  - When asked specifically about bay fill, focus group participants were open to bay fill as an option to reduce disruption to the Embarcadero roadway. They saw the Embarcadero roadway as a key asset to protect. Concerns about bay fill’s long-term effectiveness and performance in an earthquake were raised, but most people were open to using bay fill as a way to expand public access and maintain transportation corridors.
- Timelines
  - Community members, specifically in the community focus groups, supported the Embarcadero receiving 7’ of protection by 2040, but there were mixed emotions about other areas of the waterfront not receiving 7’ of protection until 2090.
- Ranking Priorities from Community Meeting Polling:
  - The highest ranked options were “Improved Bay ecology and habitat” and “Improved public access to the water.”
  - The lowest ranked options were “Workforce opportunities for local people and businesses.”
- Demographic Information from Citywide Event Registrations:

What Neighborhood Do You Live In?			
	Count	Total	
Northern Waterfront	18	112	16%
Southern Waterfront	5	112	4%

Central Waterfront	7	112	6%
Other SF Neighborhoods	65	112	58%
East Bay, North Bay, Peninsula	17	112	15%

What Is Your Race or Ethnicity?			
	Count	Total	
American Indian/Native Alaskan	1	112	1%
Asian/Pacific Islander	11	112	10%
Black/African American	1	112	1%
Latino/a	5	112	4%
White/Caucasian	66	112	59%
Multiple Ethnicities	6	112	5%
Prefer Not to Say	22	112	21%

Participants in the Community Focus Groups represented a broad range of ages, incomes, neighborhoods, and ethnicities/races. The focus groups targeted three categories of waterfront users: General Waterfront Users, Waterfront Workers (Industry), and Youth (ages 16-24). See full demographic breakdown and learnings in “Community Focus Group Top-Line Report and Demographics” in appendix.

## What We Heard: Islais Creek / Bayview

- Concerns about:
  - Local workforce opportunities not coming to fruition
  - Gentrification and displacement both from Adaptation Strategy implementation and from open space improvements
  - Contamination and lack of follow-through to address mitigation and clean-up
  - Lack of coordination on resilience efforts south of Heron’s Head Park
  - Questions included: How will local people and businesses be prioritized for job opportunities? How is toxic soil/water/air being mitigated? How will displacement be avoided? What is being done south of Heron’s Head?
- Excitement about:
  - Increased access to water recreation
  - Restoring natural wetlands
  - Generating economic opportunities and job creation
- Strategy E - Hold the Line
  - There were few specific comments about this strategy
  - A slight majority of attendees indicated in polls that they would be in favor of more transformational changes in this geography instead of prioritizing keeping the current shoreline, streets, and buildings as they are.
- Strategy F - Manage the Water
  - This strategy consistently received the most “need more information” responses in polling.
  - Community members indicated support for the possibility of jobs and economic opportunities that could come with the building, operations, and maintenance of infrastructure.



- Community members said they need more information about the tide gates and lagoons and expressed concerns that relying on infrastructure means they could fail with potentially disastrous consequences, as has happened in other cities (i.e. Katrina).
- Strategy G - Align with Watersheds
  - This strategy received some strong comments of support but also elicited the most questions and expressions of concern.
  - Transformative options that align with natural patterns were seen by some as providing the longest-term defense and therefore the “maximum” protection. Aligning the City’s defense strategy with nature’s rising sea levels was conceptually received positively.
  - Concerns about “retreat” approaches leading to a loss of jobs and industrial space, negative effects on housing, public access improvements leading to gentrification, and individuals bearing the brunt of adaptation costs in this strategy were also shared.
- Ranking Priorities from Community Meeting Polling:
  - The highest ranked options were “Enhancing and restoring watersheds and native marsh habitats” and “Limiting actions that need to be taken by individuals.”
  - The lowest ranked options were “Preserving the current footprint of the Southern Waterfront” and “Limiting funds spent.”
- Demographic Information from Islais Creek/Bayview Event Registrations:

What Neighborhood Do You Live In?			
	Count	Total	
Northern Waterfront	6	219	3%
Southern Waterfront	103	219	47%
Central Waterfront	3	219	1%
Other SF Neighborhoods	79	219	36%
East Bay, North Bay, Peninsula	28	219	13%

What Is Your Race or Ethnicity?			
	Count	Total	
Asian/Pacific Islander	46	219	21%
Black/African American	60	219	27%
Latino/a	2	219	1%
White/Caucasian	64	219	29%
Multiple Ethnicities	10	219	5%
Prefer Not to Say	37	219	17%

- Demographic breakdown of attendees for District 10 Community Open House on 11/9/2022
  - Total attendance: 47
  - Number of people reporting their ZIP code: 39
  - Attendees reported ZIP codes
    - 94124 (Bayview/Hunters Point) – 35
    - 94109 (Polk Gulch/Nob Hill) – 1
    - 94127 (Twin Peaks) – 1
    - 94110 (Outer Mission) – 1
    - 94131 (Diamond Heights) – 1

## What We Heard: Mission Creek / Mission Bay

- Concerns about:
  - Impacts to transportation and mobility
  - Sustainable operation and maintenance of infrastructure
  - Impacts on the sewer system
  - Questions included: How would a floodable district work? What power source will pumping stations use? Who will operate tide gates and is there a back-up generator if power should fail? How will the current sewer system be impacted?
- Excitement about:
  - The range of solutions being considered
  - Approaches beyond seawalls being considered
  - Nature-based options that are not “over-engineered”
- Strategy E - Hold the Line
  - A slight majority of community members polled supported keeping the current shoreline, streets and buildings along the Mission Bay waterfront as they are, though almost as many participants favored more transformational changes to land use.
- Strategy F - Manage the Water
  - Community members were fairly evenly split between supporting this approach, having concerns about this approach, and needing more information.
  - The vast majority of questions were related to this strategy.
  - Questions focused on whether the changes to bridges would affect vessel traffic, how the combined sewer system would be impacted by tide gates, and how current development projects are taking risks into account.
- Strategy G - Align With Watersheds
  - Community members were fairly evenly split between supporting a nature-based approach and having concerns about the transformational scale of change.
- Ranking Priorities from Community Meeting Polling:
  - Community members were split over priorities. The highest ranked options were “Preserving the existing buildings, open spaces and transportation corridors” and “Transforming public spaces through multiuse and floodable spaces.”
  - The lowest ranked options were “Limiting adaptation actions that need to be made by individuals” and “Limiting funds spent.”
- Demographic Information from Mission Creek/Mission Bay Event Registrations:

What Neighborhood Do You Live In?			
	Count	Total	
Northern Waterfront	5	116	4%
Southern Waterfront	18	116	16%
Central Waterfront	30	116	26%
Other SF Neighborhoods	42	116	36%
East Bay, North Bay, Peninsula	21	116	18%

What Is Your Race or Ethnicity?			
	Count	Total	
American Indian/Native Alaskan	1	116	1%
Asian/Pacific Islander	22	116	19%
Black/African American	11	116	9%

Latino/a	5	116	4%
White/Caucasian	44	116	38%
Multiple Ethnicities	7	116	6%
Prefer Not to Say	26	116	22%

## What We Heard: Embarcadero

- Concerns about:
  - Changes to mobility and transportation networks
  - Traffic disruption
  - The feasibility of options presented and how they will be funded
  - Questions included: how an elevated Embarcadero promenade would work, pros and cons of bay fill on the environment, and whether sea level rise estimates are expansive enough
- Excitement about:
  - Possibilities to expand pedestrian access
  - Possibilities to reduce car traffic
- Strategy E - Hold the Line
  - Received the most support in polling because of the balance of using targeted, limited bay fill and delivering a generous promenade.
- Strategy F - Manage the Water
  - Respondents to polls were evenly split between either supporting this approach or indicating they needed more information.
- Strategy G - Align with Watersheds
  - There were concerns about the more limited public promenade, rather than the narrowed roadway.
- There were not pronounced concerns about using bay fill itself. Instead, community members were most concerned with the implications to the public space and roadway. Community members supported an expanded pedestrian realm and also wanted to maintain roadway width as much as possible for public transportation and vehicles.
- Ranking Priorities from Community Meeting Polling:
  - The highest ranked options were “Expanding pedestrian public access opportunities along the Embarcadero” and “Using targeted bay fill to minimize construction disturbance,” followed by “Preserving the historic nature of the Embarcadero.”
  - The lowest ranked options were “Limiting funds spent now” and “Redesign the entire roadway limiting the amount of bay fill needed.”
- Demographic Information from Embarcadero Event Registrations:

What Neighborhood Do You Live In?			
	Count	Total	
Northern Waterfront	17	101	17%
Southern Waterfront	7	101	7%
Central Waterfront	9	101	9%
Other SF Neighborhoods	38	101	38%
East Bay, North Bay, Peninsula	30	101	30%

What Is Your Race or Ethnicity?			
	Count	Total	

Asian/Pacific Islander	18	101	18%
Black/African American	4	101	4%
Latino/a	7	101	7%
White/Caucasian	44	101	44%
Multiple Ethnicities	11	101	11%
Prefer Not to Say	17	101	17%

## Other Engagement Channels

### StoryMaps

This interactive digital storytelling platform communicated risks, reviewed community input to date, and presented the Draft Waterfront Adaptation Strategies in detail. Surveys embedded at the end of each section asked community members what excited or concerned them and how they would rank potential opportunities.

Launched October 11, by December 12, the StoryMaps had garnered 3,643 page views and 77 total survey responses. Due to the breakdown in demographics and the low number of total responses, feedback from the StoryMaps should be taken into consideration only as part of the larger community feedback indicated above.

### StoryMaps Respondent Demographics

Of the 40 individual respondents who answered the ethnicity question, 68% (28) identified as White/Caucasian. 32% (12) identified as another ethnicity with the breakdown as follows: 16% (2) Asian/Pacific Islander, 16% (2) Black/African American, 9% (1) Latino/a, 25% (3) Multiple Ethnicities, and 33% (4) other or prefer not to say. We do not have demographic information about the thousands of people who viewed but did not respond to surveys.

Of the 41 individual respondents who answered the question about where they lived, the breakdown is as follows: 27% (11) live in the East Bay, North Bay or Peninsula, 7% (3) Southern waterfront, 10% (4) Central waterfront, 12% (5) Northern waterfront, and 44% (18) other SF non-Port-waterfront neighborhoods. Most responses were from community members not living in the neighborhoods that will be most affected.

### StoryMaps Feedback

Overall, the responses from the Storymaps did not show any major differences from the feedback gathered from the engagement events. Across the three geographies, respondents indicated top priorities of nature-based solutions and public access both in their comments and the ranking of opportunities.

- For Islais Creek/Bayview the top priority was “Prioritize enhancing and restoring watersheds and native marsh habitats” (5 of 11 people).
- For Mission Creek/Mission Bay the top priority was “Focus on enhancing natural watersheds and the Bay’s ecology” (4 of 10 people).
- For the Embarcadero the majority of people (7 of 10) indicated “Expand pedestrian public access opportunities on the Embarcadero” as either their first or second priority.

In comments, respondents raised similar concerns to community meeting attendees around displacement, long time horizons, funding, and technical practicalities.

StoryMaps Total Views	3,643
Introduction Survey	43
Islais Creek / Bayview Survey	11
Mission Creek / Mission Bay Survey	10
Embarcadero Survey	10
Feedback / Last Thoughts Survey	3

Responses downloaded on 12/09/22 can be found [here](#)

### **CAC Presentations + Port Advisory Focus Group**

In addition to citywide community engagement, the Port continued to engage Citizen Advisory Committees and partners.

On October 14, the Port hosted the third in a series of focus groups with Port constituents, community leaders, and citywide residents ([notes linked here](#)). The October focus group shared the Draft Waterfront Adaptation Strategies and followed up on previous August and September focus groups that shaped the development of community-focused materials used in the October public rollout.

Port staff presented to the Southern Advisory Committee on December 7 ([notes linked here](#)) and the Mission Bay Citizens Advisory Committee on December 8 ([notes linked here](#)).

### **Equitable Engagement**

As part of the Port’s ongoing commitment to equity, the WRP’s community engagement and outreach strategies were responsive to the needs and priorities of San Francisco’s waterfront communities and targeted community groups, including youth, seniors, and other communities in the Southern Waterfront who have been historically excluded from planning processes. Learnings from Phase B engagement will help enhance future WRP outreach and engagement to these groups. See recommendations below.

### **In-Language Engagement**

To make information about the Draft Waterfront Adaptation Strategies available in languages community members are most comfortable using, in-language Spanish and Chinese communications were developed as part of engagement. These in-language materials included:

- Adaptation Strategies Explainer Video ([Spanish](#) | [Chinese](#))
- Downloadable PDF fact sheets for each of the seven Draft Waterfront Adaptation Strategies
- Webpages listing the full calendar of engagement events, with a sign-up form to register for events with a request for a translator ([Spanish](#) | [Chinese](#))
  - These in-language engagement webpages included links to Draft Waterfront Adaptation Strategy fact sheets, a sign-up form for translation at events, and the Adaptation Strategies explainer video
- Waterfront posters with designated QR codes leading to the engagement page to sign up for events and review materials
  - These posters were up October 22 to December 10 and received a combined total of 256 scans; see table summary included in the “By the Numbers” section below.
- In-language social media posts

## Recommendations for Future Engagement

### Graphics and Communication

- Use maps that community members can more easily identify with (e.g., Google Maps).
- Include street names, landmarks, and compass directions on maps.
- Use hypothetical examples to communicate potential risks, impacts, and opportunities (e.g., x person lives here, needs to commute to y location daily, a possible adaptation plan would result in Z impacts).
- Develop and share clear communication around cost considerations and funding.
- Communicate data and justification for varied timelines for adaptation in the Embarcadero geography.
- Share more specific data around impacts to vulnerable communities, that is, low income, folks with different abilities, and disabilities, children, and people of color.
- Address the potential impacts to daily life in visuals and messaging when sharing the hybrid approaches, tie these also to potential opportunities.
- Communicate work around Embarcadero Early Projects and other near-term actions as connected to longer-range adaptation planning to make it easier for community members to connect with.
- Work with City agencies to compile and share information about resilience efforts beyond Heron's Head Park; co-host public events in the Southern Waterfront with other City agencies to show comprehensive City efforts to address sea level rise in the southeast.
- Lead next rounds of engagement with what we heard this round and how the hybridized strategy is responsive to it.
- In next rounds use renderings at ground level with more detail and from perspectives the public can relate to, to communicate what changes to the waterfront could look like.
- Update FAQ with most common questions from this round of engagement and promote.
- Add a dedicated email address for the WRP ([wrp@sfport.com](mailto:wrp@sfport.com)) to the website and other communications for ongoing questions.

### Process

- Clearly identify points for input versus information sharing. In instances where information sharing is the primary goal, identify desired outcomes and ways to measure impact.
- Develop a clear understanding of the demographics of communities who currently reside in the various waterfront geographies and align demographic targets with this understanding and dedicate budget appropriately to ensure successful reach. Include benchmark check ins to assess reach and adapt when needed.
- Identify priority community groups to engage based on program objectives and set goals for participation and input gathered for each target group.
- Identify individuals within key community groups with influence and reach to engage and leverage in outreach efforts (e.g., partner with these influencers to develop targeted WRP materials and short videos that carry higher-impact information and messages to specific segments in the community).
- Build in more time in the Program schedule for development of public facing materials, publicity, and implementation.

- Build in engagement touchpoints that can return to the same group of folks with updates and new opportunities for input.
- Identify opportunities for community-driven decision making.

## Equity

- Clearly define equity objectives related to engagement and metrics to capture including demographic information, and track outreach efforts against those metrics.
- Capture and share agreed upon demographic information consistently.
- Ensure the Port and PEC team align on which demographics within each geography are viewed as equity priority groups for the Port/WRP and engage them in targeted ways those groups can fully participate in; identify where/how the program could elevate the voices of the equity priority groups.
- Allow space for adaptive engagement, for example tailoring engagement based on a specific groups interest or needs.
- Create collaborative opportunities for community-driven decision making where it makes sense to do so, e.g., not related to safety-based decision, but on use, look and feel, and ideas to minimize impacts.
- Continue to create opportunities for deep conversations in smaller groups.
- Compile and share specific data about who works within and uses areas that would be impacted.
- Identify gaps in engagement done to date and direct resources to fill those gaps.
- Include budget for direct engagement with Spanish and Chinese limited English proficient (LEP) communities. Latinx and Chinese engagement remains low compared to city population demographics because of lack of budget for dedicated outreach.
- Provide a recording of community meeting presentations online with an option to “leave a question” to be answered by Port staff.
- Build in more time in the Program schedule for development targeted public facing materials, translations, and geography-specific publicity.

## Schedule of Events

- Ground type and cadence of events in clearly articulated objectives.
- Continue hosting event types that were popular (i.e. waterfront walking tours) adapting the content to meet evolving Program objectives.
- Spread out events over more time so as not to compete with one another.
- Consider hosting one in-person and one online community meeting per geography.
- Continue leveraging smaller group discussion or focus groups as venue for deeper conversations around specific tradeoffs.

## Promotion

- Post WRP Events to main sfport.com calendar.
- Leverage Port partners like the Exploratorium and key CBO partners to publicize events.
- Build in more time for social media ad approval. Sea level rise was frequently flagged as a political ad and required additional review.

- Elevate effort for cultural adaptation of ads on ethnic media channels.
- Use activations, markers, messaging along the waterfront to raise public awareness. Consider using public transportation ad space to target non waterfront communities.
- Provide printed handouts of future engagement events for low-tech community members.

### StoryMaps

- Shorten and distill content as much as possible.
- Do not embed surveys throughout, survey should be in its own section.
- Broaden engagement from diverse communities or supplement with other ways of delivering the information more readily used by diverse audiences.

## By The Numbers

This section provides detailed information around engagement by promotion type. When taking into account website views, Eventbrite page views, social media engagement, and event registration and attendance, over 170,000 people viewed content related to the Draft Waterfront Adaptation Strategies.

Below is a breakdown of attendance by engagement activity type. Note: The table below does not include attendance to the rescheduled Embarcadero Walking Tour #2 (February 4, 2023).

### Engagement Attendance by Event Type

Event Type	Number of Attendees
Digital Community Meetings*	159
Waterfront Walking Tours*	122
Southern Waterfront In-person Community Events*	99
CBO Focus Group #3	10
CBO Share Out Presentations	67
Port Advisory Focus Group	13
Community Focus Groups (3)	32
<b>Total</b>	<b>502</b>

\*Publicly promoted events

StoryMaps Total Views as of 12/12/22	<b>3,643</b>
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### Port Website

Information about the Draft Waterfront Adaptation Strategies and communications about engagement events were posted to the WRP landing page and newly created pages within Port website. The table below summarizes content and metrics for content on the WRP pages of the website.

Page Title and Link	Content	Page Views (Oct. 12– Dec. 13)
	<b>Total</b>	<b>3,023</b>
<a href="https://sfport.com/wrp">sfport.com/wrp</a>	Posted adaptation strategies “explainer video”	1,878



	<p>Added links to:</p> <ul style="list-style-type: none"> <li>• StoryMaps</li> <li>• Draft Waterfront Adaptation Strategies page</li> <li>• Engagement page</li> <li>• San Francisco Chronicle</li> </ul>	
<a href="https://sfport.com/wrp/waterfront-adaptation">sfport.com/wrp/waterfront-adaptation</a>	<p>Description of Draft Waterfront Adaptation Strategies and timeline for developing a Draft Waterfront Adaptation Plan by summer 2023</p> <p>Links to:</p> <ul style="list-style-type: none"> <li>• Individual strategy fact sheets</li> <li>• Adaptation FAQ</li> <li>• StoryMaps</li> <li>• Engagement page</li> </ul>	909
<a href="https://sfport.com/wrp/our-waterfront">sfport.com/wrp/our-waterfront</a>	<p>Calendar of two months of in-person and online community events with registration links</p> <p>Adaptation Strategies “explainer” video</p> <p>Links to:</p> <ul style="list-style-type: none"> <li>• Chinese in-language copy of page</li> <li>• Spanish in-language copy of page</li> <li>• StoryMaps</li> </ul>	1,362
<a href="https://sfport.com/wrp/our-waterfront-ch">sfport.com/wrp/our-waterfront-ch</a>	<p>In-language Adaptation Strategies “explainer” video</p> <p>In-language calendar of two months of in-person and online community events with in-language sign-up form for translation at events</p> <p>Links to in-language individual strategy fact sheets</p>	407
<a href="https://sfport.com/wrp/our-waterfront-sp">sfport.com/wrp/our-waterfront-sp</a>	<p>In-language Adaptation Strategies “explainer” video</p> <p>In-language calendar of two months of in-person and online community events with in-language sign-up form for translation at events</p> <p>Links to in-language individual strategy fact sheets</p>	755

In addition to these WRP-specific pages, the Draft Waterfront Adaptations were featured on the sfport.com homepage in the main carousel and linked to the WRP landing page at sfport.com/wrp.

Publicity around the Draft Waterfront Adaptation Strategies also drove overall traffic to all the Program webpages. There were 7,062 total views for all WRP webpages between October 12 and December 13.

## Port Social Media

Between October 11 and December 12, 33 social media posts were posted across three social media sites (Facebook, Instagram, and Twitter) with customized content for each platform. Analytics of the Port’s social media posts, including views, engagements, etc. are not visible to the WRP Engagement Team.

In addition, social media ads targeting San Franciscans (with audiences segmented by language) were run on Facebook and Instagram with the following results:

- 11 total ads (10 custom creatives; 1 boosted post)
- 509,243 impressions (number of times an ad was viewed)
- 155,297 reach (number of individuals who viewed an ad)
- 11,426 link clicks
  - Link click results contributed to the tallies of page views in other sections and can't be summed with them; they should be considered separately.
- 1,658 reactions
- 218 shares
- 69 comments
- In-language ads in Spanish ran from October 26 to December 6, displaying the Spanish Adaptation Strategies video and linking to the Spanish in-language landing page
  - 41,884 ad impressions in Spanish
  - 660 link clicks to Spanish engagement page
- In-language ads in Chinese ran from October 26 to December 6, displaying the Chinese Adaptation Strategies video and linking to the Chinese in-language landing page
  - 22,442 ad impressions in Chinese
  - 437 link clicks to Chinese engagement page
- \$5,050.81 total budget

## Eventbrite

Ads promoting community events linked directly to the Port’s Eventbrite where people could sign up for events. The table below summarizes pages views, event registrations, and WRP eNewsletter sign-ups collected on Eventbrite for the 16 public events from their page launch on October 11 to the last event date on December 8.

Event Page	Page Views	Event Sign-ups	Eventbrite Event Attendees	eNewsletter Sign-ups from Eventbrite Events
<b>Total</b>	<b>8,465</b>	<b>633</b>	<b>380</b>	<b>264</b>
Citywide Digital Community Meeting #1 (Tuesday, October 25)	417	88	40	50

Southern Waterfront Community Mixer - In-Person (Wednesday October 26)	279	24	34	0
Mission Creek / Mission Bay Walking Tour #1 (Saturday, October 29)	290	40	26	0
Islais Creek / Bayview Digital Community Meeting #1 (Tuesday, November 1)	292	27	12	16
Mission Creek / Mission Bay Digital Community Meeting #1 (Wednesday, November 2)	274	25	13	15
Citywide Digital Community Meeting #2 (Thursday, November 3)	253	12	6	7
Mission Creek / Mission Bay Walking Tour #2 (November 5)	312	17	15	3
Southern Waterfront Community Open House – In-Person (Wednesday, November 9)	670	100	65	23
Islais Creek / Bayview Walking Tour #1 (Saturday, November 12)	241	28	16	11
Embarcadero Digital Community Meeting #1 (Tuesday, November 15)	1,022	38	22	23
Embarcadero Walking Tour #1 (Saturday, November 19)	340	29	21	9
Mission Creek / Mission Bay Digital Community Meeting #2 (Tuesday, December 6)	1,312	46	29	19
Islais Creek / Bayview Digital Community Meeting #2 (Wednesday, December 7)	438	40	23	32
Embarcadero Digital Community Meeting #2 (Thursday, December 8)	1,857	34	14	18
Islais Creek / Bayview Walking Tour #2 (Saturday, January 21)*	198	45	24	17
Embarcadero Walking Tour #2 (Sunday, February 4)*	270	40	20	20

\*Rescheduled from early December to early 2023 due to rain. Eventbrite data for the events is as of December 20.

### **Adaptation Strategies Explainer Video Views**

A collaboration with SFGovTV produced a two-minute “explainer” video to describe the risks facing the waterfront and introduce the Draft Waterfront Adaptation Strategies. The video was developed in

English, Spanish, and Chinese. In addition to being featured on the WRP’s Adaptation Strategies webpages, all three videos were posted on the Port’s YouTube channel.

YouTube Views as of January 4, 2023:

- English – 514 views
- Spanish – 38 views
- Chinese – 33 views
- Total – 585 views

Facebook and Instagram Ad Views through December 10, 2023:

- English – 59,037 views
- Spanish – 6,471 views
- Chinese – 4,094 views
- Total – 69,602 views

It is important to note these platforms’ view counts are defined differently and should not be measured against each other. YouTube counts “views” as 30 or more seconds, whereas Facebook and Instagram count “views” as 3 or more seconds.

### Waterfront Posters with QR Codes

QR codes leading to the in-language versions of the community engagement page with links to sign up for events were added to waterfront posters placed on Port property and maps distributed at walking tours around Islais Creek / Bayview, Mission Creek / Mission Bay, and the Embarcadero.

The table below summarizes the QR code views:

<b>Waterfront Geography</b>	<b>Language</b>	<b>Scans</b>
Islais Creek / Bayview	Spanish	28
	Chinese	6
	English	79
	Subtotal	113
Mission Creek / Mission Bay	Spanish	85
	Chinese	15
	English	4
	Subtotal	104
Embarcadero	Spanish	10
	Chinese	5
	English	24
	Subtotal	39
<b>Total</b>		<b>256</b>

Total QR scans by language

Language	Number of Scans
Spanish	123

Chinese	26
English	107
<b>Total</b>	<b>256</b>

## Promotion

Promotion featured a combination of digital, print, and in-person materials.

### WRP Mailing List

Subscribers to the WRP mailing list increased from 3,711 at the time of the first mailing on October 17 to 4,243 total subscribers who signed up as part of event promotion and outreach by the December 20 mailing (532 additional subscribers). Links to the mailings are included below:

- [WRP eNewsletter #49](#) | Mailed October 17, 2022
- [WRP eNewsletter #50](#) | Mailed December 20, 2022
- [Phase B eBlast #1](#) | Mailed October 24, 2022
- [Phase B eBlast #2](#) | Mailed October 31, 2022
- [Phase B eBlast #3](#) | Mailed November 7, 2022
- [Phase B eBlast #4](#) | Mailed November 28, 2022

### Port Social Media and Paid Ads

Between October 11 to December 12, 33 social media posts were posted across three social media sites (Facebook, Instagram, and Twitter) with customized content for each platform. Paid Ads were run in English, Spanish, and Chinese. See details above.

### Waterfront Posters

Islais Creek / Bayview, Mission Creek / Mission Bay, and Embarcadero themed waterfront posters were put up on Port property along the waterfront. Posters were printed in Spanish, Chinese, and English with designated QR codes that connected to the corresponding in-language webpage with the full calendar of engagement events. See engagement numbers above. Copies of the final posters are uploaded to this [SharePoint folder](#).

### Southern Waterfront-Specific Promotion

Leaders of Community-Based Organizations (CBOs) operating in or near District 10 were contacted via email and phone for each Southern Waterfront-Specific event. Events were posted locally on Nextdoor, in ABC's weekly newsletter, and on Instagram. December events were featured in the District Supervisor's public calendar. Registrants of previous Southern Waterfront-specific events were contacted via email to notify them of upcoming engagement events. Flyers were printed and distributed along the 3rd Street corridor, to neighborhood/community-based organizations, and to local libraries in Islais Creek/Bayview and Mission Creek/Mission Bay.

### Swag

A reusable tote bag, featuring the Sea Level Rise Seal as a marker to projected sea level rise and promoting the main WRP landing page at [sfport.com/wrp](http://sfport.com/wrp), was given away at the in-person events as an acknowledgement of people's time and participation. The tote bags will further raise awareness about sea level rise and the Port's leadership in addressing the waterfront risks within communities between engagement events.

## Appendix

A: [Phase B Presentation Tracker with high-level event information](#)

B: [Community Focus Group Top-Line Report and Demographics](#)

C: Links to Reporting Materials from Digital Community Meetings

Geography	Meeting Date	Reporting Materials
Citywide	Tuesday, October 25, 6:00-7:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: !@eXgf3%)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A notes + screen shots of poll results</a></li> </ul>
	Thursday, November 3, 12:00-1:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: Cg=UBw0&amp;)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
Islais Creek / Bayview	Tuesday, November 1, 6:00-7:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a></li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
	Wednesday, December 7, 12:00-1:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: UAb7D&amp;V4)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
Mission Creek / Mission Bay	Wednesday, November 2, 6:00-7:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: dK3h#*u?)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
	Tuesday, December 6, 12:00-1:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: 0y15?.YU)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
Embarcadero	Tuesday, November 15, 6:00-7:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: fLB1^3@#)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>
	Thursday, December 8, 12:00-1:30 PM	<ul style="list-style-type: none"> <li>• <a href="#">Zoom recording</a> (Pass code: ZQ6yn\$EX)</li> <li>• <a href="#">Chat log</a></li> <li>• <a href="#">Q&amp;A note + screen shots of poll results</a></li> </ul>

### Photo Folders to In-person Events

- Southern Waterfront Community Events
  - [Community Mixer](#)
  - [Open House](#)
- Islais Creek / Bayview Waterfront Walking Tours
  - [November 12](#)
  - [January 21](#)
- Mission Creek / Mission Bay Waterfront Walking Tours
  - [October 29](#)
  - [November 5](#)
- Embarcadero

- [November 19](#)
- [February 4](#)

# Notice of Intent Scoping Period



TABLE 1—TAKE ANALYSIS—Continued

Species	Authorized take	Scaled take <sup>1</sup>	Abundance <sup>2</sup>	Percent abundance
Pygmy killer whale .....	504	149	2,126	7.0
False killer whale .....	801	236	3,204	7.4
Killer whale .....	7	n/a	267	2.6
Short-finned pilot whale .....	619	183	1,981	9.2

<sup>1</sup> Scalar ratios were applied to “Authorized Take” values as described at 86 FR 5322, 5404 (January 19, 2021) to derive scaled take numbers shown here.

<sup>2</sup> Best abundance estimate. For most taxa, the best abundance estimate for purposes of comparison with take estimates is considered here to be the model-predicted abundance (Roberts *et al.*, 2016). For those taxa where a density surface model predicting abundance by month was produced, the maximum mean seasonal abundance was used. For those taxa where abundance is not predicted by month, only mean annual abundance is available. For Rice’s whale and killer whale, the larger estimated SAR abundance estimate is used.

<sup>3</sup> Includes 31 takes by Level A harassment and 546 takes by Level B harassment. Scalar ratio is applied to takes by Level B harassment only; small numbers determination made on basis of scaled Level B harassment take plus authorized Level A harassment take.

Based on the analysis contained herein of Shell’s proposed survey activity described in its LOA application and the anticipated take of marine mammals, NMFS finds that small numbers of marine mammals will be taken relative to the affected species or stock sizes (*i.e.*, less than one-third of the best available abundance estimate) and therefore the taking is of no more than small numbers.

#### Authorization

NMFS has determined that the level of taking for this LOA request is consistent with the findings made for the total taking allowable under the incidental take regulations and that the amount of take authorized under the LOA is of no more than small numbers. Accordingly, we have issued an LOA to Shell authorizing the take of marine mammals incidental to its geophysical survey activity, as described above.

Dated: July 21, 2023.

Angela Somma,

Acting Director, Office of Protected Resources,  
National Marine Fisheries Service.

[FR Doc. 2023–15860 Filed 7–26–23; 8:45 am]

BILLING CODE 3510–22–P

## DEPARTMENT OF DEFENSE

### Department of the Army, Corps of Engineers

#### Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francisco County, California

**AGENCY:** U.S. Army Corps of Engineers, Department of the Army, DoD.

**ACTION:** Notice of Intent to prepare a Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood

Study, San Francisco County, California.

**SUMMARY:** Pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality regulations, the U.S. Army Corps of Engineers (USACE), Tulsa District, announces its intent to prepare a Draft Integrated Feasibility Report and Environmental Impact Statement (IFR–EIS) for the San Francisco Waterfront Coastal Flood Study. The study will investigate the feasibility of managing tidal and fluvial flooding and sea level rise along 7.5 miles of the San Francisco Waterfront, from Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. This notice announces USACE’s intent to determine the scope of the issues to be addressed and identify the significant issues related to a proposed action.

**DATES:** Written comments should be submitted by August 28, 2023.

**ADDRESSES:** Written comments related to the development of the Draft IFR–EIS may be submitted by any of the following methods:

- *Email:* [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil).
- *Mail:* U.S. Army Corps of Engineers, Tulsa District, ATTN: RPEC—SFWS, 2488 E 81st Street, Tulsa, OK 74137.
- For more information visit the project website at: <https://sfport.com/wrp/usace>.

**FOR FURTHER INFORMATION CONTACT:**

Questions or comments regarding the proposed Draft IFR–EIS may be directed to Ms. Melinda Fisher at 918–669–7423 or by email at [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil).

**SUPPLEMENTARY INFORMATION:**

1. *Authority.* The San Francisco Waterfront Coastal Flood Study (the Study) was originally authorized under section 110 of the Rivers and Harbors Act of 1950, Public Law (Pub. L.) 515, 64 stat. 163. The project was subsequently authorized under Section 142 of the Water Resources

Development Act (WRDA) of 1976, Pub. L. 94–587, 90 stat. 2917, 2930, as amended by Section 705 of WRDA of 1986, Pub. L. 99–662, 100 stat. 4082, 4158 and section 203 of WRDA 2020.

2. *Background.* The USACE and the Port of San Francisco (Port) have partnered to study flood risk along 7.5 miles of San Francisco’s bayside shoreline including areas between Aquatic Park and Heron’s Head Park. The Study is one of several coordinated waterfront resiliency efforts being undertaken by the Port in partnership with other federal, state, and local agencies to plan and reduce the risk of anticipated seismic activity, flooding, coastal storm damages, and sea level rise along the waterfront.

The Study began in 2018 under the USACE San Francisco District, South Pacific Division and was transferred to the Tulsa District out of the Southwestern Division in 2021. The Study follows the USACE Specific, Measurable, Attainable, Risk Informed, and Timely (SMART) planning process which targets a feasibility study to be completed within three years, but due to several complexities, including consideration of seismic conditions and the diversity of the geographic regions and stakeholders, the Study has been approved to complete the process in seven years.

3. *Purpose and Need.* The purpose of the Study is to investigate the feasibility of managing tidal and fluvial flooding and sea level rise along 7.5 miles of the San Francisco Bay shoreline. The project area is at risk of flooding from bay water during coastal storms, extreme tides, and future sea level rise. Flooding along the waterfront could cause extensive damage to public infrastructure and private property, loss of life and deterioration of public health and safety, degradation of the natural environment, and adverse changes to the social and economic character of the waterfront community. The risk is

expected to increase over time as sea levels rise in the bay.

4. *Proposed Action and Alternatives Being Considered.* Adapting the waterfront will require changes on a large scale that balance multiple factors and priorities. The Study Team has formulated an array of alternatives that would reduce the risk of flooding along the waterfront by considering the three USACE sea level rise curve scenarios (low, intermediate, and high), alignment of the line of defense relative to the existing shoreline, and adaptability of the design to address higher sea levels if certain thresholds are triggered after construction. A total of seven alternatives have been formulated for this study including:

- *Alternative A—No Action:* Takes no action to reduce flood risks through this project. This alternative serves as the baseline condition.

- *Alternative B—Nonstructural:* Proposes nonstructural measures such as relocation, raise in place, floodproofing, and zoning in areas identified with frequent flooding.

- *Alternative C—Defend Low Rate of Rise:* Uses a combination of structural (e.g., t-walls, sheet pile walls, berms, curb extensions), nonstructural (e.g., deployable flood barriers, floodproofing), and natural and nature-based features (NNBF) (e.g., ecological armoring) to address flooding in “low spots” along the shoreline. This alternative does not include any future year actions or adaptability once construction is complete.

- *Alternative D—Hybrid, Lower Rate of Rise:* Similar to Alternative C except measures are adaptable for future construction assuming the rate of rise accelerates to a higher rate of sea level change. Ecotone levees, ecological armoring, and wetland preservation and restoration are additional NNBF included in this design.

- *Alternative E—Defend, Higher Rate of Rise:* Uses a combination of structural (e.g., wharf raises and rehabilitation, seawalls, sheet pile walls, and berms), nonstructural (e.g., building and bridge raises, floodproofing) and NNBF (e.g., living seawalls/vertical shoreline, embankment shorelines, ecotone levees, and naturalized shorelines) to defend at the existing shoreline and prevent overtopping at the higher rate of sea level change with recommendations for adaptation in future years.

- *Alternative F—Working with Water, Higher Rate of Rise:* Similar to Alternative E, except there is managed retreat inland along the southern waterfront and tide gates at the mouths of Islais and Mission creeks. The NNBF include ecotone levees, ecological

armoring, naturalized shorelines, coarse beaches, and wetland preservation and restoration. Additional retreat and adaptations are proposed as the rate of sea level rise increases. This alternative proposes the most bayward alignment.

- *Alternative G—Living with Water, Higher Rate of Rise:* Similar to Alternative F, except this alternative concedes the largest area for managed retreat and incorporates more nonstructural measures (e.g., relocation and zoning) and significantly more areas of wetland restoration. It does not include water control structures (i.e., tide gates). This alternative proposes the most inland alignment and does not require bay fill.

5. *Brief Summary of Expected Impacts.* Expected impacts include short- and long-term impacts to existing aquatic habitats, fish and wildlife including federally protected species and their habitat, water quality, air quality, aesthetic quality, noise, transportation corridors, recreation features, historic resources, and socioeconomic resources. Impacts anticipated to require compensatory mitigation include aquatic habitats, water quality, and air quality, while many of the impacts to other resources will be minimized or avoided through project design. Long-term benefits are anticipated to each of the socioeconomic resources such as life safety, critical infrastructure, utilities, historic resources, historically disadvantaged communities, recreation, and the local economy through the management of coastal flooding and sea level rise. Long-term increases in aquatic habitats may also be realized with implementation of the NNBF.

The USACE San Francisco District and Port issued a Notice of Early Scoping in the **Federal Register** August 20, 2020. At that time, it was unclear if significant effects would be realized and the need for an EIS was not formally announced. Since then, it was determined that significant resource impacts are anticipated and an EIS is warranted. During early scoping, several significant environmental and social issues were raised including but not limited to minimizing bay fill; effects of high rates of sea level rise on any alternative considered; disruptions to businesses, transportation corridors and walk paths; environmental justice impacts on historically disadvantaged communities; impacts to water quality, contaminated sites, historic resources; and the potential cost and time to implement any of the strategies. In general, there was wide support for use of nature-based measures in lieu of gray infrastructure, preserving and increasing

public access to the waterfront, and incorporating adaptation components to address uncertainties in sea level rise.

6. *Anticipated Permits, Consultations, or Coordination.* The proposed action is being coordinated with federal, state, regional, and local agencies. In accordance with relevant environmental laws and regulations, the USACE will consult with the following agencies: US Fish and Wildlife Service and National Marine Fisheries Service under the Fish and Wildlife Coordination Act and Endangered Species Act; National Marine Fisheries Service under the Marine Mammal Protection Act and Magnuson-Stevens Fishery Conservation and Management Act; the San Francisco Bay Regional Water Quality Control Board under Section 401 of the Clean Water Act; the Bay Conservation and Development Commission under the Coastal Zone Management Act; the Bay Area Air Quality Management District under the Clean Air Act; the California State Historic Preservation Office and the Advisory Council on Historic Preservation under the National Historic and Preservation Act; and tribes under tribal coordination policies and executive orders. Other Federal and state agencies have been invited to participate throughout the study process as Coordinating or Participating Agencies.

For compliance with the National Environmental Policy Act (NEPA), the USACE will serve as the lead Federal agency in the preparation of the Draft IFR–EIS. For the California Environmental Quality Act (CEQA), the City of San Francisco Planning Department (Planning Department) is the lead agency for the Study. The Planning Department is conducting CEQA review under a separate process and will not be integrated with this NEPA effort.

7. *Public Participation.* USACE invites all affected federal, state, and local agencies, affected Native American Tribes, other interested parties, and the public to participate in the NEPA process during development of the Draft IFR–EIS.

Early scoping began in 2020, however due to the scale of anticipated effects, the USACE is inviting additional comments on the potential alternatives, issues of concern and any analyses relevant to the proposed action with this notice and formally announces the intent to prepare an EIS. For more information visit the project website at <https://sfport.com/wrp/usace>.

The scoping comment period begins with publication of this notice and ends on August 28, 2023. All comments

received during early scoping and the scoping period are being used to identify significant resources and effects that should be considered in the preparation of the Draft IFR–EIS. Comments received after the comment period closes will be considered prior to the Draft IFR–EIS public review period, to the extent possible. For those that cannot be addressed prior to the public review period, the comments will be included within the public review period and addressed at that time.

While no public scoping meetings are scheduled during this scoping period, virtual public scoping meetings were held on September 16 and 17, 2020 coinciding with the Notice of Early Scoping issued in the **Federal Register** August 2020. The Port has also held numerous public engagement sessions including a robust outreach effort in the Fall of 2022 with a total of sixteen virtual and in-person public engagement events to further describe the purpose of the Study and strategies being considered, as well as to seek feedback on areas of concern and the plan formulation process.

8. *Availability of Draft IFR–EIS.* The USACE currently estimates that the Draft IFR–EIS will be available for public review and comment in the Fall of 2023. At that time, the USACE will provide a 60-day public review period for individuals and agencies to review and comment. The USACE will notify all interested agencies, organizations, and individuals of the availability of the draft document at that time. All interested parties are encouraged to respond to this notice and provide a current address if they wish to be notified of the Draft EIS circulation.

**Wesley E. Coleman, Jr.**

*Programs Director, Southwestern Division.*

[FR Doc. 2023–15898 Filed 7–26–23; 8:45 am]

**BILLING CODE 3720–58–P**

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## DEPARTMENT OF EDUCATION

[Docket No.: ED–2023–SCC–0142]

### Agency Information Collection Activities; Comment Request; Ronald E. McNair Postbaccalaureate Achievement Program Annual Performance Report

**AGENCY:** Office of Postsecondary Education (OPE), Department of Education (ED).

**ACTION:** Notice.

**SUMMARY:** In accordance with the Paperwork Reduction Act (PRA) of 1995, the Department is proposing a

revision of a currently approved information collection request (ICR).

**DATES:** Interested persons are invited to submit comments on or before September 25, 2023.

**ADDRESSES:** To access and review all the documents related to the information collection listed in this notice, please use <https://www.regulations.gov> by searching the Docket ID number ED–2023–SCC–0142. Comments submitted in response to this notice should be submitted electronically through the Federal eRulemaking Portal at <https://www.regulations.gov> by selecting the Docket ID number or via postal mail, commercial delivery, or hand delivery. If the [regulations.gov](https://www.regulations.gov) site is not available to the public for any reason, the Department will temporarily accept comments at [ICDocketMgr@ed.gov](mailto:ICDocketMgr@ed.gov). Please include the docket ID number and the title of the information collection request when requesting documents or submitting comments. Please note that comments submitted after the comment period will not be accepted. Written requests for information or comments submitted by postal mail or delivery should be addressed to the Manager of the Strategic Collections and Clearance Governance and Strategy Division, U.S. Department of Education, 400 Maryland Ave. SW, LBJ, Room 6W203, Washington, DC 20202–8240.

**FOR FURTHER INFORMATION CONTACT:** For specific questions related to collection activities, please contact Julie Laurel, 202–453–6733.

**SUPPLEMENTARY INFORMATION:** The Department, in accordance with the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3506(c)(2)(A)), provides the general public and Federal agencies with an opportunity to comment on proposed, revised, and continuing collections of information. This helps the Department assess the impact of its information collection requirements and minimize the public's reporting burden. It also helps the public understand the Department's information collection requirements and provide the requested data in the desired format. The Department is soliciting comments on the proposed information collection request (ICR) that is described below. The Department is especially interested in public comment addressing the following issues: (1) is this collection necessary to the proper functions of the Department; (2) will this information be processed and used in a timely manner; (3) is the estimate of burden accurate; (4) how might the Department enhance the quality, utility, and clarity of the information to be collected; and (5) how

might the Department minimize the burden of this collection on the respondents, including through the use of information technology. Please note that written comments received in response to this notice will be considered public records.

*Title of Collection:* Ronald E. McNair Postbaccalaureate Achievement Program Annual Performance Report.

*OMB Control Number:* 1840–0640.

*Type of Review:* A revision of a currently approved ICR.

*Respondents/Affected Public:* Private Sector; State, Local, and Tribal Governments.

*Total Estimated Number of Annual Responses:* 206.

*Total Estimated Number of Annual Burden Hours:* 2,297.

*Abstract:* Ronald E. McNair Postbaccalaureate Achievement (McNair) Program grantees must submit the Annual Performance Report each year. The reports are used to evaluate grantees' performance for substantial progress, respond to the Government Performance and Results Act (GPRA), and award prior experience points at the end of each project (budget) period. The Department also aggregates the data to provide descriptive information on the projects and to analyze the impact of the McNair Program on the academic progress of participating students.

In this revision, the Department added two fields, at the project level, requesting information on the implementation of the Competitive Preference Priorities (CPPs) used in the most recent grant competition. The addition of the CPP questions coupled with an increase in the number of respondents resulted in a slight increase in total annual burden hours.

Dated: July 24, 2023.

**Kun Mullan,**

*PRA Coordinator, Strategic Collections and Clearance, Governance and Strategy Division, Office of Chief Data Officer, Office of Planning, Evaluation and Policy Development.*

[FR Doc. 2023–15963 Filed 7–26–23; 8:45 am]

**BILLING CODE 4000–01–P**

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## DEPARTMENT OF EDUCATION

[Docket ID ED–2023–FSA–0109]

### Privacy Act of 1974; System of Records

**AGENCY:** Federal Student Aid, U.S. Department of Education.

**ACTION:** Notice of a Modified System of Records.

**SUMMARY:** In accordance with the Privacy Act of 1974, as amended

**From:** [Denise Louie](#)  
**To:** [SF Waterfront](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Fw: U.S. Army Corps of Engineers San Francisco Waterfront Coastal Flood Study Notice of Intent  
**Date:** Wednesday, August 2, 2023 1:43:49 PM

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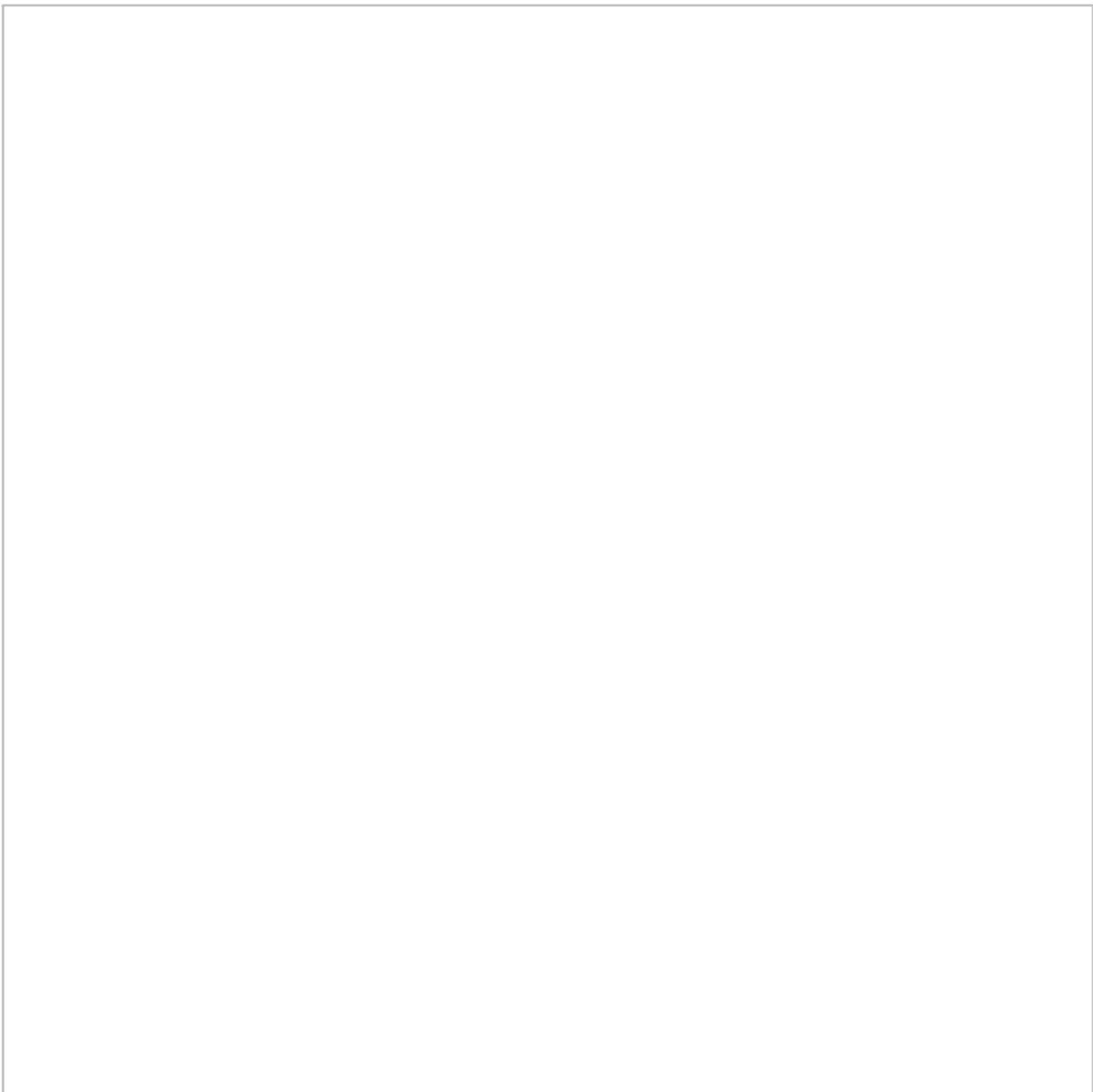
Hi there,  
Thank you for inviting public comment regarding the SF Waterfront Coastal Flood Study.

My family and I care very much about the environment, which includes biodiversity, which is in crisis. Therefore, we urge you to take actions that favor the natural world, native plants and animals and to avoid actions that harm the same. Because we have met the enemy of biodiversity, and it is us humans.

Sincerely,  
Denise Louie  
San Francisco native and life-long resident

----- Forwarded Message -----

**From:** Port of San Francisco <communications@sfport.com>  
**To:** "denise\_louie\_sf@yahoo.com" <denise\_louie\_sf@yahoo.com>  
**Sent:** Tuesday, August 1, 2023 at 03:56:16 PM PDT  
**Subject:** U.S. Army Corps of Engineers San Francisco Waterfront Coastal Flood Study Notice of Intent



## **Notice of Intent to Prepare a Draft Integrated Feasibility Report and Environmental Impact Statement**

The U.S. Army Corps of Engineers (USACE) and Port of San Francisco have partnered to study flood risk along San Francisco's bayside shoreline.

The San Francisco Waterfront Coastal Flood Study is one of the several coordinated waterfront resilience activities being undertaken in partnership with federal, state, and local agencies to plan for anticipated seismic activity, flooding, and sea level rise. The study will identify vulnerabilities and recommend strategies to reduce current and future flood risks for consideration for federal investment and implementation along the Port's entire 7.5 mile jurisdiction.

The USACE **San Francisco Waterfront Coastal Flood Study** is receiving written comments

from any member of the public through August 28, 2023, as part of a Notice of Intent to prepare a **Draft Integrated Feasibility Report and Environmental Impact Statement (IFR-EIS) for the Flood Study**.

Written comments related to the development of the Draft IFR-EIS may be submitted by any of the following methods:

Email: **SFWFRS@usace.army.mil**

Mail: U.S. Army Corps of Engineers, Tulsa District, ATTN: RPEC-SFWS, 2488 E 81st Street, Tulsa, OK 74137

Questions or comments regarding the proposed Draft IFR-EIS may be directed to Ms. Melinda Fisher at 918-669-7423 or by email at **SFWFRS@usace.army.mil**.

The USACE is soliciting public participation and input on scoping for the National Environmental Policy Act (NEPA) EIS that will assist with determining the appropriate level of NEPA documentation and analysis for the study.

The USACE currently estimates that the Draft IFR-EIS will be available for public review and comment in fall 2023. At that time, the USACE will provide a 60-day public review for individuals and agencies to review and comment.

For more about the Flood Study, visit the public website at **sfport.com/wrp/usace**.

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sfport.com/wrp



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Pier 1 The Embarcadero | San Francisco, CA 94111 US

This email was sent to denise\_louie\_sf@yahoo.com.  
*To continue receiving our emails, add us to your address book.*

**From:** [Glenn Rogers](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Thames River Barrier  
**Date:** Wednesday, August 2, 2023 1:42:55 PM

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## Thames Barrier



Thames Barrier protect London.

London, England has been around a lot longer than San Francisco and was long ago forced to control their water flow issues to improve drainage, sewer functioning and flooding of low-lying areas. They created a mechanical barrier that stops high tide from intruding into their city.

The Thames Barrier was built in 1982. This barrier is closed during high tides and during storm surges. During low tide, the barrier is opened to allow water to leave.

A similar flood control system may be appropriate for the SF Bay area. Since the solution to Climate Change is not completely our responsibility or even something we can correct alone, it seems likely that a local flood control barrier may be the best local solution to the problem of future flooding in San Francisco.

Glenn Rogers, PLA and VP, CSFN  
Landscape Architect, License 3223

web site: [alderlandscapearchitecture.com](http://alderlandscapearchitecture.com)



**From:** [Steve Lawrence](#)  
**To:** [SF Waterfront](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Port study  
**Date:** Sunday, August 6, 2023 10:47:30 AM

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Please harmonize, and simplify. It seems that you plan for a 3' sea level rise by 2050--much more than other SF documents plan for (1/2" per year). Hard to believe 3'. It seems that you plan for a quake of 6.7 or more (more than 2/3 chance in twenty years). And yet you say that about \$5 billion is expected to be spent shoring up or replacing the seawall in 30 years, so say about \$3.5 billion by 2050.

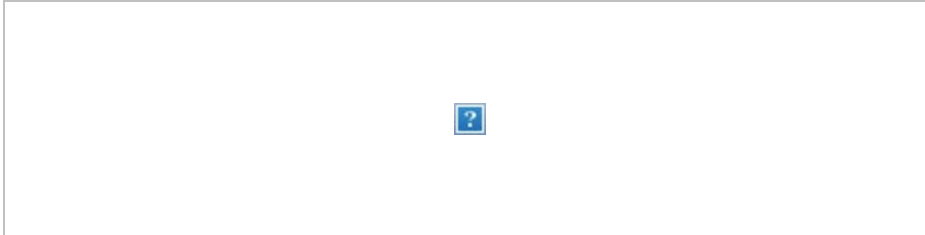
It is hard to accept all three above at once. \$3.5 billion will not be adequate address 3' rise or a 6.7 quake, either one, much less both. Perhaps if one can't accept three inconsistencies one is not a fit San Francisco bureaucrat. But this reader cries: discordant, harmonize.

Steve Lawrence, resident, Forest Hill

<https://sfport.com/files/2021-12/SFWaterfrontCoastalFloodStudyWebinarDeck.pdf>

**From:** [CNPS Yerba Buena](#)  
**To:** [SF Waterfront](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] U.S. Army Corps of Engineers San Francisco Waterfront Coastal Flood Study Comment  
**Date:** Wednesday, August 9, 2023 11:51:09 PM  
**Attachments:** [SF Waterfront Coastal Flood Study Comment 081023.pdf](#)

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August 9, 2023

U.S. Army Corps of Engineers  
Tulsa District  
ATTN: RPEC-SFWS  
2488 E 81st Street  
Tulsa, OK 74137

Email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)

Re: Document #2023-15898

Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francisco County, California.

Dear Ms. Melinda Fisher and Others to Whom It May Concern;

Thank you for this opportunity to comment on the upcoming Draft IFR and EIS for the San Francisco Waterfront Coastal Flood Study.

The California Native Plant Society's mission is to conserve California native plants and their natural habitats, and increase understanding, appreciation, and horticultural use of native plants. Our vision includes a future where Californians can experience thriving biological diversity, even in human-altered landscapes. The Yerba Buena chapter of CNPS covers San Francisco County and we respectfully submit the following questions:

1. How does the proposed flood protection plan account for potential sea level rise scenarios over the next few decades, and what adaptation measures are included to address changing sea levels?
2. Could you provide more details about the engineering techniques and infrastructure proposed in the plan to mitigate coastal flooding? How will these measures interact with the existing environment and communities?
3. What assessments have been conducted to evaluate the potential impacts of the flood protection infrastructure on local ecosystems, including wetlands, aquatic habitats, shoreline and upland areas and wildlife? How will these impacts be mitigated or minimized?

4. How will the proposed flood protection plan impact public access to and use of the waterfront areas? Are there provisions to ensure continued recreational and economic activities in these areas?
5. Can you elaborate on the cost-benefit analysis conducted for the proposed flood protection measures? What economic benefits are expected to result from the implementation of the plan, and how will these benefits be distributed among different stakeholders?
6. Are there plans to integrate green infrastructure or nature-based solutions into the flood protection measures? How might these approaches enhance both flood resilience and environmental sustainability or better yet, enhancement?
7. Given the potential for climate change-related uncertainties, what flexibility and adaptability have been built into the proposed plan to adjust to evolving conditions and ensure its long-term effectiveness?
8. How does the proposed flood protection plan align with broader regional or statewide coastal management strategies and initiatives, particularly those related to climate resilience and hazard mitigation?
9. What contingency plans are in place if any unforeseen challenges or impacts arise during the implementation of the flood protection measures? How will these challenges be addressed in real-time?
10. Could you explain the potential effects of the flood protection infrastructure on adjacent infrastructure, utilities, and transportation systems? How will these potential impacts be managed?
11. What provisions are in place to ensure that disadvantaged or vulnerable communities are not disproportionately affected by the flood protection measures? How will social equity considerations be integrated into the plan?
12. Can you provide information on the timeline for implementation of the proposed flood protection plan, including key milestones and anticipated completion dates for different phases?
13. How will the proposed flood protection plan be funded, and what mechanisms are in place to secure the necessary financial resources for its successful implementation and maintenance?
14. How does the flood protection plan address potential conflicts or coordination challenges with other ongoing or planned waterfront enhancements (ex: Measure AA) or development projects in the region?
15. Will the project enhance important tidal marsh ecosystem plants such as *Suaeda californica* (California sea-blite) and *Zostera marina* (eelgrass)

Thank you again for this opportunity to submit questions. We look forward to the release of the Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Respectfully,

Bob Hall

California Native Plant Society, Yerba Buena chapter  
Conservation Chair

<http://cnps-yerbabuena.org>

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CALIFORNIA  
NATIVE PLANT SOCIETY

Yerba Buena  
Chapter

August 9, 2023

U.S. Army Corps of Engineers  
Tulsa District  
ATTN: RPEC-SFWS  
2488 E 81st Street  
Tulsa, OK 74137

Email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)

Re: Document #2023-15898

Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francisco County, California.

Dear Ms. Melinda Fisher and Others to Whom It May Concern;

Thank you for this opportunity to comment on the upcoming Draft IFR and EIS for the San Francisco Waterfront Coastal Flood Study.

The California Native Plant Society's mission is to conserve California native plants and their natural habitats, and increase understanding, appreciation, and horticultural use of native plants. Our vision includes a future where Californians can experience thriving biological diversity, even in human-altered landscapes. The Yerba Buena chapter of CNPS covers San Francisco County and we respectfully submit the following questions:

1. How does the proposed flood protection plan account for potential sea level rise scenarios over the next few decades, and what adaptation measures are included to address changing sea levels?
2. Could you provide more details about the engineering techniques and infrastructure proposed in the plan to mitigate coastal flooding? How will these measures interact with the existing environment and communities?
3. What assessments have been conducted to evaluate the potential impacts of the flood protection infrastructure on local ecosystems, including wetlands, aquatic habitats, shoreline and upland areas and wildlife? How will these impacts be mitigated or minimized?

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Thank you again for this opportunity to submit questions. We look forward to the release of the Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Respectfully,

Bob Hall

California Native Plant Society, Yerba Buena chapter  
Conservation Chair

<http://cnps-yerbabuena.org>

**From:** [CNPS Yerba Buena](#)  
**To:** [SF Waterfront](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] U.S. Army Corps of Engineers San Francisco Waterfront Coastal Flood Study Comment  
**Date:** Wednesday, August 9, 2023 11:51:09 PM  
**Attachments:** [SF Waterfront Coastal Flood Study Comment 081023.pdf](#)

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August 9, 2023

U.S. Army Corps of Engineers  
Tulsa District  
ATTN: RPEC-SFWS  
2488 E 81st Street  
Tulsa, OK 74137

Email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)

Re: Document #2023-15898

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Thank you again for this opportunity to submit questions. We look forward to the release of the Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Respectfully,

Bob Hall

California Native Plant Society, Yerba Buena chapter  
Conservation Chair

<http://cnps-yerbabuena.org>

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**From:** [Don Margolis](#)  
**To:** [SF Waterfront](#)  
**Subject:** [Non-DoD Source] Comments on NOI to Prepare Draft Integrated Feasibility Report and EIS  
**Date:** Wednesday, August 9, 2023 12:50:35 PM

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Ms. Fisher,

On behalf of the South End Rowing Club, 500 Jefferson Street, San Francisco, CA ("SERC"), we request inclusion on your list of those receiving notice of all public input stages of the process of preparing the Draft Integrated Feasibility Report and Environmental Impact Statement for the Waterfront Coastal Flood Study.

SERC is a non-profit recreational club that admits all interested persons as members, and is located at San Francisco Aquatic Park. SERC members engage in and promote several recreational activities, including open water swimming along the San Francisco shoreline, and human-powered rowboating, kayaking, and sculling.

SERC wishes to have an opportunity to provide input into every relevant step of the planning process in order to contribute as responsible citizens to a successful outcome, and to ensure appropriate consideration and mitigation of impacts that any proposed project may have on the continued use of the Bay for swimming and boating recreational pursuits, and other human-powered water contact activities. Concerns include points of access and egress, water quality, and hydrology, all of which relate to human safety and health.

Please add SERC to your list of persons receiving notice of all meetings and proposed actions. Thank you.

Donald Margolis, Esq.  
South End Rowing Club  
500 Jefferson Street  
San Francisco, CA 94109  
Email: [donmargolis56@gmail.com](mailto:donmargolis56@gmail.com)

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Don Margolis

**From:** [Peter Antoniak](#)  
**To:** [SF Waterfront](#)  
**Subject:** [Non-DoD Source] DRAFT IFR-EIS  
**Date:** Tuesday, August 15, 2023 11:35:52 AM

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I'm a Professional Civil Engineer in San Bruno and have attended several presentations on the Peninsula about how each local government was going to handle sea level rise.

It occurred to me that, instead of each community building dikes and stormwater management systems, this may be better handled by diking off the South Bay and managing the estuary like it is done in Holland.

The obvious location of a dike would be from just North of SFO to the Oakland Airport. As an added benefit, Interstate 380 could continue across the Bay on top of the dike along with a second BART transbay crossing.

Not sure if SFO flight clearance requirements would conflict with a bridge to allow for shipping, but a swinging bridge over the locks might be considered.

Pete Antoniak, Commander CEC, US Navy Retired





# United States Department of the Interior



NATIONAL PARK SERVICE  
Interior Regions 8, 9, 10, and 12  
555 Battery Street, Suite 122  
San Francisco, CA 94111

IN REPLY REFER TO:  
PW-P (1.D, L7619)

U.S. Army Corps of Engineers, Tulsa District  
ATTN: RPEC—SFWS  
2488 E 81st Street, Tulsa, OK 74137  
(email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil))

To Whom It May Concern:

Thank you for the opportunity to comment on the San Francisco Waterfront Coastal Flood Study. The National Park Service (NPS), National Trails Office administers the Pony Express National Historic Trail (NHT) and the Butterfield Overland NHT, both of which intersect the planning area for this EIS. We look forward to participating in the EIS process and providing expertise on trails resources and potential impacts resulting from rising sea level. Geospatial data for the congressional alignments of the two trails can be found at [Butterfield Overland NHT special resource study](#), and [Pony Express NHT \(arcgis.com\)](#).

San Francisco Maritime National Historical Park manages a fleet of historic ships, Visitor Center, Maritime Museum, Maritime Research Center, and the Aquatic Park Historic District, all within the park boundary adjacent to the planning area (Fisherman's Wharf/Embarcadero) for this EIS.

The NPS looks forward to participating in the EIS process and providing any additional input and expertise on cultural and historic resources and potential indirect impacts from flooding and other environmental risks.

For questions or additional information about San Francisco Maritime National Historical Park, please contact Dale Dualan ([dale\\_dualan@nps.gov](mailto:dale_dualan@nps.gov)), Management Analyst and Public Information Officer. Regarding the Pony Express NHT and Butterfield Overland NHT, contact Jordan Jarrett ([jordan\\_jarrett@nps.gov](mailto:jordan_jarrett@nps.gov)) at the NPS National Trails Office.

Sincerely,

**DANETTE NOLAN** Digitally signed by DANETTE  
NOLAN  
Date: 2023.08.22 08:04:01 -07'00'

Danette Woo Nolan  
Regional Environmental Coordinator  
National Park Service, Interior Regions 8, 9, 10 & 12

INTERIOR REGION 8 • LOWER COLORADO BASIN\*  
INTERIOR REGION 9 • COLUMBIA—PACIFIC NORTHWEST\*  
INTERIOR REGION 10 • CALIFORNIA—GREAT BASIN  
INTERIOR REGION 12 • PACIFIC ISLANDS

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AMERICAN SAMOA, ARIZONA\*, CALIFORNIA, GUAM, HAWAII, IDAHO, MONTANA\*,  
NEVADA, NORTHERN MARIANA ISLANDS, OREGON, WASHINGTON  
\*PARTIAL

**From:** [Fain, Jessica@BCDC](mailto:Fain, Jessica@BCDC)  
**To:** [SF Waterfront](#)  
**Cc:** [Brad Benson](#); [Capone, Kelley \(PRT\)](#); [Goldbeck, Steve@BCDC](mailto:Goldbeck, Steve@BCDC); [Buehmann, Erik@BCDC](mailto:Buehmann, Erik@BCDC)  
**Subject:** [Non-DoD Source] San Francisco Waterfront Coastal Flood Study Scoping Comment Letter  
**Date:** Monday, August 28, 2023 7:50:06 PM  
**Attachments:** [image001.png](#)  
[20230828\\_USACE\\_SF Flood Study IFS EIS BCDC Scoping Comments.docx.pdf](#)

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Ms. Fisher,

Please find the attached comment letter from the San Francisco Bay Conservation and Development Commission on the USACE's Notice of Intent to Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study. Don't hesitate to reach out with any questions.

Sincerely,

JESSICA FAIN, AICP  
Director of Planning  
San Francisco Bay Conservation and Development Commission  
Bay Area Metro Center  
375 Beale Street, San Francisco, CA 94105  
415-352-3642  
[Jessica.Fain@bcdca.gov](mailto:Jessica.Fain@bcdca.gov)  
<http://www.bcdca.gov/>



"Celebrate Pride With Us"

# San Francisco Bay Conservation and Development Commission

375 Beale Street, Suite 510, San Francisco, California 94105 tel 415 352 3600 fax 888 348 5190

State of California | Gavin Newsom – Governor | [info@bcdc.ca.gov](mailto:info@bcdc.ca.gov) | [www.bcdc.ca.gov](http://www.bcdc.ca.gov)

August 28, 2023

Melinda Fisher  
U.S. Army Corps of Engineers  
Tulsa District, ATTN: RPEC—SFWS,  
2488 E 81st Street, Tulsa, OK 74137  
Sent via email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)

SUBJECT: Comments on Notice of Intent to Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Dear Melinda Fisher:

Thank you for the opportunity to comment on the notice of intent to prepare an integrated feasibility report and Environmental Impact Statement (EIS) for the San Francisco Waterfront Coastal Flood Study by the San Francisco District of the U.S. Army Corps of Engineers (USACE), which will evaluate coastal storm and flood risk management alternatives along 7.5 miles of the San Francisco Waterfront, from Aquatic Park to Herons Head Park, in the City of San Francisco, San Francisco County, California. The following comments provided by BCDC staff are based on the McAteer-Petris Act and the *San Francisco Bay Plan* (Bay Plan).

The USACE and Port Study Team has formulated an array of seven waterfront adaptation strategy alternatives that would reduce the risk of flooding along the waterfront by considering the three USACE sea level rise curve scenarios (low, intermediate, and high), alignment of the line of defense relative to the existing shoreline, and adaptability of the design to address higher sea levels if certain thresholds are triggered after construction. BCDC staff supports the efforts to address rising sea level along the study area and appreciate the opportunity to contribute to the formulation of these alternatives and the environmental impacts and benefits that will be analyzed in the Integrated Flood Study and EIS. We believe that an EIS is appropriate for a project of this magnitude, and request that a joint federal EIS and state Environmental Impact Report be prepared and circulated for the project. As provided below, these alternatives raise issues under the McAteer-Petris Act and the *San Francisco Bay Plan*.

**Commission Jurisdiction and Authority.** BCDC is responsible for granting or denying permits for any proposed fill (e.g., earth or any other substance or material, including pilings or structures placed on pilings, and floating structures moored for extended periods of time); extraction of materials; or change in use of any water, land, or structure within the Commission’s jurisdiction. The Commission has jurisdiction over the Bay waters and the shoreline areas bayward of the Embarcadero that would be evaluated in the Feasibility Study, and a shoreline band consisting of all territory located between the shoreline of the Bay and 100 feet landward of and parallel with the

## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

shoreline. For projects that are within the Commission's jurisdiction, permits from BCDC may be required, depending on the nature of the activity.

In addition to carrying out its regulatory authority under state law, the federal Coastal Zone Management Act allows the Commission to review federal projects and projects that require federal approval or are supported with federal funds. The Commission reviews federal projects for consistency with its federally-approved Coastal Management Program for the San Francisco Bay segment of the California Coastal Zone in a similar process that it uses in reviewing permit applications under state law. As provided in the Coastal Zone Management Act, when submitting a statement of consistency, federal agencies and applicants for federal approvals must provide a detailed description of the activity, its associated facilities, and their coastal effects, and comprehensive data and information sufficient to support the Federal agency's consistency statement. BCDC staff believes that if the flood study results in a federal project with the Port of San Francisco as a local sponsor, then both federal consistency review under the CZMA and permitting pursuant to the McAtteer-Petris Act will be required and encourages the Army Corps and the Port of San Francisco to coordinate the state permitting and federal consistency determination processes. In addition, prior to submitting any permit application or consistency determination to BCDC, BCDC staff strongly encourages the Port of San Francisco staff and Army Corps of Engineers staff to meet with BCDC staff to review any project proposals, coordinate approvals, and review any issues raised by BCDC's laws and policies. While BCDC staff have participated in a number of meetings and processes related to this study, including participation in the Resource Agency Working Group, individual preapplication consultation with BCDC staff is critical to the efficient review of major projects. A similar permitting approach occurred during many Bay projects, including the Port of Oakland 50-foot deepening project, and the South Bay Shoreline Project.

**Existing Permits.** There are a large number of existing BCDC permits within the Feasibility Study area. These existing BCDC permits, in addition to often authorizing ongoing work or projects in construction, may include special conditions that include requirements, including but not limited to, providing and maintaining public access, monitoring the impact of projects on the Bay, etc. The Projects identified by the study may require, in addition to required state permits and federal consistency review, additional amendments to existing BCDC permits and may impact existing requirements. In particular, the EIS should discuss the effects, if any, that the potential coastal storm and flood risk management alternatives would have on existing public access or other conditions required in these permits.

**Priority Use Areas and BCDC's Seaport Plan.** Section 66602 of the McAtteer-Petris Act states, in part, that certain water-oriented land uses along the bay shoreline are essential to the public welfare of the Bay Area, including ports and waterfront parks and beaches, and, as such, the San Francisco Bay Plan should make provision for adequate and suitable locations for all these uses. In Section 66611, the Legislature declares "that the Commission shall adopt and file with the Governor and the Legislature a resolution fixing and establishing within the shoreline band the boundaries of the water-oriented priority land uses, as referred to in Section 66602," and that "the



## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Commission may change such boundaries in the manner provided by Section 66652 for San Francisco Bay Plan maps.” The Feasibility Study area from Aquatic Park to Herons Head in San Francisco is included on Bay Plan Maps 4 and 5 and it includes several Port Priority Use Areas at China Basin (Piers 48 and 50), Central Basin (Pier 68), and surrounding the Islais Creek Channel (Piers 80, 90, 92, 94, and 96). Any proposals for placing fill, extracting materials, or changing the use of any land, water, or structure within those areas that are designated for Port Priority Use in the Bay Plan must be developed and managed in a manner consistent with applicable policies of the McAteer-Petris Act and the Bay Plan as well as BCDC’s Seaport Plan, which is in the process of being updated. The EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Priority Use Areas and the Seaport Plan.

In addition, we request that the environmental documentation evaluate consistency with the Waterfront Beach Priority Use Areas as that Priority Use applies to areas along the San Francisco Waterfront. The Bay Plan Maps also include Plan Map Policies that are enforceable and have the same authority as the policies in the text of the Bay Plan. Plan Map 4 includes Policy 27, which states at Fisherman’s Wharf, “improve and expand commercial fishing support facilities. Enhance public access to and economic value of Fisherman’s Wharf area by encouraging development of a public fish market,” which is repeated in Plan Map 5 Policy 29. Plan Map 4 also includes Policy 26, regarding the San Francisco Waterfront Special Area Plan, which states “see special area plan for detailed planning guidelines for the shoreline between the east side of Hyde Street Pier and the south side of India Basin,” which is repeated in Plan Map 5 Policy 24. Finally, Plan Map 5 Policy 23 states for the Port of San Francisco, “See the Seaport Plan. Some fill may be needed.” Finally, Bay Plan Map 4 includes “Commission Suggestion A” for a “possible scenic transit system from Ocean Beach to China Basin.” Note that Commission suggestions are not enforceable policies. The EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with the Plan Map policies and suggestions.

**BCDC’s San Francisco Waterfront Special Area Plan.** The McAteer-Petris Act of 1965 provides for the Bay Plan to contain or incorporate by reference “special area plans” (SAP) with more specific findings and policies for portions of the Bay and its shoreline. BCDC developed the San Francisco Waterfront SAP in partnership with the Port and it applies the requirements of the McAteer-Petris Act and the provisions of the Bay Plan to the San Francisco waterfront in greater detail and should be read in conjunction with both the McAteer-Petris Act and the Bay Plan. BCDC first adopted the SAP in 1975. The last comprehensive amendment to the SAP (Bay Plan Amendment 7-99) was adopted in 2000 and it currently contains General Policies pertaining to the area covered by the Special Area Plan and Geographic-Specific Policies for three geographic vicinities, Fisherman’s Wharf, the Northeastern Waterfront, and the Southern Waterfront, as well as Plan Maps that delineate priority use areas. Although the San Francisco Waterfront SAP is in the process of being amended, the EIS should describe the consistency of the potential coastal storm and flood risk management alternatives with the existing San Francisco Waterfront SAP.

### **Commission Law and Bay Plan Policies Relevant to the Project**

## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

**Bay Fill.** Section 66605 of the McAteer-Petris Act sets forth the criteria necessary to authorize placing fill in the Bay and certain waterways. It states, among other things, that further filling of the Bay should only be authorized if it is the minimum necessary to achieve the purpose of the fill and if harmful effects associated with its placement are minimized. According to the Act, fill is limited to water-oriented or minor fill for improving shoreline appearance or public access and should be authorized only when no alternative upland location is available for such purpose. The San Francisco Waterfront Special Area Plan provides for some exceptions to the fill requirements of the Act within certain areas of the San Francisco Waterfront. If any fill is proposed as part of any project identified by the study, the environmental documentation should also indicate the location of such fill (including fill in tidal marsh), the proposed method of fill (e.g., solid earth, pile-supported structure, cantilevered structure), the approximate volume and surface area of the Bay to be filled, and the proposed development, activity, and uses of the filled area. Alternatives should be included that minimize fill and are consistent with the other applicable requirements of the Section 66605 of the McAteer-Petris Act.

**The San Francisco Bay Plan.** The Bay Plan establishes policies for development and resource conservation within BCDC's jurisdiction. Policies cover the protection of Bay resources, including fish, other aquatic organisms, and wildlife; water quality; and others, as well as issues related to development, such as climate change; fills; shoreline protection; water-related uses; appearance, design, and scenic views; public access; and mitigation. The EIS should analyze impacts and issues raised by all relevant Bay Plan Policies.

**Biological Resources.** Protection of biological resources, including wildlife and habitat, is addressed through several sections of the Bay Plan. Fish, Other Aquatic Organisms, and Wildlife Policy No. 1 states "To assure the benefits of fish, other aquatic organisms and wildlife for future generations, to the greatest extent feasible, the Bay's tidal marshes, tidal flats, and subtidal habitat should be conserved, restored and increased." Additional policies in these Bay Plan sections, and policies in the Subtidal Areas section, provide further requirements on protection of the Bay's natural resources. The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Policies pertaining to Fish, Other Aquatic Organisms, and Wildlife; Tidal Marshes and Tidal Flats; and Subtidal Areas. For example, Fish, Other Aquatic Organisms, and Wildlife Policy No. 3 states "In reviewing or approving habitat restoration projects or programs the Commission should be guided by the best available science, including regional goals, and should, where appropriate, provide for a diversity of habitats for associated native aquatic and terrestrial plant and animal species." Additionally, Fish, Other Aquatic Organisms, and Wildlife Policy No. 6 states, in part, that "Allowable fill for habitat projects in the Bay should (a) minimize near term adverse impacts to and loss of existing Bay habitat and native species; (b) provide substantial net benefits for Bay habitats and native species; and (c) be scaled appropriately for the project and necessary sea level rise adaptation measures in accordance with the best available science..." The EIS should address if and how any fill proposed for the potential coastal storm and flood risk management alternatives meets these criteria.

**Water Quality.** The policies in the Water Quality section of the Bay Plan require Bay water pollution to be prevented to the greatest extent feasible. New projects are required to be sited, designed,

## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

constructed and maintained to prevent or minimize the discharge of pollutants in the Bay by controlling pollutant sources at the project site, using appropriate construction materials, and applying best management practices. More specifically, Bay Plan policies on water quality state, in part, that “water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board’s *Water Quality Control Plan, San Francisco Basin* and should be protected from all harmful or potentially harmful pollutants.” The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Policies pertaining to Water Quality.

**Water Surface Area and Volume.** Alternatives that incorporate tidal barriers may raise significant issues under Bay Plan Water Surface Area and Volume findings and policies related to tidal barriers. The Bay Plan states, “Water circulation might be greatly improved by some of the major barrier proposals that have been made for the Bay. But barriers affect for better or for worse—the appearance and ecology of the Bay, sedimentation, flood control, and existing and proposed uses of the shores of the Bay. They are also very costly. For all barrier proposals fully evaluated thus far, disadvantages outweigh advantages.” As a result, Water Surface Area and Volume Policy 3 states, “Because further study is needed before any barrier proposal to improve water circulation can be considered acceptable, the Bay Plan does not include any barriers. Before any proposal for a barrier is adopted in the future, the Commission will be required to replan all of the affected shoreline and water area.” As a result, any alternative that incorporate tidal barriers will require the Port of San Francisco and/or USACE to apply for and fund a substantial study and Bay Plan Amendment, as provided in the Commission regulations, evaluating the impact to the Bay from such a measure and a significant and costly planning project to evaluate and potentially amend the San Francisco Bay Plan.

**Environmental Justice and Social Equity.** Policy No. 3 of the Bay Plan Environmental Justice and Social Equity chapter says “[e]quitable, culturally-relevant community outreach and engagement should be conducted by local governments and project applicants to meaningfully involve potentially impacted communities for major projects and appropriate minor projects in underrepresented and/or identified vulnerable and/or disadvantaged communities... Evidence of how community concerns were addressed should be provided.” Policy No. 4 states “[i]f a project is proposed within an underrepresented and/or identified vulnerable and/or disadvantaged community, potential disproportionate impacts should be identified in collaboration with the potentially impacted communities.”

The EIS should specify the culturally-relevant community outreach and engagement efforts that will be conducted for the Feasibility Study, identify whether the Feasibility Study area includes vulnerable communities, and if so, identify any potential disproportionate impacts that could result from the potential coastal storm and flood risk management alternatives. Additionally, as the Feasibility Study area includes areas designated for industrial uses and other uses that could affect surrounding neighborhoods, the EIS should examine, in each relevant section, the potential for each coastal storm and flood risk management alternative to negatively affect community health and quality of life, including any contributions to cumulative effects. Any impacts identified should

## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

be accompanied by mitigation measures to avoid or minimize adverse effects on community health or quality of life, and would ideally be informed by community outreach and engagement.

**Climate Change and Safety of Fills.** Climate Change Policy No. 2 states that, “When planning shoreline areas or designing larger shoreline projects, a risk assessment should be prepared... based on the estimated 100-year flood elevation that takes into account the best estimates of future sea level rise and current flood protection and planned flood protection... for the proposed project or shoreline area. A range of sea level rise projections for mid-century and end of century based on the best scientific data available should be used in the risk assessment.” Policy No. 3 states that where such assessments show vulnerability to public safety, projects “should be designed to be resilient to a mid-century sea level rise projection” and an “adaptive management plan” should be prepared if it is likely the project will remain in place longer than mid-century.

In addition, Policy No. 4 in the Bay Plan Safety of Fills section states that structures on fill or near the shoreline should have adequate flood protection including consideration of future relative sea level rise as determined by qualified engineers. The policy states that, “[a]dequate measure should be provided to prevent damage from sea level rise and storm activity that may occur on fill or near the shoreline over the expected life of a project.... New projects on fill or near the shoreline should either be set back from the edge of the shore so that the project will not be subject to dynamic wave energy, be built so the bottom floor level of structures will be above a 100-year flood elevation that takes future sea level rise into account for the expected life of the project, be specifically designed to tolerate periodic flooding, or employ other effective means of addressing the impacts of future sea level rise and storm activity.” These policies should be read in combination with Public Access Policy No. 6, which states in part that public access areas “should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding” and with policies on biological resource protection described above.

The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Climate Change and Safety of Fills policies and include a discussion of how the alternatives will encourage development on the waterfront that is designed to adapt to, tolerate, and/or manage sea level rise and shoreline flooding and to ensure resilience to mid-century sea level rise projections, and adaptation to end of the century projections, if it is likely the development will remain in place longer than mid-century. This analysis should include the mean higher high water level, the 100-year flood elevation, the mid- and end-of-century sea level projections, preferably using projections based on the best-available science found in the State of California’s Sea Level Rise Guidance (which is expected to be updated in 2023), anticipated site-specific storm surge effects, and a preliminary assessment of the project’s vulnerability to future flooding, groundwater emergence and sea level rise. Additional relevant resources include BCDC’s Climate Change Policy Guidance, the [BCDC’s Bay Shoreline Flood Explorer](#) and [BCDC’s 2020 ART Bay Area report](#), particularly the [Mission Islais Local Assessment](#).

In addition, one of the alternatives described in the study will require a significant reliance on new pumping systems. Staff encourage the assessment of the impacts of the new energy demands for pumping in the comparison of the alternatives and include a discussion of the reliability of pumping

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to control flooding in a storm event. We are enthusiastic about the consideration of approaches besides building barriers, such as managed realignment, nature-based solutions, and adapting structures to flooding.

**Shoreline Protection.** The Bay Plan establishes criteria by which new shoreline protection projects may be authorized and by which existing shoreline protection may be maintained or reconstructed. Shoreline Protection Policy 1 states that “New shoreline protection projects and the maintenance or reconstruction of existing projects and uses should be authorized if: (a) the project is necessary to provide flood or erosion protection for (i) existing development, use or infrastructure, or (ii) proposed development, use or infrastructure that is consistent with other Bay Plan policies; (b) the type of the protective structure is appropriate for the project site, the uses to be protected, and the causes and conditions of erosion and flooding at the site; (c) the project is properly engineered to provide erosion control and flood protection for the expected life of the project based on a 100-year flood event that takes future sea level rise into account; (d) the project is properly designed and constructed to prevent significant impediments to physical and visual public access; (e) the protection is integrated with current or planned adjacent shoreline protection measures; and (f) adverse impacts to adjacent or nearby areas, such as increased flooding or accelerated erosion, are avoided or minimized. If such impacts cannot be avoided or minimized, measures to compensate should be required.” Given the potential scale of the project, the EIS should pay particular attention to evaluating and minimizing adverse flooding impacts to nearby areas, as described in part (f). Per Shoreline Protection Policy 4, authorized protective projects should be regularly maintained according to a long-term maintenance program to assure that the shoreline will be protected from tidal erosion and flooding and that the effects of the shoreline protection project on natural resources during the life of the project will be the minimum necessary.

Shoreline Protection Policy No. 5 requires that “all shoreline protection projects should evaluate the use of natural and nature-based features such as marsh vegetation, levees with transitional ecotone habitat, mudflats, beaches, and oyster reefs, and should incorporate these features to the greatest extent practicable. Ecosystem benefits, including habitat and water quality improvement, should be considered in determining the amount of fill necessary for the project purpose. Suitability and sustainability of proposed shoreline protection and restoration strategies at the project site should be determined using the best available science on shoreline adaptation and restoration.” Shoreline Protection Policy No. 7 states that “the Commission should encourage pilot and demonstration project to research and demonstrate the benefits of incorporating natural and nature-based techniques in San Francisco Bay.” Shoreline Protection Policy 2 states equitable and culturally-relevant community outreach and engagement should be conducted to meaningfully involve nearby communities for all shoreline protection project planning and design processes – other than maintenance and in-kind repairs to existing protection structures or small shoreline protection projects – in order to supplement technical analysis with local expertise and traditional knowledge and reduce unintended consequences. In particular, vulnerable, disadvantaged, and/or underrepresented communities should be involved. If such previous outreach and engagement did not occur, further outreach and engagement should be conducted prior to Commission action.



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Finally, the Bay Plan Water Quality Policy No. 7 requires that, whenever practicable, native vegetation buffer areas should be used in place of hard shoreline and bank erosion control methods (e.g., rock riprap) where appropriate and practicable. New shoreline protection projects are also to avoid adverse impacts to natural resources and public access, and mitigation or alternative public access must be provided when avoidance is not possible. The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Shoreline Protection policies.

**Dredging.** The Bay Plan includes findings and policies regarding dredging in the Bay. The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Dredging policies, if applicable.

**Water-Related Industry.** The Bay Plan includes policies regarding water-related industry, which state, in part, that “Sites designated for both water-related industry and port uses in the Bay Plan should be reserved for those industries and port uses that require navigable, deep water for receiving materials or shipping products by water in order to gain a significant transportation cost advantage... Water-related industry and port sites should be planned and managed so as to avoid wasteful use of the limited supply of waterfront land...” The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with relevant Bay Plan Water-Related Industry policies, if applicable.

**Public Access, Recreation, and Appearance, Design, and Scenic Views.** Section 66602 of the McAteer-Petris Act states, in part, “that maximum feasible public access, consistent with a proposed project, should be provided.” Thus, the Commission can only approve a project within its jurisdiction if it provides maximum feasible public access, consistent with the project. Bay Plan policies regarding Recreation state, in part, “diverse and accessible water-oriented recreational facilities, such as marinas, launch ramps, beaches, and fishing piers, should be provided to meet the needs of a growing and diverse population... Recreational facilities, such as waterfront parks, trails, marinas, live-aboard boats, non-motorized small boat access, fishing piers, launching lanes, and beaches should be encouraged...”

Bay Plan policies regarding Public Access state, in part, that “in addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline...Public access to some natural areas should be provided to permit study and enjoyment of these areas...Public access should be sited, designed, managed and maintained to avoid significant adverse impacts from sea level rise and shoreline flooding. Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed...Diverse and interesting public access experiences should be provided which would encourage users to remain in the designated access areas to avoid or minimize potential adverse effects on wildlife and their habitat.” Public Access Policy No. 5 states “[p]ublic access that substantially changes the use or character of the site should be sited, designed, and managed based on meaningful community involvement to create public access that is inclusive and welcoming to all and embraces local multicultural and indigenous

## BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

history and presence...” The policies state that public access improvements should not only be consistent with the project, but also incorporate the culture(s) of the local community, and provide “...barrier free access for persons with disabilities, for people of all income levels, and for people of all cultures.”

Additionally, Bay Plan policies on Appearance, Design, and Scenic Views (ADSV) state, in part, that: “Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas...” Bay Plan ADSV Policy 5 states that “To enhance the maritime atmosphere of the Bay Area, ports should be designed, whenever feasible, to permit public access and viewing of port activities by means of (a) view points (e.g., piers, platforms, or towers), restaurants, that would not interfere with port operations, (b) openings between buildings and other site designs that permit views from nearby roads.” The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan policies regarding Public Access, Recreation and Appearance, Design and Scenic Views.

**Fill for Commercial Recreation.** The Bay Plan includes policies regarding Fill for Bay-Oriented Commercial Recreation and Bay-Oriented Public Assembly on Privately-Owned or Publicly-Owned Property, as well as policies regarding Filling for Public Trust Uses on Publicly-Owned Property Granted in Trust to a Public Agency by the Legislature. The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with BCDC’s law and Bay Plan policies regarding fill.

**Mitigation.** Bay Plan policies on Mitigation require projects to “compensate for unavoidable adverse impacts to the natural resources of the Bay...” The policies provide specific criteria for how compensatory mitigation projects should be sited and designed, community involvement in providing compensatory mitigation, when compensatory mitigation should occur relative to the impacts, and how to determine whether banking or in-lieu fee programs are acceptable. The policies also state that “Mitigation programs should be coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.” The EIS should discuss whether any mitigation is expected to be necessary to compensate for the potential impacts of the potential coastal storm and flood risk management alternatives, and if so, how the mitigation is consistent with Bay Plan Mitigation policies.

**Public Trust.** The Bay Plan includes policies regarding the Public Trust, which state, in part, that “when the Commission takes any action affecting lands subject to the public trust, it should assure that action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants [such as the Burton Act of 1968], should also assure that the terms of the grant are satisfied and the project is in furtherance of statewide purposes.” The EIS should analyze the consistency of the potential coastal storm and flood risk management alternatives with Bay Plan Public Trust policies.

BCDC Comments on Notice of Intent To Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study

Thank you for your consideration of these comments. If you have any questions regarding this letter, please do not hesitate to contact me at (415) 352-3642 or via email at [Jessica.Fain@bcdca.gov](mailto:Jessica.Fain@bcdca.gov).

Sincerely,



JESSICA FAIN  
Planning Director

cc. Brad Benson, Port of San Francisco, [brad.benson@sfport.com](mailto:brad.benson@sfport.com)  
Kelley Capone, Port of San Francisco, [kelley.capone@sfport.com](mailto:kelley.capone@sfport.com)>



**From:** [Truitt, Robin](#)  
**To:** [SF Waterfront](#)  
**Subject:** [Non-DoD Source] EPA's scoping comments on the San Francisco Waterfront Coastal Flood Study  
**Date:** Monday, August 28, 2023 2:26:28 PM  
**Attachments:** [2023-08-28 EPAs Scoping Comments San Francisco Waterfront Feasibility Study\\_signed.pdf](#)

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Dear Melinda Fisher –

Please find attached EPA's scoping comments on the Corps' Notice of Intent to Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study. We thank you for the opportunity to provide comments. Please contact me if you have any questions, and we look forward to working with you.

Ms. Robin Truitt, Life Scientist  
USEPA, Region 9  
Environmental Review Branch  
75 Hawthorne St., TIP-2  
San Francisco, CA 94105  
(415) 972-3742  
[Truitt.Robin@epa.gov](mailto:Truitt.Robin@epa.gov)

*\*Note that the federal government is transitioning to a fully electronic environment. Please transmit all correspondence/documents electronically.*



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX**  
**75 Hawthorne Street**  
**San Francisco, CA 94105-3901**

August 28, 2023

Via email: [SFWFRS@usace.army.mil](mailto:SFWFRS@usace.army.mil)

Ms. Melinda Fisher  
U.S. Army Corps of Engineers, Tulsa District  
Attn: RPEC-SFWS  
2488 E. 81<sup>st</sup> Street  
Tulsa, Oklahoma 74137

Subject: EPA's Scoping Comments on the Notice of Intent to Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francisco, California

Dear Melinda Fisher:

The U.S. Environmental Protection Agency has reviewed the Notice of Intent (NOI) to prepare a integrated feasibility report and Environmental Impact Statement (SEIS) for the subject project. Our comments are provided pursuant to the National Environmental Policy Act and our independent NEPA review authority under Section 309 of the Clean Air Act. The EPA is serving as a cooperating agency for the project NEPA analysis and will participate in meetings and review reports and administrative and final drafts of the EIS.

The Corps and Port of San Francisco have partnered to investigate the feasibility of managing tidal and fluvial flooding and sea level rise along 7.5 miles of San Francisco's bayside shoreline between Aquatic Park and Heron's Head Park. Flooding in the project area could cause extensive damage to public infrastructure and private property, loss of life, degradation of the natural environment, and adverse changes to the social and economic character of the waterfront community. The Notice of Intent proposes seven adaptable, structural and non-structural, defensive or protective alternatives designed to reduce flooding risks during storms and extreme tides at various levels of expected sea level rise.

As detailed further below, the EPA recommends that the Draft Feasibility Study and EIS consider climate change effects and improve surrounding habitat, as well as maximize opportunities to:

- Discuss appropriate project designs that can adapt the waterfront and its uses over time while recognizing that decisions made today influence the options available to future generations with different environmental and social conditions;
- Incorporate sea level rise models that further long-term resiliency of project components;
- View all alternatives and adaptation strategies, especially at the southernmost end of the project area, through an equity lens to ensure that benefits accrue to, and burdens are minimized for, communities with environmental justice concerns;
- Incorporate sustainable nature-based features and stormwater capture/treatment into the alternatives to enhance the quality of Bay water and habitat.

We appreciate the opportunity to provide scoping comments and are available to discuss any questions on the comments. I can be reached at [Truitt.Robin@epa.gov](mailto:Truitt.Robin@epa.gov) or (415) 972-4372.

Sincerely,

**ROBERTA TRUITT**

Digitally signed by ROBERTA  
TRUITT  
Date: 2023.08.28 12:17:41 -07'00'

Robin Truitt  
Environmental Review Branch

Enclosure: Detailed Comments

CC: San Francisco Port Authority: Steven Reel, Adam Varat, Kelley Capone, Brad Benson  
Bay Conservation & Development Cmsn: Ashley Tomerlin, Eric Buehmann, Jessica Fain  
San Francisco Planning Dept: Jessica Range  
Water Resources Control Boards: Keith Lichten, Samantha Harper, Xavier Fernandez, Sturgis Tahsa  
Calif. Fish & Wildlife: Craig Weightman, Eric Wilkins, Arn Aarreberg, Erin Chapell  
State Lands Cmsn: Michael Wells, Reid Boggiano, Maren Farnum  
NOAA: Brian Meux  
U.S. Fish and Wildlife Service: Stephanie Millsap, Steven Schoenberg  
National Park Service: Jenny Parker, Christopher Johnson, Kelly Clark  
Army Corps of Engineers: Julie Beagle, Raven Blakeway

# U.S. ENVIRONMENTAL PROTECTION AGENCY’S DETAILED SCOPING COMMENTS ON THE NOTICE OF INTENT TO PREPARE AN INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT FOR THE SAN FRANCISCO WATERFRONT COASTAL FLOOD STUDY, SAN FRANCISCO, CALIFORNIA – August 28, 2023

## NEPA COMPLIANCE

Even though the Notice does not indicate what avenue the Corps is pursuing for NEPA compliance, the EPA understands that a programmatic-type EIS is being considered. A programmatic EIS is useful to frame support for planned projects over time, and to analyze which types and extent of viable flood control and sea level rise design protections are most suitable for the various reaches within the project area. To the degree possible, EPA recommends that potential site- or project-specific impacts of individual actions be identified as well as those circumstances or triggers that would warrant later environmental analysis as tiered from this EIS. The EPA recommends that the EIS discuss the projected lifespan of near-term projects to provide flood protection and allow for long-term alternatives for different timeframes or the implementation of more detailed designs.

Although there may not be enough detail to identify site- or project-specific compensatory mitigation, the EPA would recommend that a programmatic EIS develop a global set of assumptions, permit conditions or best management practices, applicable to all future projects, that address avoidance and minimization measures. And, to the extent certain alternatives or types of projects are reasonably foreseeable, couple these with earlier seismic or other proposed actions in the area to analyze the cumulative or combined effect of these projects on resources.

The EPA appreciates that an inclusive public involvement process to develop a shared vision, principles and goals for flood studies and waterfront resilience and adaptation is already underway. But, as planning and adaptation options have a long-term horizon, the EPA recommends that the Port and Corps continue, and perhaps re-initiate, outreach efforts and meaningful engagement with affected or interested communities as specific projects are designed.

## ***Concurrent Clean Water Act Section 404 Process***

EPA encourages the Corps to integrate Clean Water Act (CWA) Section 404 regulatory requirements into the NEPA process to streamline environmental review by using NEPA documents for multiple permitting processes. Wetlands within the project boundaries that have a continuous surface connection with San Francisco Bay will be regulated under the Clean Water Act pursuant to the Supreme Court’s decision in *Sackett v. EPA* dated May 25, 2023. Although the EPA is aware that the Corps must calculate the costs of project features in meeting the purpose and need,<sup>1</sup> use the NEPA process to clearly and independently demonstrate that the preferred alternative or plan is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the overall project purpose with the fewest direct, secondary, and cumulative impacts to aquatic resources (40 CFR 230).

## **STATEMENT OF PURPOSE AND NEED**

The Draft EIS for the proposed project should clearly identify the underlying purpose and need that is the basis for proposing the range of alternatives (40 CFR 1502.13). The *purpose* of the proposed action is typically the specific objectives of the activity, while the *need* for the proposed action may be to eliminate a broader underlying problem or take advantage of an opportunity. The purpose and need

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<sup>1</sup> Costs may be referenced in Table 6 Archetype Cost Estimates for Adaptation Activity Types at <https://abag.ca.gov/our-work/resilience/planning/sea-level-rise-adaptation-funding-and-investment-framework>

should be a clear, objective statement of the rationale for the proposed project, as it provides the framework for identifying project alternatives. The Draft EIS should concisely identify why the project is being proposed and should focus on the specific desired outcomes of the project (e.g., public health and safety, minimization of adverse changes to the social and economic character of the waterfront community, etc.) rather than prescribing a predetermined resolution.

The EPA recommends building upon pre-existing work that has evaluated flood and seismic risks for both public and private assets, reviewed the complex regulatory environment that governs coastal planning and development activities, and identified more detailed actions that can be taken now and in the near future to meet the challenge of rising seas, including the Sea Level Rise Vulnerability and Consequences Assessment (2020)<sup>2</sup>, the Sea Level Rise Action Plan (2016)<sup>3</sup> and the Port’s Waterfront Resilience Program and adaptation strategies.<sup>4</sup>

### **EXISTING ENVIRONMENTAL CONDITIONS**

Existing conditions are a key frame of reference for quantifying and characterizing adverse and positive environmental effects. The EPA recommends evaluating the effects of project alternatives against existing environmental conditions as the primary basis for comparison. If the No Action Alternative A includes future actions and is not representative of current conditions, we recommend also evaluating the no-action alternative against the existing condition baseline. Although alternatives can also be compared against a projected no action scenario that includes reasonably foreseeable future conditions, this approach can result in additional uncertainty for the alternatives analysis. By utilizing existing environmental conditions as a point of comparison, future changes to environmental resources can be more accurately measured for all alternatives.

EPA recommends that the Future without Project describe potential effects on the shoreline that could affect transportation, property values and displacement of businesses, jobs, and homes. Identify which areas of the shoreline are receding landward, being eroded, experience overtopping by frequent “high tide flooding” in the absence of large storms, or could be subject to daily tidal flooding over time certain water levels. We also recommend the following when defining existing environmental conditions:

- Verify whether historical data (e.g., data 5 years or older) are representative of current conditions.
- Include resources directly impacted by potential project footprints within the geographic scope of analysis, including inundation, as well as the resources indirectly (or secondarily) impacted by any of the alternatives.
- Provide clear maps of the project area, including wetland and regional water features.
- Conduct a wetland function analysis if there is any potential that an alternative will cause impacts.

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<sup>2</sup> [sfplanning.s3.amazonaws.com/default/files/plans-and-programs/planning-for-the-city/sea-level-rise/SLRVCA\\_Report\\_Full\\_Report.pdf](https://sfplanning.s3.amazonaws.com/default/files/plans-and-programs/planning-for-the-city/sea-level-rise/SLRVCA_Report_Full_Report.pdf)

<sup>3</sup> [sfplanning.s3.amazonaws.com/default/files/plans-and-programs/planning-for-the-city/sea-level-rise/160309\\_SLRAP\\_Final\\_ED.pdf](https://sfplanning.s3.amazonaws.com/default/files/plans-and-programs/planning-for-the-city/sea-level-rise/160309_SLRAP_Final_ED.pdf)

<sup>4</sup> [Draft Waterfront Adaptation Strategies | SF Port; https://sfport.com/files/2022-10/0112022\\_item\\_11a\\_draft\\_waterfront\\_adaptation\\_strategies\\_final.pdf \(sfport.com\)](https://sfport.com/files/2022-10/0112022_item_11a_draft_waterfront_adaptation_strategies_final.pdf)

## **ALTERNATIVES ANALYSIS**

The NOI lists six potential alternatives to ‘No Action’ that include structural, non-structural or natural and nature-based features, at three rates of sea level rise. These range from Alternative A that would take no additional action to reduce flood risks beyond projects that are already approved, to Alternative G which would consider areas of managed retreat, new zoning, and wetland restoration. Alternative A currently represents the baseline for comparison of costs, benefits, and environmental and social impacts with other alternatives (but see *Existing Environmental Conditions* section, above).

Discuss these alternatives, in whole or in combination, in the context of the Corps’ authorities and detail how they fulfill the project’s purpose and need. Address whether there are any management measures or alternative actions that may fall outside the Corps’ jurisdiction but may compliment or help achieve the Corps’ goals or objectives or avoid significant environmental impacts (40 CFR Section 1502.14(c)). The Draft EIS should provide a clear discussion of the reasons for the elimination of alternatives which are not evaluated in detail.

Discuss the various project types - structural (gray), non-structural (floodproofing), natural and nature based features (green), and any of the nuanced components (armoring, living seawalls, ecotone levees) that would be appropriate for each reach under each level of rise and habitats, e.g., creeks, piers, built environment. Describe the advantages and disadvantages of each type of protection and the circumstances under which they are best utilized or effective. For example, while an engineered seawall may effectively protect infrastructure or city services against flood damage, it also may disrupt ecological processes or accelerate erosion at each end.

EPA recommends that that key terms be listed, defined and standardized in the EIS. Distinguish between structural/non-structural, grey/green, relocation/managed retreat, seawalls/vertical shorelines, etc. For example, it is not clear why ‘floodproofing’ that involves raising buildings would not be considered ‘structural,’ like curb extensions or berms. Further, the NOI states that ‘managed retreat’ or relocation are possibilities under Alternatives B, F and G, but distinguishing between the terms, and what each entails, is unclear. Discuss the types of natural or nature-based features (NNBF) that could be used alone or in combination with structural or non-structural defenses, e.g., living seawalls, ecotone levees, ecological armoring and wetland preservation/restoration, and their efficacy in meeting the project purposes and needs.

The earliest strategies were based on 1.5 feet to 3.5 feet of sea level rise by 2100, which is typically less than the level of sea level rise currently considered for local and state projects. The EPA recommends that the EIS use the best available science-based assumptions for determining the planning year horizon and flood heights. Consider the State of California’s *Sea-Level Rise Guidance*<sup>5</sup> which is widely used throughout the state for planning and permitting purposes and the *Sea Level Rise Adaptation Funding and Investment Framework prepared by Metropolitan Transportation Commission, Association of Bay Area Governments and Bay Conservation and Development Commission (2022-2023)*<sup>6</sup> [3.5’ - 4.9’ of sea level rise is used to identify which segments of shoreline may be vulnerable to significant flooding].

We recommend comparing or highlighting differences between measures deployable at lower rates of rise versus those at higher rates, as well as analyzing alternatives or features that ‘defend’ infrastructure

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<sup>5</sup> Ocean Protection Council. (2018). State of California Sea-Level Rise Guidance 2018 Update.

[https://opc.ca.gov/webmaster/ftp/pdf/agenda\\_items/20180314/Item3\\_Exhibit-A OPC\\_SLR\\_Guidance-rd3.pdf](https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A OPC_SLR_Guidance-rd3.pdf)

<sup>6</sup> [Sea Level Rise Adaptation Funding and Investment Framework | Association of Bay Area Governments \(ca.gov\)](https://abag.ca.gov/our-work/resilience/planning/sea-level-rise-adaptation-funding-and-investment-framework);

<https://abag.ca.gov/our-work/resilience/planning/sea-level-rise-adaptation-funding-and-investment-framework>

or communities versus those that ‘work or live with water.’ The EPA also recommends that the EIS assist decision-makers and the public in envisioning what a coastal flood defense system that protects against the worst-case scenario (7’ sea level rise?) would look like.

The EPA recommends that the EIS identify the levels of risk and vulnerabilities for each reach within the project area and eliminate alternatives that are insufficiently protective, not designed to protect infrastructure or communities for as long as needed, or preclude later project options. Consider what types of projects may be needed early or on an interim basis to provide some level of protection and whether the costs justify the benefits of these short-term actions.

## **IMPACTS ANALYSIS**

A robust range of alternatives will include options for avoiding significant environmental impacts. The EIS should clearly describe the rationale used to determine whether impacts of an alternative are significant or not. Thresholds of significance should be determined by considering the context and intensity of an action and its effects (40 CFR 1508.27). Several significant environmental and social issues were raised during early scoping and include minimizing bay fill; the effects of high rates of sea level rise on any alternative considered; disruptions to businesses, transportation corridors and walking paths; environmental justice impacts on historically disadvantaged communities; impacts to water quality from the release of legacy contaminants; and the limited time to implement any of the strategies. EPA recommends that these issues be address in the EIS and generally supports project activities that would provide public access to and along the waterfront, preserve historical and cultural resources, and protect or enhance aquatic resources and habitats

The environmental impacts – beneficial and adverse – of the proposal and alternatives should be presented in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public (40 CFR 1502.14). The potential environmental impacts of each alternative should be quantified to the greatest extent possible (e.g., acres of wetlands impacted; changes to water quality standards).

The EPA is aware that the waterfront and inland areas impacted by sea level rise may also face stormwater and emergent groundwater hazards that threaten public infrastructure and private homes and businesses. The EPA recommends that any adaptation strategies that increase shoreline resilience to coastal flooding will need to consider these other flood sources as well. Additionally, discuss the use of bay fill as a defense that may be required to protect existing communities, but also analyze why the use of artificial or reclaimed fill should be limited or minimized consistent with San Francisco Bay Plan<sup>7</sup> guidance.

Use available mapping and other information (e.g., the SFEI Resilience Atlas,<sup>8</sup> National Wetlands Inventory<sup>9</sup> ) to map sea level rise and important natural resources. Document and quantify (including dollar values) the value of natural and cultural resources to improve public understanding and acceptance of the need for protection.

The EPA offers the following recommendations for analyzing and disclosing impacts in the EIS:

- Include appropriate baselines for the resources of concern with an explanation as to why those baselines were selected; Discuss the degree to which the action may adversely affect housing or

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<sup>7</sup> [San Francisco Bay Plan \(ca.gov\)](http://San Francisco Bay Plan (ca.gov))

<sup>8</sup> <https://resilienceatlas.sfei.org/>

<sup>9</sup> <https://www.fws.gov/program/national-wetlands-inventory>



businesses, transportation and ports, or cause loss or destruction of important scientific, cultural, or historical resources.

- Include a description of the affected environment that focuses on each affected resource or ecosystem. Identify the affected environment through perception of meaningful impacts and natural boundaries rather than predetermined geographic areas. Discuss the degree to which potential effects or mitigation measures are highly uncertain or technically or scientifically controversial.
- Focus on resources of concern, i.e., those resources that are most “at risk” before mitigation. Identify which resources are analyzed, which ones are not, and why. For this project, discuss the degree to which the action may adversely affect water quality and aquatic resources in the nearshore environment, as identified by state and federal resource agencies.
- Identify all other on-going, planned, and reasonably foreseeable projects in the study area. Where studies exist on the environmental impacts of these other projects, use these studies as sources for quantifying impacts. Refer to the CEQ report, *Considering Cumulative Impacts under NEPA*<sup>10</sup> as a systematic way to analyze cumulative effects.

While compensatory mitigation including adverse effects on aquatic habitats, water quality, and air quality may not be able to be quantified at the programmatic level, the EIS should include an analysis of how adverse impacts to these resources can be avoided or minimized through project design.

EPA anticipates that long-term benefits to life safety, critical infrastructure, utilities, disadvantaged communities and the local economy will be realized by adherence to the various federal directives addressing climate change and environmental justice as described below.

### **CLIMATE CHANGE AND RESILIENCY**

On January 9, 2023, the Council on Environmental Quality (CEQ) published interim guidance<sup>11</sup> to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews. CEQ developed this guidance in response to EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This interim guidance is effective immediately. As discussed in this guidance, consider: (1) the potential effects of the proposed action on climate change, including by assessing both GHG emissions and reductions from the proposed action; and (2) the effects of climate change on the proposed action and its environmental impacts. An accurate and clear climate change analysis will help promote climate change resilience and adaptation and prioritize the need to ensure climate-resilient infrastructure by considering the reasonably foreseeable effects of climate change on infrastructure investments and the resources needed to protect such investments over their lifetime.

#### ***Sea Level Rise***

Relatively small changes in average sea levels can have large effects on tidal flood frequency. The potential to inundate large swaths of the project area are expected to be affected by storm surge and wave inundation in combination with future sea level rise (SLR). Increases in SLR are anticipated to lead to more frequent and intense coastal flooding and erosion events; threatening infrastructure, including drinking water, housing, business, and transportation, as well as historical and cultural sites.

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<sup>10</sup> [NEPA | National Environmental Policy Act - Cumulative Effects \(doe.gov\)](https://ceq.doe.gov/publications/cumulative_effects.html),  
[https://ceq.doe.gov/publications/cumulative\\_effects.html](https://ceq.doe.gov/publications/cumulative_effects.html)

<sup>11</sup> <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>; 2023-01-CEQ interim guidance on GHG emissions and climate change.pdf (energy.gov)



Climate change induce sea level rise could also result in habitat loss and ecosystem degradation. Flood and shoreline damages could be exacerbated by sea level variability and more extreme El Nino and La Nina events.<sup>12</sup>

In addition, the EPA is aware that nearly all Bay Area counties are concerned that impacts of rising groundwater along the Bay will be more severe than from the more than 3 feet of sea level rise that could take place by the middle of the century.<sup>13</sup> Projects need to be planned with both sea level and groundwater rise in mind. In keeping with the current state of science, those involved in planning for shoreline resilience should remember that San Francisco Bay is an interconnected physical system. Though it is locally diverse along its perimeter, the Bay links all of its contiguous jurisdictions and how they collectively respond to the threat of sea level rise will determine the Bay's long-term health and fate. Operational Landscape Units (OLUs) provide a critical planning framework for prioritizing appropriate nature-based solutions that can be cost-effective and help to avoid unintended impacts in neighboring locales.<sup>14</sup>

These slow-moving threats have already provided the impetus for the City, its Port, and other regional, state and federal authorities to assess risks to people, the economy and the environment.<sup>15</sup> San Francisco's *Sea Level Rise Vulnerability and Consequence Assessment*<sup>16</sup> identified a SLR Vulnerability Zone that could be flooded by a 100 year coastal event (1% annual chance of exceedance in any one year) and 66 inches of SLR.<sup>17</sup> It considers shared baseline information to support decision making under a range of SLR projections, over broad timespans, and across sectors.<sup>18</sup> The exposure assessment rates the expected performance of each asset inventoried during periods of temporary or permanent flooding and provides a framework for future planning and project prioritization.

The Assessment identified key considerations to guide planning efforts to ensure that strategies are effective, efficient, equitable and environmentally appropriate. The Assessment states that successful adaptation planning should:

- Begin with robust community engagement to ensure strategies will meet local needs and build public and political support for action;
- Prioritize and include vulnerable neighborhoods that already bear disproportionate environmental contamination burdens and will be most impacted by future flooding;
- Include natural solutions where possible to improve the City's environment and provide open space recreation opportunities;
- Create a decision-making framework for when and where to implement facility-specific floodproofing versus neighborhood-scale shoreline strategies;
- Identify strategies that could be implemented by multiple actors, including individual agencies, private landowners, and the City as a whole;

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<sup>12</sup> See generally, *Climate Change Indicators: Coastal Flooding* | US EPA, <https://www.epa.gov/climate-indicators/climate-change-indicators-coastal-flooding>

<sup>13</sup> See generally the work of Kristina Hill, Director, U.C. Berkeley's Institute of Urban and Regional Development.

<sup>14</sup> SFEI and SPUR. 2019. *San Francisco Bay Shoreline Adaptation Atlas: Working with Nature to Plan for Sea Level Rise Using Operational Landscape Units*. Publication #915, San Francisco Estuary Institute, Richmond, CA. Version 1.0

<sup>15</sup> See, e.g., *SFEI 2015 Landscape Resilience Framework.pdf*

<sup>16</sup> *Sea Level Rise Adaptation | SF Planning*, <https://sfplanning.org/sea-level-rise-action-plan>

<sup>17</sup> Because the Assessment states that it did not consider the most extreme emerging science in presenting a range of possible scenarios (p. 21), the EPA recommends that authoritative information on the highest projected water levels, or worst-case scenario, be presented in the EIS to avoid a crisis response.

<sup>18</sup> Sector asset categories include transportation, water distribution, wastewater, power, public safety, open space and port facilities.

- Adopt adaptation policies for private development and public investment in addition to implementing physical strategies;
- Identify potential funding sources and identify appropriate agencies to lead adaptation projects that cross agency jurisdictions;
- Balance uncertainty in long-term climate projections with the need for urgent action; and
- Integrate SLR and coastal flooding programs with other City or Bay-wide resilience efforts

The EPA acknowledges all the prior work that has been done to promote SLR resilience, understands that several social-ecological studies are underway, and recognizes that current planning efforts include engagement with a variety of interested communities and groups. The EPA supports continued cooperation between all levels of government and continued outreach to, and wide-spread involvement of, those parties most adversely affected. The EPA recommends that the EIS discuss the extent to which the Corps can utilize the SLR Vulnerability Assessment and the studies identified therein, e.g., Embarcadero Seawall Program (p. 45) and identify data gaps needed to develop alternatives for the feasibility study and how those data can be obtained.

### ***Adaptive Management***

The EPA supports the use of adaptive management for decision-making where there is uncertainty about the level of impact, the ability of a resource to respond to change, or the effectiveness of mitigation. The EPA recommends detailing the Port of San Francisco's *Draft Waterfront Adaptation Strategies* which presented options to reduce flood and seismic risk along the Port's entire waterfront jurisdiction, from Heron's Head Park to Fisherman's Wharf. The Strategies are intended to guide decisions about where, when, and how high to build flood defenses; how and when to adapt key buildings and infrastructure to ensure continued operations of City services; and where to employ natural and nature-based features. It also includes recommendations for policy changes that will best defend public and private lands, preserve and grow housing and jobs, and create recreational opportunities, waterfront access, and improved Bay habitat.

The EPA supports the development of an Adaptive Management Plan which includes these elements:

- Identifies specific resource value goals and management objectives;
- Discusses the modeling efforts used to predict impacts and identify data gaps;
- Discusses assumptions about expected outcomes and the level of impact that would be deemed acceptable;
- Creates a specific monitoring plan that can accurately measure the impacts and the effectiveness of mitigation;
- Discusses the level of impact that would trigger action, including additional mitigation measures that would be implemented should a threshold be exceeded;
- Identifies funding sources for long-term mitigation and monitoring, if applicable; and
- Identifies mechanisms for public disclosure of the monitoring results and involvement in adaptive management decisions.

### ***Monitoring and Adaptive Management***

Monitoring is a key provision of adaptive management. Where there is insufficient information available about the resource, uncertainties regarding the rate of sea level rise, or the effectiveness of an alternative design, we recommend studies be included as condition of the authorization to address information gaps and advance the adaptive management strategy. We recommend that a monitoring and mitigation plan be required to ensure compliance with all proposed avoidance and minimization measures to assess their effectiveness over time. In the EIS, describe monitoring programs and how they will be used as effective

feedback mechanisms so that any needed adjustments can be made to the project components to meet environmental objectives throughout the life of the project.

### ***Floodplains and Connectivity***

Executive Order 13690 – *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, amended Executive Order 11988 – *Floodplain Management* and defined “floodplain.” It states that agencies shall consider alternatives to locating project components within the floodplain to avoid adverse effects and incompatible development. EPA recommends that the Draft EIS explain how each alternative would be consistent with the directives in Executive Order 13690.<sup>19</sup>

Best practices include minimizing floodplain fills and other actions that require fills, such as construction of highways or infrastructure; relocating nonconforming structures and facilities outside of the floodplain and returning the site to natural contours; preserving free and natural drainages; and restoring damaged riparian areas and vegetation. Where possible, the agency is required to use natural systems, ecosystem process, and nature-based approaches when developing alternatives for consideration. The EPA recommends that the EIS discuss where flood loss reduction efforts conflict with those to protect and restore floodplain natural and cultural resources, and identify where flood loss reduction and natural resource protection efforts can be successfully combined.

Connectivity and corridors are important across terrestrial, marine, and freshwater environments and increasing connectivity is one of the most frequently recommended climate adaptation strategies for biodiversity management. Maintaining connected habitats also can help sustain ecosystem services, such as flood risk reduction, extreme heat mitigation, health and public safety, and access to nature. The Council on Environmental Quality’s *Guidance for Federal Departments and Agencies on Ecological Connectivity and Wildlife Corridors*,<sup>20</sup> issued March 21, 2023, states that federal agencies should seek to incorporate connectivity best practices into planning and decision-making. The EPA recommends that the EIS incorporate shared science and data to identify existing barriers to connectivity that could be removed. Build consideration of connectivity and corridors into planning and decision making by following the Guide’s best management practices including landscape scale nature-based solutions and habitat restoration.

### ***Climate Change Guidance on Greenhouse Gas Emissions***

On January 9, 2023, the Council on Environmental Quality published interim guidance<sup>21</sup> to assist federal agencies in assessing and disclosing climate change impacts during environmental reviews. CEQ developed this guidance in response to Executive Order 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. This interim guidance is currently in effect. CEQ indicated that agencies should use this interim guidance to inform the NEPA review for all new proposed actions and may use it for evaluations in progress, as agencies deem appropriate, to consider alternatives or help address comments raised through the public comment process. EPA recommends the Draft EIS apply the interim guidance to ensure robust consideration of potential climate impacts, mitigation, and adaptation issues.

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<sup>19</sup> For more information, go to: <https://www.fema.gov/federal-flood-risk-management-standard-ffrms>.

<sup>20</sup> Council on Environmental Quality. March 2023. *Guidance for Federal Departments and Agencies on Ecological Connectivity and Wildlife Corridors* at <https://www.whitehouse.gov/wp-content/uploads/2023/03/230318-Corridors-connectivity-guidance-memo-final-draft-formatted.pdf>

<sup>21</sup> <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>

## **WATER QUALITY AND AQUATIC RESOURCES**

The EPA recommends that the EIS discuss the direct, indirect and cumulative effects of proposed flood protection activities, including construction, operations and maintenance, on water quality standards, including sedimentation, temperature and water column turbidity, in project area creeks and the Bay. Discuss plans to control urban runoff and stormwaters and consider whether treatment may be required. Identify point and non-point sources of pollutant discharges within the project area, including wastewater and sewage facilities needed. EPA recommends that wetland and floodplain vegetation buffers be restored or maintained to reduce sedimentation and delivery of chemical pollutants to the waterbody and supports the use of erosion and sedimentation control measures during construction/grading.

### ***Impairment***

Throughout the San Francisco Bay, state water quality standards are exceeded for PCBs, pesticides, invasive species, mercury and other metals and toxic substances. Beaches have unacceptable levels of bacteria due to sewage spills and habitat destruction has eliminated more than 90 percent of shoreline wetlands over the last 150 years.<sup>22</sup> The San Francisco Bay, Islais Creek, and Mission Creek are on the Clean Water Act section 303(d) list of impaired waters for PCBs, mercury, and other toxic metals, organics, pesticides and nutrients which exceed water quality standards. There is a plan for restoring impaired waters that identifies the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards – the Total Maximum Daily Load (TMDL). Therefore, EPA recommends that the EIS identify the impairments to the Bay and creeks and confirm that project components align with existing TMDLs in compliance with the San Francisco Regional Water Quality Control Board's Plans and Clean Water Act section 401 water quality certification requirements.<sup>23</sup>

### ***Riparian and Aquatic Ecosystems***

Analyze the direct, indirect (secondary), and cumulative impacts to the aquatic and other resource characteristics, including impacts to stream channel morphology; riparian function; fish and invertebrate assemblages; threatened, endangered and/or sensitive species and their habitat; and other resources within the geographic scope of analysis. Additionally, we recommend that the impact analysis consider the potential for non-linear responses, where incremental impacts of the proposed project may result in non-incremental changes in environmental conditions. Analyze any changes in surface and groundwater hydrology supporting streams and wetlands or functional conversion of wetland types.

Describe how the project would comply with Executive Order 11990, *Protection of Wetlands*, including how wetlands would be identified and avoided. To the extent adverse effects to wetlands are unavoidable, discuss the loss or degradation of wetland functions and values, the assessment method used to make these determinations, and how such impacts would be minimized, offset, or mitigated. EPA recommends offsetting mitigation based on a functional replacement approach rather than acre-to-acre replacement to ensure that the specific wetland functions are replaced in an ecosystem. The EPA notes that any assumptions regarding wetland quality and function should be field verified using an assessment method appropriate for the region and monitored for adaptive management.

We recommend that the Corps include mitigation and its effectiveness at the draft EA or EIS stage for future projects. Continue to consult with the National Marine Fisheries Service and other state and

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<sup>22</sup> [What Are the Challenges? | US EPA](https://www.epa.gov/sfbay-delta/what-are-challenges), <https://www.epa.gov/sfbay-delta/what-are-challenges>

<sup>23</sup> [Surface Water Quality Assessment Program | California State Water Resources Control Board](https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment), [https://www.waterboards.ca.gov/water\\_issues/programs/water\\_quality\\_assessment](https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment)

federal agencies to develop minimization or mitigation measures in compliance with regulatory program permit requirements and to assess effectiveness. The EPA encourages the Corps to allow public review of mitigation before a final decision for the project is made.

## **ENVIRONMENTAL JUSTICE**

The EPA recommends that the EIS incorporate an environmental justice perspective into all facets of decision-making consistent with Executive Order 14096 *Revitalizing Our Nation's Commitment to Environmental Justice for All* (2023).<sup>24</sup> EO 14096 directs agencies to identify, analyze, and address actions related to any Federal regulation, policy, or practice that impair the ability of communities with environmental justice concerns to achieve or maintain a healthy and sustainable environment. Further, it requires agencies to consider best available science and information on any disparate health effects (including risks) arising from exposure to pollution and other environmental hazards. Where available, adopt or require measures that avoid, minimize, or mitigate disproportionate and adverse human health and environmental effects of Federal activities on communities with environmental justice concerns, to the maximum extent practicable.

### ***Identifying Communities with EJ concerns***

To comply with EO 14096, a relatively refined understanding of potential adverse impacts on a community-by-community basis is needed to provide decision-makers with the level of detail necessary to make an informed choice between alternatives and determine whether mitigation is available. We strongly encourage the use of EJScreen<sup>25</sup> when conducting EJ scoping efforts to find communities who be candidates for further outreach and involvement.

### ***Meaningful Engagement***

As communities with EJ concerns are identified, Section 3 of EO 14096 directs agencies to seek out and encourage the involvement of communities with EJ concerns and provide technical assistance tools and resources to assist in facilitating meaningful and informed public participation. Additionally, CEQ's EJ Guidance states "...agencies should elicit the views of the affected populations on measures to mitigate a disproportionately high and adverse human health or environmental effect...and should carefully consider community views in developing and implementing mitigation strategies. Any mitigation measures should reflect the needs and preferences of affected low-income populations, people of color, or Indian tribes to the extent practicable."

To date, the Port has heard from many communities with EJ concerns that their priorities are to protect housing, utilities, transportation, and business and provide disaster recovery facilities. In the EIS, summarize information describing what was done to inform these communities about the project and the potential impacts it would have on their communities, what input was received from the communities, and how that input was utilized in the decisions that were made regarding the project. EPA recommends that the Corps and Port continue meaningful community engagement throughout the planning process to ensure ample time to incorporate community feedback into the project.

### ***Cumulative Effects on Communities with EJ Concerns***

EO 14096 clarifies that federal agencies should carry out environmental reviews in a manner that includes the cumulative effects of the proposed action on communities with environmental justice concerns. The NEPA definition of cumulative impact is one "... which results from the incremental

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<sup>24</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizing-our-nations-commitment-to-environmental-justice-for-all/>

<sup>25</sup> Available at: <https://ejscreen.epa.gov/mapper/>; User Guide at [https://ejscreen.epa.gov/mapper/help/ejscreen\\_help.pdf](https://ejscreen.epa.gov/mapper/help/ejscreen_help.pdf)



impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR §1508.1(g)(3)). Although all communities would be affected by, and vulnerable to, uncontrolled flooding along the waterfront, it is important to evaluate prior actions and decisions that have resulted in disproportionate burdens.<sup>26</sup>

### ***Implementing Environmental Justice***

The EPA recommends that the EIS clearly identify how the NEPA process and analysis will improve outreach, access civil works information and technical services, and maximize benefits to disadvantaged communities to achieve environmental justice pursuant to the *Assistant Secretary of the Army for Civil Works Memorandum for Commanding General, U.S. Army Corps of Engineers, Implementation of Environmental Justice and the Justice40 Initiative* (March 15, 2022) and its *Interim Environmental Justice Strategic Plan* (December 16, 2022).

EPA is aware that historically underserved communities, particularly in the southeast part of the project area, are often hit first and hardest by climate hazards such as storm and coastal flooding, impacting jobs, housing, and access to and from the community. EPA is concerned that the managed retreat strategies will adversely and disproportionately affect already overburdened communities, or that gentrification enhanced by new open spaces or improved waterfront access will displace or relocate historically underserved communities. Consistent with the Justice40 Initiative,<sup>27</sup> discuss how the overall benefits of these federal investments will flow to disadvantaged communities that are marginalized, underserved or overburdened by pollution and flooding. In addition to correcting the adverse effects of climate change, consider opportunities to invest in affordable and sustainable housing, remediate and reduce legacy pollution, and develop critical clean water and wastewater infrastructure.

### **AIR QUALITY**

EPA recommends identifying the magnitude of transportation or construction related air quality impacts from each proposed alternative, including any floodproofing of existing infrastructure, in-water barge work, the elimination of workforce commuting options, potential traffic disruptions, and public health and safety impacts to emergency vehicles. We recommend coordination with local agencies regarding preparation of any traffic control plans that include an adaptive management framework where traffic is monitored and responsive actions are identified. For example, plan to implement more than one commuter transportation option should be based on identified adverse traffic impacts which would not only affect local residents but could slow the construction schedule.

Consider applying the following standard construction and mobile source mitigation measures to each subsequent project, as appropriate:

### **Fugitive Dust Source Controls**

- Phase grading operations and operate water trucks for stabilization of surfaces under windy conditions.

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<sup>26</sup> For future reference, the Council on Environmental Quality (CEQ) and Office of Science and Technology Policy (OSTP), on behalf of the Ocean Policy Committee (OPC), are seeking to develop an Ocean Justice Strategy for activities across the Federal Government and will propose equitable and just practices to advance safety, health, and prosperity for communities residing near the ocean and its shorelines. 88 Fed.Reg. 37518 (June 8, 2023)

<sup>27</sup> [Justice40 Initiative | Environmental Justice | The White House](#)

- Cover vehicles used to transport solid bulk material on public roadways and that have potential to cause visible emissions. Alternatively, sufficiently wet and load materials onto the trucks in a manner to provide at least one foot of freeboard.
- When hauling material and operating non-earthmoving equipment, limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.
- Sweep the first 500 feet of paved roads exiting construction sites, other unpaved roads en route from the construction site, or construction staging areas whenever dirt or runoff from construction activity is visible on paved roads, or at least twice daily (less during periods of precipitation).

### **Mobile and Stationary Source Controls**

- Minimize use, trips, and unnecessary idling of heavy equipment.<sup>28</sup>
- Maintain and tune engines per manufacturer’s specifications to perform at EPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Prohibit any tampering with engines and require continuing adherence to manufacturer’s recommendations.<sup>29</sup>
- Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Use grid-based electricity for construction activities, onsite renewable electricity generation, and/or hydrogen for construction activities rather than diesel and/or gasoline generators, to the extent possible.
- Lease new, cleaner equipment using the best available emissions control technologies that meets the most stringent of applicable federal or state standards.
- Deploy Best Available Control Technology (*BACT*) – Require BACT during construction and operation of projects, and employ the cleanest alternatives available by:
  - a) Soliciting bids that include use of energy and fuel-efficient fleets.
  - b) Soliciting preference construction bids that use BACT, particularly those seeking to deploy zero-emission technologies.
  - c) Employing the use of electricity and/or hydrogen.
  - d) Using lighting systems that are energy efficient, such as LED technology.
  - e) Using the minimum amount of greenhouse gas-emitting construction materials feasible.
  - f) Using cement blended with the maximum feasible amount of flash or other materials that reduce greenhouse gas emissions from cement production.
  - g) Using lighter-colored pavement where feasible.
  - h) Recycling construction debris to the maximum extent.
- Define “Clean Truck” relative to current vehicle emissions standards. One option for defining this technology would be to use products certified to meet the EPA greenhouse gas emissions standards for model year 2021 and newer heavy-duty on-highway vehicles. Another option would be to define it as products certified to meet the CARB optional low NO<sub>x</sub> emission standards for heavy-duty engines.<sup>30, 31</sup>
- In general, commit to the best available emissions control technologies for project equipment:

<sup>28</sup> <https://ww2.arb.ca.gov/capp-resource-center/heavy-duty-diesel-vehicle-idling-information>.

<sup>29</sup> <https://www.epa.gov/enforcement/epa-tampering-policy-epa-enforcement-policy-vehicle-and-engine-tampering-and>

<sup>30</sup> <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-2-greenhouse-gas-emissions-standards>

<sup>31</sup> <https://ww2.arb.ca.gov/our-work/programs/optional-reduced-nox-standards>

- On-Highway Vehicles servicing infrastructure sites should meet or exceed the EPA exhaust emissions standards for model year 2017 and newer light-duty vehicles and model year 2021 and newer heavy-duty vehicles (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).<sup>32, 33</sup>
- Nonroad Vehicles and Equipment servicing infrastructure sites should meet or exceed the EPA Tier 4 exhaust emissions standards for heavy-duty nonroad compression-ignition engines (e.g., nonroad trucks, construction equipment, cargo handlers, etc.).<sup>34</sup>
- Marine Vessels servicing infrastructure sites should meet or exceed the latest EPA exhaust emissions standards for marine compression-ignition engines (i.e., Tier 4 for Category 1 and 2 vessels, and Tier 3 for Category 3 vessels).<sup>35</sup>
- Low Emission Equipment Exemptions – The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.
- Advanced Technology Demonstration and Deployment – Infrastructure project proponents should be encouraged to demonstrate and deploy mobile source technologies that exceed the latest EPA emission performance standards for the equipment categories that are relevant for a given project (e.g., plug-in hybrid-electric vehicles-PHEVs, battery-electric vehicles-BEVs, fuel cell electric vehicles-FCEVs, advanced powertrain nonroad equipment and marine vessels, etc.).<sup>36, 37, 38</sup>

### **Administrative Controls**

- Reduce the number of worker commuter vehicles travelling to and from the project site. Include carpooling or transit subsidies.
- Plan construction scheduling to minimize vehicle trips and/or nonroad operational hours.
- Locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures. Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Identify sensitive receptors adjacent to emission sources, including residential areas, hospitals, day care or school facilities. Prior to any construction notify residents of the timing of construction and consider providing ways to minimize exposures, such as keeping windows closed.

<sup>32</sup> <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-control-air-pollution-motor-vehicles-tier-3>

<sup>33</sup> <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-phase-2-greenhouse-gas-emissions-standards>

<sup>34</sup> <https://nepis.epa.gov/Exec/ZipPDF.cgi?Dockey=P100OA05.pdf>

<sup>35</sup> <https://nepis.epa.gov/Exec/ZipPDF.cgi?Dockey=P100OA0B.pdf>

<sup>36</sup> <https://www.fueleconomy.gov/feg/evsbs.shtml>

<sup>37</sup> [https://www.fueleconomy.gov/feg/fcv\\_sbs.shtml](https://www.fueleconomy.gov/feg/fcv_sbs.shtml)

<sup>38</sup> <https://globaldrivetozero.org/tools/zero-emission-technology-inventory/>



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**To:** [SF Waterfront](#)  
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**Subject:** [Non-DoD Source] Water Board Comment Letter on the NOI for the Draft IFR-EIS  
**Date:** Friday, September 1, 2023 7:14:10 PM  
**Attachments:** [Outlook-https\\_ww.png](#)  
[SF Waterfront DIFR EIS NOI Comments.pdf](#)  
**Importance:** High

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Greetings,

Please find attached our comment letter on the NOI for the Draft IFR-EIS. We apologize for sending you our comments a few days late, but we hope that you will still take these comments into consideration as you prepare the Draft IFR-EIS.

We look forward to continuing collaborating with you in the RAWG as this project moves forward.

Sincerely,

**Tahsa Sturgis** | *Water Resource Control Engineer*

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## San Francisco Bay Regional Water Quality Control Board

September 1, 2023

U.S. Army Corps of Engineers  
Tulsa District, ATTN: RPEC—SFWS  
2488 E 81st Street, Tulsa, OK 74137

**Subject: Notice of Intent to Prepare an Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francisco, California**

We have reviewed the Notice of Intent (NOI) to prepare a Draft Integrated Feasibility Report (DIFR) and Environmental Impact Statement (EIS) for the San Francisco Waterfront Coastal Flood Study (Project). The Project's purpose is to investigate the feasibility of managing tidal and fluvial flooding and sea level rise along 7.5 miles of the San Francisco Bay shoreline.

We appreciate the Project's complexity and the central role it plays in the City of San Francisco's (City) future. Like many communities in the Bay, the City is especially vulnerable to the near- and long-term impacts of climate change, sea level rise, and flooding. As such, the Project is an example of the planning and engineering challenges that other Bay Area shoreline communities will face. To that end, we appreciate the collaborative approach and inclusion in the Resource Agency Working Group (RAWG). In our experience, the permitting process for projects, on any scale, is more efficient when the regulatory agencies can provide feedback at the early project design stages. We look forward to continuing our work with the stakeholders on this important project to timely protect the City from anticipated sea level rise.

***Comments on Alternatives and Impacts to Aquatic Resources***

Projects with potential fill-related impacts to State waters, such as the Project, must first demonstrate their design avoids and minimizes those impacts to the extent practicable. As part of the 401 Certification and WDRs process, we will require a thorough analysis of all the proposed alternatives, Alternatives A through G, including their long-term indirect effects. The Water Board adopted U.S. Environmental Protection Agency's Section 404(b)(1), "Guidelines for Specification of Disposal Sites for Dredge or Fill Material," dated December 24, 1980, in its Basin Plan and Procedures for *Discharges of Dredged or Fill Material to Waters of the State* (Dredge and Fill Procedures) for determining the circumstance under which filling of waters of the State may be permitted. The Section 404(b)(1) Guidelines and Dredge and Fill Procedures prohibit discharges of fill material into waters of the United States and in the case of the Dredge and Fill Procedures, waters of the State, unless a discharge, as proposed, constitutes the least environmentally damaging practicable alternative that will achieve the project purpose. To accomplish this, the Guidelines and Procedures sequence the order in

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JAYNE BATTEY, CHAIR | EILEEN M. WHITE, EXECUTIVE OFFICER

which proposals must be approached: 1) Avoid - avoid impacts to waters; 2) Minimize – once impacts have been avoided to the maximum extent practicable, modify the project to minimize impacts to waters; and 3) Compensate – once impacts have been fully minimized, compensate for unavoidable impacts to waters.

Although we appreciate and acknowledge the inclusion of nature-based and hybrid alternatives that are adaptable and do not restrict future construction needs that may arise from potential higher than anticipated sea level rise scenarios, both the direct and indirect effects of structural components must be further analyzed, specifically those included in Alternatives C through E. In addition, opportunities to reduce and avoid the Project's impacts may present themselves by further considering and developing nature-based design alternatives and minimizing the structural components that pose long-term risks to the Bay's water quality and beneficial uses. Although we understand some structural components may be necessary due to site-specific constraints, we are concerned about the indirect effects of those components, such as tide gates and sheet pile walls.

Tide gates pose a significant risk to water quality and beneficial uses. Based on our experience, dissolved oxygen (DO) decreases in standing water associated with tide gate operations, thereby adversely affecting water quality, and posing a substantive potential risk of fish kills when that water is released. Further, the high cost of operating and maintaining tide gates leads to a less than desirable condition where the likelihood of decreased DO concentrations, and related water quality issues, such as a buildup of sulfides, increases over time. Another consideration is the projected increase in the magnitude of storm events in the future caused by climate change. Currently, as climate change continues, in a given year, extreme weather conditions (e.g., droughts, higher magnitude storm events, storm surges) are projected to occur more frequently. When these extreme weather conditions occur, the overall effect of the watershed's upstream condition combined with the historical condition at the proposed Project location (i.e., contamination from sanitary sewer overflows and coal gas plants) will also impact the water quality behind the tide gates.

### ***Comments on Further Consideration of Nature-Based Alternatives***

As part of the Corps' 404(b)(1) Alternatives Analysis, we encourage further analysis and consideration of practicable alternatives that incorporate nature-based alternatives while also reducing or eliminating structural components. As stated above, we are required to analyze alternatives that first avoid and minimize impacts to waters of the State. As such, we are fully supportive of design components that avoid impacts, such as planned retreat, and ones that minimize impacts, such as living seawalls. Since the 401 Certification process will require a thorough analysis, in sequence, of avoiding, minimizing, and then compensating the Project's impacts to the extent practicable, we recommended that you incorporate the same approach into the 404(b)(1) Alternatives Analysis that will be prepared for this Project in the DIFR and EIS.

**Summary**

We are supportive of the Project's intent and consideration of nature-based alternatives and are providing these comments to ensure the Project's 401 Certification process is issued expeditiously by bringing our concerns regarding the long-term indirect effects of the Project's proposed structural components to your attention at this early design stage. We look forward to continuing collaborating in the RAWG on this important project in the as the design moves forward and offering our input along the way.

Sincerely,

Xavier Fernandez  
Planning Division Manager