United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
2800 Cottage Way, Room E-1712
Sacramento, CA 95825

March 22, 2024

IN REPLY REFER TO:
ER 24/0036

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

Subject: U.S. Department of the Interior Comments - San Francisco Waterfront Coastal Flood Study, CA, Draft Integrated Feasibility Report and Environmental Impact Statement, City and County of San Francisco, CA, January 2024

Dear Melinda Fisher:

The U.S. Department of the Interior (Department) has reviewed the *San Francisco Waterfront Coastal Flood Study, CA, Draft Integrated Feasibility Report and Environmental Impact Statement* (DEIS), located in the City and County of San Francisco, CA and dated January 2024. The Department offers the following comments on the DEIS, which include contributions from the Department's National Park Service (NPS).

The NPS, National Trails Office (NTO) previously commented on the San Francisco Waterfront Coastal Flood Study due to the project planning area including portions of both the Pony Express National Historic Trail (NHT) and the Butterfield Overland NHT. The DEIS does not include an analysis of impacts to these resources. National Historic Trails are congressionally designated resources protected under the National Trails System Act of 1968. Impacts of federal projects to these specially designated national resources need to be analyzed as part of the National Environmental Protection Act process.

The Department recommends that the DEIS consider both the Pony Express NHT and Butterfield Overland NHT in its analysis. If the Pony Express and Butterfield Overland NHTs have been considered but determined to lie outside the scope of the project, we suggest that the DEIS describe this conclusion and the reasoning behind it.

The Department appreciates the opportunity to review and comment on this DEIS. Please reach out to Jordan Jarrett, NTO Archeologist at jordan_jarrett@nps.gov, to confirm data on the Pony

Express NHT and Butterfield Overland NHT, as well as for any questions about the National Trails Program. For all other questions, please contact me at Janet_Whitlock@ios.doi.gov.

Sincerely,

Janet Whitlock
Regional Environmental Officer

Electronic distribution: SFWFRS@usace.army.mil

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sent via email to: SFWFRS@usace.army.mil

TO: U.S. Army Corps of Engineers - Tulsa District
ATTN: RPEC-SFWS

FROM: Carla Short, Director
San Francisco Public Works - City & County of San Francisco

DATE: March 21, 2024

SUBJECT: **San Francisco Waterfront Coastal Flood Study Draft Integrated Feasibility Report and Environmental Impact Statement – San Francisco Public Works Comments**

San Francisco Public Works received a notice from the Port of San Francisco that the *San Francisco Waterfront Coastal Flood Study Draft Integrated Feasibility Report and Environmental Impact Statement* prepared by the US Army Corps of Engineers was released for public review and comment through March 29, 2024, pursuant to the requirements of the National Environmental Policy Act (NEPA).

Thank you for the opportunity to provide comments and recommendations regarding those activities being studied that may affect operations and other capital improvement projects by the City & County of San Francisco in the Islais Creek area.

We respectfully request the US Army Corps of Engineers incorporate shoreline access for fireground operations on the creek side of the properties along Islais Creek in the study. Per Section 5.1.3 of the Report, the Tentatively Selected Plan in Reach 4 (Islais Creek) proposes to elevate the creek shorelines using a combination of shoreline berms and floodwalls. These adaptation measures should provide adequate width and load carrying capacity for SFFD fire trucks to traverse the entire length of the improved shoreline at Islais Creek.

Questions regarding this letter or further coordination with the City & County of San Francisco Public Works should be directed to Thomas Roitman, Project Manager at (628) 271-2404 or thomas.roitman@sfdpw.org. Questions regarding San Francisco Fire Department apparatus criteria should be directed to Ken Cofflin, Fire Marshal at (415) 558-3320 or ken.cofflin@sfgov.org.

Sincerely,

Carla Short
Director
San Francisco Public Works

Jeanine Nicholson
Chief of Department
San Francisco Fire Department

cc: Albert Ko, Deputy Director and City Engineer

March 27, 2024

U.S. Army Corps of Engineers
Tulsa District, ATTN: RPEC-SFWS
2488 E81st Street, Tulsa, OK 74137
Attn.: Melinda Fisher, Melinda.Fisher@usace.army.mil

Subject: Draft Integrated Feasibility Report and Environmental Impact Statement for the San Francisco Waterfront Coastal Flood Study, San Francsico, California

We have reviewed the 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. In the EIS, the 7.5-mile shoreline was divided into four reaches, based on their hydrologic separability, geographic references, specific wave action, and major differences in the inventory of physical structures along the shoreline. The EIS identifies the Tentatively Selected Plan (TSP) as, "a cost effective, hybridized plan that combines retreat and defend measures, scaled to perform under the lowest initial risk and to adapt to risk of a higher rate of [relative sea level change] RSLC as a potential subsequent action." The TSP uses a combination of different alternatives along the four reaches in two actions: the first will be to address the projected 2040 sea level rise and the second will be to address the projected 2090 sea level rise.

As the first U.S. Army Corps of Engineers (Corps) coastal flood risk management study in the nation where sea level rise is the primary driver of projected coastal and combined flood risk, the Project's importance to laying the groundwork for the future cannot be understated. As such, we appreciate the Project's inclusion of a multi-faceted approach to address projected sea level rise and the Project Delivery Team's (PDT's) foresight in recognizing the critical need to put forward a Project that supports the necessary adaptability requirements to reflect the uncertainty in projected and observed sea level rise. We support the waiver of policy that is currently under review by the Office of the Assistant Secretary of the Army for Civil Works.

We reiterate our previous comments on the Notice of Intent (NOI) to Prepare the EIS (NOI Comments) regarding our appreciation of the Project's complexity and the central role it plays in the City of San Francisco's (City) future as well as the critical example the Project sets for similar Bay Area shoreline communities from a planning and engineering perspective. We look forward to continuing our role in the Resource Agency Working Group (RAWG) to both ensure an efficient permitting process and optimize the environmental benefits of the project.

Comment 1: Alternatives and Impacts to Aquatic Resources

As we stated in the NOI Comments, Projects with potential fill-related impacts to State waters, such as the Project, must first demonstrate their design avoids and minimizes adverse impacts to the extent practicable. As part of the 401 Certification and Waste Discharge Requirements permitting process, we will require a thorough analysis of the proposed TSP and Alternatives A through G, including their long-term indirect effects. The State Water Board (State Water Board) adopted the *Procedures for Discharges of Dredged of 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. Similar to the U.S. Environmental Protection Agency's Section 404(b)(1), "Guidelines for Specification of Disposal Sites for Dredge or Fill Material" (Guidelines), the Dredge and Fill Procedures prohibit discharges of fill material into waters of the State, unless a discharge, as proposed, constitutes the least environmentally damaging practicable alternative that will achieve the overall project purpose. To accomplish this, the Procedures sequence the order in 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.

For clarity and to streamline the Project's next steps, please note that the Alternatives Evaluation in the EIS, Appendix A, Plan Formulation, and Draft 404(b)(1) Analysis, Appendix D-4-1, do not satisfy the requirements, outlined above, specific to the Procedures and Guidelines. Opportunities to avoid and further minimize the Project's impacts, such as developing and incorporating the nature-based design features (nature-based features) outlined in the "Independent Measures" into the Project, were not fully considered. Incorporating nature-based features into the Project would potentially minimizes impacts by producing a new or modified environmental state of higher ecological value than the existing condition (see Section 230.75(d) of Appendix A to the Procedures and 40 CFR 230.75(d)), which would help satisfy the requirements of both the Dredge and Fill Procedures and the Guidelines. Accounting for the beneficial impacts from nature-based features incorporated into the Project during the Alternatives Analysis would also reduce the amount of compensatory mitigation needed to offset adverse fill impacts resulting from the Project. Lastly, the alternatives analysis must further analyze both the direct and indirect effects of structural components and include them in the accounting of the beneficial and adverse impacts in the Alternatives Analysis. Again, we understand some structural components may be necessary due to site-specific constraints, but we are concerned that the indirect effects of components, such as tide gates and sheet pile walls, are not fully accounted for in the Alternatives Analysis.

We highlight the recommendations made throughout the EIS to further optimize the TSP with natural and nature-based design features and the importance of meeting the Procedures requirements by evaluating the practicability of nature-based features. To adequately assess these alternatives, the long-term effect must be better evaluated to assess whether the Guidelines and Procedures have been met. We suggest modeling the habitat conversion associated with implementing these alternatives to better understand the long-term ramifications of the alternatives.

Comment 2: Tentatively Selected Plan and Nature-Based Features Development

As stated previously, we appreciate the PDT emphasizing the need for adaptability and support the waiver request that is currently under review. Recognizing that future work is needed beyond 2040 to meet the projected 2090 SLR is an important consideration for not only the Project, but all climate change adaption projects that must face the challenges of uncertainty with forecasted sea level rise amounts that will be further refined moving forward.

As noted in our NOI Comment letter, 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. We are also 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. As indicated above, under both the State Dredge and Fill Procedures and Section 404(b)(1) Guidelines, minimization measures include actions that minimize adverse effects on plant and animal populations by producing "a new or modified environmental state of higher ecological value by displacement of some or all of the existing environmental conditions" (Section 230.75(d) of Appendix A of the State Dredge and Fill Procedures and 40 CFR 230.75(d)). Accordingly, replacing the current sea wall along shoreline the San Francisco with a living sea wall would be a minimization measure that should be fully analyzed for practicability. As described above, the process for including this as a minimization measure in the Alternatives Analysis would be to account for both the beneficial and adverse impacts (whether direct or indirect) from the placement of fill associated with the Project's structural components We recommend and support the further development of these nature-based features, as referenced in the EIS.

Since the 401 Certification process will require a thorough analysis, in sequence, of avoiding, minimizing, and then compensating the Project's adverse impacts to the extent practicable, we urge you to incorporate the same approach required in the 404(b)(1) Alternatives Analysis for the Final EIS (FEIS).

Comment 3: Monitoring and Adaptation Plan

The Monitoring and Adaptation Plan (MAP) in Appendix G must be further developed to distinguish the monitoring and adaptation needed for nature-based features from the sea level rise triggers that will guide the proposed large-scale additions to Reaches 1, 3, and 4 for the projected 2090 sea level rise. As seemingly the first of its kind, the MAP should not have been based on the principles of adaptive management used for ecosystem restoration projects alone.

The MAP should recognize that the proposal to add to the seawall height and raise the ground elevation is not comparable to a restoration project's adaptation strategy or outline. The unique construction, planning, and funding constraints that the proposed infrastructure adaptation measures face should be outlined in detail in the MAP, and the corresponding adaptation triggers for "adaptation actions" must take those constraints into consideration

to change the proposed actions to tangible solutions with real milestones. We recommend further developing these adaptation pathways and constraints in further detail in the FEIS.

The adaptation strategies typical for ecosystem restoration projects are more applicable to the nature-based features incorporated in the TSP, and which should be further explored and developed in the FEIS. Accordingly, the MAP should further develop performance criteria, success criteria, and adaptation strategies specific to the nature-based features.

Comments on Mitigation

Before we can accept a mitigation proposal, we are required to analyze alternatives that first avoid and minimize impacts to waters of the State. In concept, there are components in the mitigation approach proposed in the Mitigation Plan, Appendix K, that may satisfy our Certification requirements. However, any proposed mitigation must consider, and distinguish between, both the mitigation type in relation to the impact type (i.e., in-kind or out-of-kind mitigation) as well as the temporal loss of functions, values, and acreage that will occur from the time that the Project impacts occur to when any mitigation is fully established. Out-of-kind mitigation requires a larger amount of mitigation than in-kind mitigation. Similarly, the mitigation amount required is larger if the time gap between when the Project impacts first occur to when the mitigation project is fully established. In that context, the mitigation proposed in the Mitigation Plan is insufficient and should be further revised to factor these considerations into the mitigation types and proposed amount.

Summary

We are supportive of the Project's overall intent and consideration of nature-based features 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

Cc: U.S. Army Corps of Engineers:
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March 28, 2024

US Army Corps of Engineers
Tulsa District, Attn: RPEC-SFWS
2488 E 81st Street
Tulsa, OK 74137

Port of San Francisco
Pier 1, The Embarcadero
San Francisco, CA 94111
Attn: Brad Benson, Waterfront Resilience Program Director

Via email to SFWFRS@usace.army.mil

RE: Comments on San Francisco Waterfront Flood Study

The University of California, San Francisco (UCSF) has reviewed the San Francisco Waterfront Flood Study Draft Plan (Draft Plan) and Environmental Impact Statement (EIS). As a public agency and major stakeholder, we share the value of good urban and environmental planning and support your efforts to address the threat of relative sea level change. The Draft Plan is clearly an ambitious undertaking that will have wide-reaching implications, and we expect, on balance, beneficial impacts.

We provide the comments below to learn more about your investigations to date, and to encourage further study on the topics we raise. In addition, we are happy to share information and data about our campus sites if that is of interest to your team.

UCSF, one of the oldest healthcare institutions in San Francisco, is the second largest employer in San Francisco and owns sites throughout the City. UCSF's Mission Bay campus is a major research, teaching, and hospital/clinical campus located near the eastern waterfront (Reach 3). The campus includes sensitive receptors such as housing residents, patients, and children. Accordingly, we would like to understand more about projections of the rising water table, and potential effects on below-grade hazardous soils along or near the waterfront that, to date, have been managed under existing soil management plans developed prior to considerations about relative sea level change.

UCSF also owns a facility in the Northeast Mission District, located within the Inland Adaptation Zone of Reach 3. We would like to better understand whether the proposed coastal defense structures may exacerbate the flood risk inland in Reach 3, and if so, what specific stormwater management infrastructure is contemplated.

Finally, we are eager to learn more about best approaches or design practices to consider for existing or planned subsurface structures in areas potentially subject to inundation, as development at our sites continues. To the extent that the Draft Plan or EIS can address this, we would welcome such discussions.

Thank you for bringing us into the planning process at an early stage. We would appreciate being informed when specific implementation projects within Reach 3 are defined, and when further environmental review of those projects is available. We look forward to continued coordination.

Sincerely,

Alicia Murasaki
Assistant Vice Chancellor, Campus Planning and Campus Architect

March 29, 2024

U.S. Army Corps of Engineers, Tulsa District
2488 E 81st St.
Tulsa, OK 74137

RE: San Francisco Waterfront Coastal Flood Study Draft Plan

To Whom it May Concern:

The San Francisco Bay Area Water Emergency Transportation Authority (WETA) is a regional public transit agency tasked with operating, improving, and expanding ferry service on the San Francisco Bay and with coordinating the water transit response to regional emergencies. Under the San Francisco Bay Ferry brand, WETA carries almost three million passengers annually utilizing a fleet of 17 high speed passenger-only ferry vessels. San Francisco Bay Ferry currently serves the cities of Alameda, Oakland, Richmond, San Francisco, South San Francisco, and Vallejo.

As a tenant, close partner of the Port and the agency responsible for the coordination of emergency ferry service in the region, WETA is an especially interested party regarding the Waterfront Coastal Flood Study Draft Plan and any proposed work that may affect ferry service, our customers, or our facilities. The following locations and facilities within the project area along the San Francisco waterfront are critical to WETA's operation and administration of ferry service. All of these locations are also able to berth vessels and transport people in the event of a regional emergency.

- **Downtown San Francisco Ferry Terminal**. The Downtown SF Ferry Terminal acts as the central hub in WETA's ferry network with service on 6 lines from this terminal to various cities and communities around the Bay Area including Pier 41, Vallejo, Richmond, Oakland, and three terminals in Alameda. Additionally, WETA operates special event service between Downtown SF and Pier 48.5 on game or large event days.
- **Pier 9**. WETA's primary administrative office is located at Pier 9. This location serves as one of the emergency operations centers for WETA staff to oversee, manage, and coordinate water transit activities in the event of an emergency with significant regional impacts. Pier 9 also has the capacity to berth vessels as well as load and unload passengers in an emergency.
- **Pier 41.** Located adjacent to the popular destinations of Fisherman's Wharf and Pier 39, WETA operates weekend service between Downtown SF and Pier 41.
- **Pier 48.5.** This temporary float is located near the Ballpark and Chase Center in the Mission Bay neighborhood, and WETA operates special event service between Downtown SF and Pier 48.5 on game or large event days.

In addition to WETA's existing facilities along the San Francisco waterfront, the agency has capital expansion plans for a permanent ferry terminal at Mission Bay and a yet to be identified location along the Southern waterfront. Both projects are part of the agency's medium and long-term vision going out to the year 2050.

WETA is generally supportive of the proposed work and investment outlined in the Draft Plan to defend against up to 3.5 feet of sea level rise—including raising the shoreline and building short walls around piers. WETA also welcomes the upcoming seismic retrofit of Pier 9. Given that prioritizing emergency response is one of the Waterfront Resilience Program's key goals, the Plan ought to highlight the importance of the Downtown SF Ferry Terminal and Pier 9 as both regional transit assets and critical emergency response assets. Mitigation measures to defend against Sea Level Rise at the San Francisco Ferry Building should also not impede the ability for passengers with disabilities to access any of the ferry terminal gates.

With major work planned for the area around the Downtown SF Ferry Terminal, Mission Bay, and Pier 9 like raising the shoreline and buildings, installing levees and berms, as well as upgrading the seawall, WETA wants to ensure that the potential construction impacts to the ferry system are clearly identified and communicated well in advance to all interested parties. The uninterrupted operation of the ferry terminals along the San Francisco waterfront is of regional importance for both San Francisco and the other communities that WETA serves. WETA also has plans to construct a new Mission Bay terminal and upgrade the Downtown San Francisco terminal with electrification infrastructure in the next few years. The agency needs to come into compliance with new emissions regulations before 2030 and will work diligently with the Port to ensure these projects proceed without interruption or delay. Additionally, WETA seeks to maintain unimpeded access to its administrative facilities on Pier 9 during construction to continue carrying out its State-mandated function of providing water transit and emergency response services for the Bay Area. WETA expects to work collaboratively with the Port to provide ferry customers, stakeholders, and the public with sufficient notice of potential construction impacts and construction mitigation measures.

WETA and the Port have enjoyed a decades-long collaborative relationship on projects of regional importance that improve the quality of life for Bay Area residents, workers, and visitors alike. We look forward to continuing this partnership in the years to come as we address the challenges that sea level rise pose to San Francisco and the broader region.

Sincerely,

Seamus Murphy
Executive Director | WETA

REGION 9
SAN FRANCISCO, CA 94105

March 29, 2024

Ms. Melinda Fisher
U.S. Army Corps of Engineers, Tulsa District
ATTN: RPEC-SFWS
2488 East 81st Street
Tulsa, Oklahoma 74137

Subject: San Francisco Waterfront Coastal Flood Study Draft Integrated Feasibility Report and Environmental Impact Statement, California, EIS# 20240011

Dear Melinda Fisher:

The U.S. Environmental Protection Agency has reviewed the Draft EIS 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. The CAA Section 309 role is unique to EPA. It requires EPA to review and comment publicly on every environmental impact statement.

The stated 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 City and County of San Francisco's shoreline. The seven, multi-hazard alternative strategies reflect the uncertain timing of relative sea level change, and present structural and nonstructural measures that incorporate engineering with nature in a phased approach to be implemented in the years 2040 and 2090. The Draft EIS notes that the conceptual framework of first action alternatives presented during this feasibility stage would need additional preconstruction engineering and design to detail potential impacts and mitigation; enable permitting review; and maximize net economic, social and ecological benefits across low and intermediate sea level change scenarios.

EPA 309 Review Summary

The EPA identified that the Tentatively Selected Plan in the Draft EIS has the potential to cause or contribute to short-term exceedances of air and water quality standards, and does not identify "first" action designs or components in sufficient detail to support review by permitting agencies. EPA strongly recommends that all avoidance, minimization and mitigation measures be identified in the preferred alternative for the Final EIS. The Detailed Comments below identify project components and potential mitigation that could further reduce flood impacts while also reducing impacts to air and water quality and protect aquatic resources from direct and indirect adverse effects. We recommend:

- Refinement of "first" flood control actions in the tentatively selected plan to a level of design that demonstrates how the suite of components would minimize air and water quality impacts

sufficiently to meet air and water quality standards, or mitigation needed to reduce the impacts to less than significant;

- Incorporation of economic, social and environmental considerations into any statement of purpose and need, to align with national policies;
- The integration of Natural and Nature-Based Features into all alternatives to reduce flood risk and protect aquatic resources; and
- Preparation of an early coordination plan with all potentially impacted transportation agencies to avoid or minimize disruptions to services.

The EPA appreciates the opportunity to review the Draft EIS for the San Francisco waterfront coastal flood risk feasibility study. When the Final EIS is released for public review, please notify us and make an electronic version available. If you have any questions, please contact me at donez.francisco@epa.gov, or Robin Truitt, the lead reviewer for this project, at (415) 972-3742 or truitt.robin@epa.gov.

Sincerely,

FRANCISCO DONEZ

Digitally signed by FRANCISCO DONEZ
Date: 2024.03.29 09:29:33 -07'00'

Francisco Dóñez
Acting Manager
Environmental Review Section 2

cc: Kelley Capone, Port of San Francisco
Adam Varat, Port of San Francisco
Ashley Tomerlin, Bay Conservation and Development Commission
Erik Buehmann, Bay Conservation and Development Commission
Samantha Harper, San Francisco Bay Regional Water Quality Control Board
Xavier Fernandez, San Francisco Bay Regional Water Quality Control Board
Keith Lichten, San Francisco Bay Regional Water Quality Control Board
Jenny Parker, National Park Service
Brian Meux, National Marine Fisheries Service
Stephanie Millsap, U.S. Fish and Wildlife Service

EPA'S DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE SAN FRANCISCO WATERFRONT INTEGRATED FEASIBILITY REPORT, CITY AND COUNTY OF SAN FRANCISCO, CALIFORNIA – MARCH 29, 2024

Future National Environmental Policy Act analysis

The EPA is concerned that many important details affecting the significance of the effects and necessary mitigation cannot be assessed, because engineering and design are incomplete and the ability to comply with certain laws and regulations is unknown (pgs. 151, 187, Table 6-1 *Regulatory Compliance Status*).[1] We seek clarity on plans for subsequent NEPA documentation in the Final EIS.

The Draft EIS states that the alternatives have been formulated and evaluated considering four criteria: completeness, effectiveness, efficiency, and acceptability. However, the document only provided a high-level overview of the structural construction footprints and generalized disturbance within those footprints (p. 10; App. A-3). The Draft EIS further states that analysis of the most significant, aggregated, impacts of proposed "first" (year 2040) and "second" (year 2090) actions are based on the uncertain timing of sea level change and cannot be complete without further design (pgs. 102 - 103). Given the stated uncertainties, the EPA is concerned that the Final EIS would not be able to present a complete analysis of the potential effectiveness, efficiency and acceptability of the tentatively selected plan.

The Draft EIS confirms that additional NEPA documentation would be required for second actions, but it is not clear whether first actions would be further developed for the Final EIS or additional NEPA would be needed. The Draft EIS states that supplementation of the EIS *may be* required if design changes induce impacts greater than those described in the Final EIS (p. 3). The Draft EIS notes that the Tentatively Selected Plan, identified as the Total Net Benefits Plan, would be subject to change and further evaluation and development for the Final EIS (App. D-1, p. 4-15). Based on public and agency input, the Draft EIS states that the Final EIS, slated for completion by the end of 2025, would:

a) Identify the locations and types of measures needed within each reach;
b) Report separately the impacts of first and second actions (pgs. 68, 95, 183); and
c) Analyze and develop Natural and Nature-based Features (NNBFs) included in the action alternatives, or as independent measures for potential impacts and benefits (App. D-1, p. 4-15).

The EPA understands that full compliance with NEPA, Fish and Wildlife Coordination Act, Endangered Species Act, Clean Water Act Section 404, National Historic Preservation Act , E.O. 12898 (Environmental Justice), E.O. 11988 (Floodplain Management), and E.O. 11990 (Protection of Wetlands) for first action measures is expected at this feasibility stage and will be confirmed in the Final EIS (p. 187). Because project proponents note that preconstruction engineering and design would happen over the next several decades and the Draft EIS states that construction sequencing depends on completion of supplemental environmental studies and environmental clearance of individual components,[2] clearly state in the Final EIS what additional NEPA compliance, pursuant to 40 CFR §1502.9(d),[3] is necessary.

[1] See comments below for data gaps identified by permitting agencies to secure regulatory compliance, and the discussions at pages 180 and App. D-1 at p. 5-1.

[2] January 13, 2024 public meeting presentation and p. 180.

[3] "Agencies shall prepare supplements to either draft or final environmental impact statements if a major Federal action remains to occur, and the agency makes substantial changes to the proposed action that are relevant to environmental

Recommendations for the Final EIS:

- As the Corps identifies preferred plans in the Final EIS and finalizes its Clean Water Act 404(b)(1) analysis, identify the locations and types of measures needed within each of the four "Reaches;" report separately on the impacts of first and second actions; and analyze and develop Natural and Nature-based Features (NNBFs) to clarify what combination of project components and mitigation measures would be the Least Environmentally Damaging Practicable Alternative.
- Identify whether the Port of San Francisco has a Locally Preferred Plan that is different from the final Proposed Action, and whether there are certain elements of the local plan that the local sponsor or City and County of San Francisco would undertake to provide additional net benefits.
- Ensure that the final plan for first actions recommended in the Chief's Report contains a sufficient level of detail to comply with regulatory requirements and adequately describes mitigation necessary to reduce impacts to less than significant.
- Provide detailed plans for subsequent NEPA compliance to address incomplete or missing data needed for permitting or mitigation for first actions and the intended strategy and timeframe for providing missing or incomplete data.
- If identified impacts require design refinements that include new alternatives, major modifications, footprint expansions or compensatory mitigation approaches that are beyond the scope and range of effects considered in this feasibility study, confirm in the Final EIS that Corps would prepare supplemental NEPA documentation to support engineering and design feasibility, regulatory compliance and environmental acceptability before authorizing construction.

Tiering Second Actions

The EPA appreciates that both first and second connected or reasonably foreseeable actions were included in this feasibility study to consider overall potential flood defense options and the potential need for future adaptive responses.[4] The Draft EIS recognizes the need for subsequent NEPA reviews of proposed second actions when adaptation triggers are reached as long as 50 years into the future (p. 3). However, it is not clear what triggers - other than relative sea level changes – would prompt future actions.

Because the Draft EIS recognizes that forecasting changing economic and physical conditions and impacts beyond 50 years is uncertain, the EPA agrees that options for different or alternative responses be kept open to better provide long-term shoreline resilience (p. 41). As proposed second action project components would be designed and implemented over multiple decades, tiering from the Final EIS may be appropriate on specific actions to focus on economically, environmentally and socially sustainable responses, alternatives or assessments of environmental mitigation ripe for decision (40 CFR §1501.11(c)).

concerns; or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."

[4] First actions in the Total Net Benefits Plan focus on the defense of existing structures using primarily traditional hard or gray built structures. Second actions consider more natural and nature-based shoreline resiliency measures, even retreat.

Recommendations for the Final EIS: Since the second actions proposed later (2090) are closely related parts of the whole and depend on the resiliency of other measures and adaptive management,

- Describe the extent to which Corps/Port decision-making on the first actions may prevent or modify the second actions and their effects;
- Identify the range of adaptation 'triggers' or types of situations that would influence or define future action alternatives. For example, what factors other than rising sea levels would need to be considered when deciding whether to build new or higher flood control structures or to retreat – relocation costs, unavailability of flood insurance?
- Prepare and circulate EISs or EAs, as appropriate, for project- or site-specific actions.

Water Quality

Approximately 40% of California water drains into San Francisco Bay, including point and non-point source pollutants that distribute up to 40,000 metric tons of at least 65 different pollutants. The study area is listed as an impaired water body by the San Francisco Bay Regional Water Quality Control Board. Under Section 303(d) of the CWA, impaired waters are defined as those that do not meet water quality standards, even after point and non-point sources of pollution have had pollution control technologies implemented (App. D-1, p. 3-20).

The Draft EIS states that bay fill, construction of bayward sections of the seawall, roadway construction, and wharf replacements would have significant and unavoidable impacts to water quality. Bay fill permanently removes open water, while seawall and wharf construction could cause turbidity, resuspended contaminated sediments, or release contaminating materials (Tables 4-2, 4-4, 4-5; App. D-1, Section 4.12.3). Pier demolition, removal and relocation would temporarily increase turbidity and suspend sediment, although it may have long-term beneficial impacts to water quality by removing creosote-laden pilings (Appendix D-1, Section 4.12.4). Roadway replacements require that stormwater, sewer, and inland drainage systems be expanded or replaced (p. 111).

The proposed placement of approximately eight acres of inbay fill would require water quality certification from the San Francisco Bay Regional Water Quality Control Board and a permit from the San Francisco Bay Conservation and Development Commission for fill within the Bay and land extending inland within 100 feet of the shoreline. These permits and authorizations would require avoidance or minimization of bay fill impacts and the use of best management practices that avoid and/or minimize temporary impacts from in-water and above-water construction (App. D-1, pgs. 4-91 and 4-92). The San Francisco Bay Regional Water Quality Control Board has identified criteria needed to issue a Water Quality Certificate, including mitigation for unavoidable adverse impacts to aquatic habitats that would replace the quality and quantity of habitat lost, incorporation of runoff and surface water management measures for all new or modified impervious surfaces, groundwater and discharge modeling, and a complete CWA §404(b)(1) analysis (App. D-1 p. 5-7). According to the Draft EIS, BCDC informed the Corps that project design details were not sufficient to support a formal review. The Draft EIS confirms that a consistency determination with BCDC's Bay Plan[5] would need to be based on a greater level of design (App. D-1 p. 5-16).

[5] See https://www.bcdc.ca.gov/plans/sfbay_plan.html#2.

Recommendations for the Final EIS and Record of Decision:

- Continue to work with the San Francisco Bay Regional Water Quality Control Board and BCDC to refine designs sufficient to support a formal review and provide permitting authorities with sufficient information to support compliance with water quality standards, including modelling and mitigation, and procedures necessary for issuance of a water quality certificate.
- As project engineering and designs are refined to an acceptable level, determine whether corrections or revisions to the EIS or alternatives are needed, or whether project components that cannot be made compliant need to be removed or revised.

Air Quality

The EPA understands that compliance with the Clean Air Act has been delayed until Preconstruction Engineering and Design, and that the Bay Area Air Quality Management District needs a comprehensive emissions analysis with more accurate data to define expected construction activities and the level of mitigation needed to offset impacts (App. D-1 p. 5-8).

The Draft EIS acknowledges that during construction, there would be unavoidable air quality impacts associated with the release of exhaust emissions from the operation of heavy equipment and the transport of personnel and materials into and out of the project area. The EPA understands that necessary mitigation measures would include implementation of the Air Quality Management District's Basic and Enhanced Best Management Plans for Construction and a health risk assessment for future construction within 1,000 feet of sensitive receptors, like residential properties, schools and hospitals (App. D-1 pgs. 4-39 – 4-42; App. D-1-1, p. 14). The Draft EIS states that no compensatory mitigation is necessary based on existing information now. Should modeling indicate that emissions are greater than *de minimus* levels once the designs have been refined, compensatory mitigation would need to be considered and would likely include funding an off-site emission reduction project (App. D-1, p. 4-178).

Recommendations for the Final EIS And Record of Decision:

- As project-specific analyses are conducted, commit to all best management practices and mitigation measures necessary to avoid, minimize or mitigate construction-generated emissions. If health risk assessments demonstrate a significant risk, include additional measures to reduce these risks to the lowest level possible, e.g., financial assistance for residential air filtration systems; use of on-road versus off-road engines for on-site hauling.
- Describe a timeline and forum for how the Corps would fulfill the public notice requirements for the Draft General Conformity Determination in 40 C.F.R. §93.156 if it is not included in the Final EIS. Note that the applicability analysis should incorporate only the mitigation measures that the Corps and local sponsor would implement.

Purpose And Need

The stated purpose of this Draft EIS is to investigate the feasibility of managing the increasing risk of fluvial and tidal flooding from storms, extreme tides and future sea level rise along 7.5 miles of the San Francisco Bay shoreline (p. 10). However, the Draft EIS follows proposed guidelines[6] that expand this

6 Corps of Engineers' *Agency Specific Procedures to Implement the Principles, Requirements and Guidelines for Federal Investments in Water Resources*, 89 Fed. Reg. 12066 et seq. to be codified at 33 CFR Part 234.1 et seq. (February 15, 2024)

singular purpose to also meet regional economic, social and environmental needs and follow national policies to ensure that infrastructure investments encompass climate-smart, long-term solutions.[7]

There is a good deal of overlap between the Corps' new guidelines, NEPA (40 CFR §1502.13) and Clean Water Act Section §404(b)(1) analyses (33 CFR §325) in considering the purpose and need for action and preparation of alternatives. The analytical framework for evaluating federal investment alternatives under each requires identifying the alternative that would be best for the environment and the alternative that would deliver the biggest net public benefit based on regional economic, social and environmental factors.

The EPA notes that the alternative features presented in the waterfront study are not limited to just structural flood control defenses, but that a Plan that maximizes total net benefits across all possible sea level change scenarios would draw from Regional Economic Development, Other Social Effects, and Environmental Quality accounts (pgs. 37-38). The need to preserve and protect transportation services, community cohesion, vulnerable populations, air and water quality, ecosystems, and cultural and historic resources are fundamental benefits of the project and drive the alternatives. The EPA recommends that public benefits be reflected upfront in the Purpose and Need statement to broaden evaluation criteria of completeness, acceptability, efficiency and effectiveness and align with subsequent uses of the document for clean air and water regulatory authorizations and California's Environmental Quality Act.

Recommendations for the Final EIS:

- Expand the statement of Purpose and Need to reflect the objectives of Regional Economic Development, Other Social Effects, and Environmental Quality accounts and evaluation criteria to guide future analysis and design.
- Retain all practicable alternatives, or parts thereof, that best achieve net benefits and meet multiple project needs to increase flood control performance, add resiliency, and are ecological acceptable and adaptable.

Engineering With Nature

Section 1184 of the Water Resources Development Act of 2016 requires consideration of natural and nature-based features (NNBFs) in addition to nonstructural and structural measures in flood risk management and ecosystem restoration. The Draft EIS indicates that the current Total Net Benefits Plan seeks to avoid significant adverse impacts to ecological habitats by placing the line of defense at or landward of the existing shoreline and avoids bay fill to the greatest extent practicable (App. D- 1, p. 2-4). The EPA appreciates the discussion of this topic in Appendix I[8] and the Corps' intent to embed natural elements within and alongside engineered structures to better support adaptation success and long-term resilience for San Francisco's waterfront.

[7] OMB Memorandum M-24-03 *Advancing Climate Resilience through Climate Smart Infrastructure Investments* at https:// www.whitehouse.gove/omb/information-for-agencies/memoranda/#memoranda-2023.

[8] Tables I- 2 and I-3 (pgs. App. I-22-26) describe the types of natural and nature-based features retained for flood control and potential mitigation.

The EPA supports the use of NNBFs for both resiliency and mitigation. Because NNBFs can dissipate wave energy, reduce wave runup and prevent overtopping of hardened flood structures, the EPA encourages the use of the specifically selected NNBFs that add roughness and/or change the slope as first actions to reduce flooding (p. 75; App. I, p. I-2). The EPA acknowledges that adding marsh enhancement features, ecological armoring, naturalized shorelines, and ecotone levees would help to defend the loss of ecologically important habitats and potentially offset adverse impacts from project activities (p. ES-11).

Noting the dynamic nature of NNBFs, we recommend that NNBFs be built as soon and as high as possible to give them time to adapt to changed conditions and replace any lost ecological functions and values. For example, first actions include habitat enhancements to rare and significant wetlands along Islais Creek, Pier 94, and Warm Water Cove which are most prone to highest wave runups and deterioration or loss of intertidal and tidal marsh habitats (App. D-1, p 4-85; App. D-1-5, pgs. 2-11/12). However, no augmentation/enhancement is planned under the current Total Net Benefits Plan for Heron's Head Park[9] although the Draft EIS states it would significantly improve suitable and preferred habitat for threatened and endangered species, both terrestrial and aquatic, as well as provide new habitat areas for migratory birds (p. 116; App. D-1, Section 4.16.5).

Appendix I outlines the opportunities for each of the NNBF types represented in the alternatives. One such opportunity is the use of living seawalls - texturized concrete on a vertical seawall - designed to reduce wave hazards while supporting nearshore ecology (p. 93). EPA is aware of an ongoing pilot project on the waterfront evaluating potential impacts and long-term benefits to native species and underwater habitats (App. I, p. I-72).[10] Only Alternative E currently includes living seawalls, but if shown to provide net benefits, the EPA would support inclusion of living seawalls in any alternative that includes vertical shorelines.

The Draft EIS states that inclusion of the most promising and effective NNBFs from across the alternatives would be optimized in the final recommended plan (App. I, p 1-2). The CWA §404(b)(1) analysis would help assess impacts and evaluate benefits using the requisite sequencing to avoid, minimize, and then mitigate impacts to aquatic resources to determine the Least Environmentally Damaging Practicable Alternative. After determining the LEDPA, the agencies would then assess the need for compensatory mitigation based on quantification of positive and negative impacts and overall net outcomes.

Recommendations for the Final EIS:

- Further develop first action designs and include NNBFs that reduce flood risk as well as avoid or minimize significant adverse impacts in a tentatively selected plan.
- Evaluate NNBFs (integrated and independent measures) as avoidance and minimization measures to be appropriately considered in the CWA §404(b)(1) alternatives analysis to determine the LEDPA.

[9] The Heron's Head Park Shoreline Resilience Project is considered an existing condition and is expected to restore the type and extent of habitats with coarse gravel beach, new vegetation to reinforce the shoreline, and subtidal oyster reefs through the middle of this century (p. 56).

[10] Living Seawall Pilot | SF Port; https://sfport.com/wrp/living-seawall

- Consider whether NNBFs proposed as Independent Actions or in Alternatives D, E, F and G, such as living seawalls or marsh restoration at Heron's Head Park, could be implemented earlier to reduce flood risk, improve resiliency against higher rates of sea level rise and realize additional public and ecological benefits.
- Beneficially re-use suitable sediments dredged from the shipping channel at Islais Creek to augment wetland or marsh enhancements or other proposed NNBFs.

Transportation

One of the objectives of this study is to maximize resilience of City transportation infrastructure essential to the daily operations and functioning of the City by building adaptable or resilient structures regardless of the sea level change curve (p.65, 70, 89). The Draft EIS considers "going 'big" with first actions in Reach 2 by assuming a higher level of sea level change to provide long term resilience and eliminate multiple or second phase construction impacts to public transportation (pgs. 90, A-169, A-172). Raising the shoreline in place could require the reconstruction of the full Embarcadero roadway; analysis of how to utilize the available space would happen during Preconstruction Engineering and Design (p. 154.) The City is particularly interested in leading the design process for what is implemented "on top" of future coastal flood defenses (e.g., roadway configuration, alignments and approaches), and emphasizes the importance of avoiding multi-modal and light rail transit impacts during the construction period (p. ES-11 and 13).

The Draft EIS states that infrastructure projects associated with the project would disrupt traffic patterns, result in transportation corridor closures, loss of access and parking, detours and increased construction traffic and congestion near staging and construction areas. These impacts are expected to be temporary but long lasting until construction is complete. Permanent unavoidable impacts may include changes to bikeway, sidewalk and transit stop configurations as well as rerouting in areas of raised elevation or narrowing of roadways to accommodate the levees and floodwalls. The Draft EIS states that alternative design configurations are possible that would eliminate disturbance of the roadway (App. D-1, p. 4-178). While there is mitigation proposed in the Draft EIS, the Final EIS would benefit from confirmation of how the implementation would be coordinated among various transportation agencies.

Recommendations:

- Prepare a Coordination Plan that establishes the timing and form of agency involvement and responsibilities related to short- and long-term changes to transit services; and include an outreach process that provides the public with opportunities to comment on an informed assessment of potential impacts, construction timing and changes to bus, rail, bike, pedestrian, ferry and surface transportation.
- Include in the Construction Management Plan ways to avoid or minimize or adverse impacts to transportation services with notice provisions that inform the affected public of project timing, alternative routes and changes to transit service locations.

Noise and Vibration

During construction, the Draft EIS acknowledges the likelihood of unavoidable noise and vibration impacts associated with pile driving, operation of heavy equipment, and movement of personnel and material into and out of the project area. In combination with other sources associated with a densely

populated urban environment, the influence of each of these sources of noise on ambient levels depends on the proximity of sensitive receptors, including residences, schools and hospitals, to transportation corridors and developed areas. The Draft EIS acknowledges that construction could result in long-term, substantial increases above ambient noise levels while also exceeding Federal Transit Authority noise and vibration criteria and Caltrans criteria for building damage (p. 128; App. D-1-2, section 2.2.3). The Draft EIS incorporates mitigation measures to minimize construction-related noise impacts, such as limiting heavy equipment use to daytime hours, constructing barriers to minimize noise around sensitive receptors, conducting noise and vibration monitoring, and employing common construction best management practices (p. 25, App. D-1-2 Section 2.3).

> ***Recommendation:*** Conduct a noise and vibration analysis for the construction of project components. Consider the use of technical guidance developed by the Federal Transit Authority which presents a process of assessing noise and vibration impacts during construction and includes impact criteria and mitigation specifically related to noise-sensitive land uses.[11]

Compensatory Mitigation

A Habitat Equivalency Analysis was used to assess the project's impacts on fish and wildlife habitat and other ecological resources and Appendix K looks at unavoidable habitat impacts from construction and long-term operation of the project components. The HEA focuses on complete, in-kind replacement of services lost between the time of impact and when the restored or created habitat becomes fully functional (App. K, p. K-6). We note that the Resource Agencies Working Group and Engineering with Nature Working Group found that the project would benefit from continued coordination with resource agencies and analyzed a variety of potential mitigation strategies. These groups recommended that mitigation projects be tailored to specific locations and needs and that pier and pile removal or restoration compensate for 8-9 acres of bay fill (App. K, pgs. K-10/11).

> ***Recommendations for the Final EIS*:** Continue to consult and coordinate with resource agencies and working groups in the design and implementation of final mitigation plans.

[11] Transit Noise and Vibration Impact Assessment Manual (dot.gov); https://www.transit.dot.gov/sites/fta.dot/gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-fta-report-no-0123_0.pdf.

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March 29, 2024

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SUBJECT: San Francisco Waterfront Coastal Flood Study, CA Draft Integrated Feasibility Report and Environmental Impact Statement

Dear Ms. Fisher:

Thank you for the opportunity to comment on the U.S. Army Corps of Engineers (USACE) San Francisco Waterfront Coastal Flood Study, Draft Integrated Feasibility Report and Environmental Impact Statement (Flood Study), dated January 2024. The purpose of the Study is to investigate the feasibility of managing 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, with the potential for extensive damage to public infrastructure and private property and associated impacts to the San Francisco waterfront, which is expected to increase over time as sea levels rise in the bay.

The San Francisco Bay Conservation and Development Commission staff (BCDC staff) comments discussed below are provided as Participating Agency and are based on BCDC's law, the *McAteer-Petris Act*, BCDC's *San Francisco Bay Plan* (Bay Plan), BCDC's federally-approved management plan for the San Francisco Bay, and the federal Coastal Zone Management Act (CZMA).

The San Francisco Bay Conservation and Development Commission is a State of California government agency located in the City of San Francisco with regulatory and planning responsibilities over San Francisco Bay, the Suisun Marsh, and along the Bay Area's nine-county shoreline. BCDC is guided in its actions by two particular state laws under its charge, the McAteer-Petris Act and the Suisun Marsh Preservation Act, as well as the policies which further implement these laws, respectively, the San Francisco Bay Plan (including certain special plans which are part of the Bay Plan such as the San Francisco Waterfront Special Area Plan) and the Suisun Marsh Protection Plan (and the locally-adopted Suisun Marsh Local Protection Program). BCDC staff have based its comments on these laws and policies, and other advisory regional adaptation resources published by the agency, including Bay Adapt: Regional Strategy for a Rising Bay. USACE and the Port of San Francisco (the Port) provided a briefing to BCDC at a public meeting on February 15, 2024.

BCDC staff want to acknowledge and applaud the USACE and its partner, the Port of San Francisco, on this monumental study to address sea level rise, flooding, and other climate change hazards along the San Francisco Waterfront. The San Francisco Waterfront is a vitally important regional resource for port and related maritime facilities, public access, open space, recreational sites, and water–oriented commercial recreation. We commend the Study's innovative proposed "adaptation pathway" approach to identifying resilience strategies that will be monitored and adapted over time. This approach will provide the flexibility necessary to protect this important resource. The study is a groundbreaking effort San Francisco Bay and balances the urgent need to adapt to the risks posed by climate change and natural hazards with the everyday needs of San Franciscans and Bay Area residents who rely on this important waterfront.

Project Area and BCDC Jurisdiction

The Project area encompasses 7.5 miles of developed, urbanized waterfront that extends from the curved, northeast shore adjacent to Aquatic Park in Fisherman's Wharf to Heron's Head Park near India Basin in the southeast. Land uses within the Project area include commercial, residential, recreational, park, industrial, maritime, and public uses.
The Project area is located within BCDC's permitting jurisdiction:

- Bay Jurisdiction: In the San Francisco Bay, being all areas subject to tidal action, including tidelands (land lying between mean high tide and mean low tide) and submerged lands (Government Code Section 66610(a)); and
- Shoreline Band Jurisdiction: In the shoreline band consisting of all territory located between the shoreline of the Bay, as described above, and 100 feet landward of and parallel with the shoreline (Government Code Section 66610(b)).

A BCDC permit is required for fill, extraction of materials, and any substantial change in use within the Commission's jurisdiction. Fill includes solid fill, pile-supported structures, cantilevered structures, or floating fill. Furthermore, rehabilitation of existing piers may be considered Bay fill depending on the work associated with the rehabilitation. It is often necessary to coordinate with BCDC staff to appropriately identify the jurisdiction in which work may take place and identify the appropriate standards and policies that may apply.

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. Both federal consistency review under the CZMA and permitting pursuant to the McAteer-Petris Act will likely be required for certain activities and plans

developed pursuant to the Flood Study. BCDC encourages USACE and the Port 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 requests the Port of San Francisco staff and USACE staff to meet with BCDC staff to review any project proposals, coordinate approvals, and review any issues raised by BCDC's laws and policies very early. BCDC staff request that any future consistency determination not be submitted without prior consultation with BCDC staff. 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.

Existing Permits

There are a large number of existing BCDC permits within the 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 pursuant to 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, potential coastal storm and flood risk management alternatives would impacts have on existing public access or other conditions required in these permits.

Special Area Plan Considerations

The San Francisco Waterfront Special Area Plan (SAP) applies the requirements of the McAteer-Petris Act and the provisions of the San Francisco Bay Plan in greater detail to the San Francisco Waterfront. Applications for projects in BCDC's jurisdiction in the plan area (from the Hyde Street Pier through India Basin) must be consistent with the provisions of the SAP in addition to the Bay Plan and McAteer-Petris Act. BCDC staff have not assessed the TSP for potential conflicts with the SAP on a project-specific basis because it would not be appropriate to do so until detailed project designs are proposed. The existing SAP does not address climate change or sea level rise, but proposed projects in the SAP area would need to be consistent with the Bay Plan climate change policies.

Pursuant to an existing MOU between BCDC and the Port of San Francisco, these agencies will undertake a collaborative effort to comprehensively update the SAP in the future. This process will involve integrating a number of ongoing planning processes, including the Flood Study and the Bay Adapt Regional Shoreline Adaptation Plan process (discussed below), and will involve substantial public outreach and engagement. This comprehensive SAP update will require identifying a framework for policies and standards for resilience and rehabilitation of the San Francisco Waterfront along with proposing public benefits. The existing SAP recognizes public plazas, open water areas, and fill removal as public benefits, but additional benefits may be identified through the comprehensive SAP and other planning process. BCDC staff recommend the Port, with the assistance of the USACE, consider this comprehensive SAP update as it develops the Study, in particular to identify future public benefits early.

Priority Use Areas

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 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. The Study should consider 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 Study should consider 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 Study should describe the consistency of the potential coastal storm and flood risk management alternatives with the Plan Map policies and suggestions.

SB 272 and the Bay Adapt Regional Shoreline Adaptation Plan Guidelines

California Senate Bill (SB) 272 (2023) requires all local governments along the Bay to address sea level rise through San Francisco Bay Sub-Regional Plans by January 1, 2034. Jurisdictions that complete this requirement will be prioritized for state funding. Vulnerability assessments and adaptation plans will be based on best available science, cover specified priorities, and will get updated on a timeline agreed upon by the local governments and BCDC. In early 2023, BCDC launched an initiative to develop a Regional Shoreline Adaptation Plan. The plan will provide guidance for the development of plans for the purpose of implementing SB 272, which SB 272 requires BCDC to establish by December 31, 2024. As the City and County of San

Francisco is required by SB 272 to complete a sub-regional plan for sea level rise resilience, BCDC staff recommend that USACE and the Port align the proposed study and any subsequent plan with the Bay Adapt Regional Shoreline Adaptation Plan guidelines. The study, or any resulting plans or projects, may require modifications based on these guidelines in the future.

Bay Fill and Environmental Impacts Mitigation

Section 66605 of the McAteer-Petris Act sets forth the criteria necessary to authorize placement of new fill in the Bay and certain waterways. Among other things, it states:

(a) That further filling of San Francisco Bay and certain waterways specified in subdivision (e) of Section 66610 should be authorized only when public benefits from fill clearly exceed public detriment from the loss of the water areas and should be limited to water-oriented uses (such as ports, water-related industry, airports, bridges, wildlife refuges, water-oriented recreation, and public assembly, water intake and discharge lines for desalinization plants and power generating plants requiring large amounts of water for cooling purposes) or minor fill for improving shoreline appearance or public access to the bay;

(b) That fill in the bay and certain waterways specified in subdivision (e) of Section 66610 for any purpose should be authorized only when no alternative upland location is available for such purpose;

(c) That the water area authorized to be filled should be the minimum necessary to achieve the purpose of the fill;

(d) That the nature, location, and extent of any fill should be such that it will minimize harmful effects to the bay area, such as, the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources, or other conditions impacting the environment, as defined in Section 21060.5 of the Public Resources Code;

(e) That public health, safety, and welfare require that fill be constructed in accordance with sound safety standards which will afford reasonable protection to persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters;

In identifying approaches to resilience and adaptation, the Study does not currently propose significant fill outside of the existing footprint of the piers and shoreline. The Study should continue to prioritize minimizing fill, minimizing harmful effects to the Bay, and strong safety standards for development in the Bay. The San Francisco Waterfront Special Area Plan (Special Area Plan) exempts the water-oriented use requirement of 66605(a) and the alternative upland location requirement of 66605 (b) from the Northeastern Waterfront, as defined in the Special Area Plan. Pursuant to the Special Area Plan, in the Northeastern Waterfront, “within the boundaries of the existing pier footprint, an existing pier may be repaired or wholly reconstructed for a use consistent with the Public Trust Doctrine and the Port’s legislative trust grant” along with other requirements. These requirements should be considered in developing

projects consistent with the Study, in particular where the Port seeks investment from outside developers or lessees to fund rehabilitation or resilience work, to ensure that projects are consistent with the land use provisions of the McAteer-Petris Act and Special Area Plan.

Bay Plan policies on Mitigation require projects to be designed to avoid adverse environmental impacts. Where they cannot be avoided, they should be minimized to the greatest extent practicable, and finally, "measures to compensate for unavoidable adverse impacts to the natural resources of the Bay…" are required. 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 Study identifies seven habitat types that would be impacted within the project study area including: subtidal, beach, artificial rocky intertidal, pond and associated vegetation, tidal flat and marsh panne, tidal marsh, and eelgrass. BCDC policies also require mitigation for impact to open water, which is not explicitly identified. The Study should ensure that any adaptation measures avoid and minimize impacts, before proceeding to identify compensatory mitigation proposals. Approaches that involve retreat and natural or nature-based approaches over hard shoreline armoring can help achieve this Policy objective, as well as achieve consistency with the Shoreline Protection policies of the Bay Plan, discussed below.

Furthermore, if the Study proceeds with recommendations for mitigation using mitigation banks, the Study should consider that BCDC does not have any existing or pending agreements to accept credits from any mitigation banks. In addition, as cited above, BCDC policies prioritize providing compensatory mitigation near and concurrent to project impacts, and direct that mitigation banks should be used only when other types of mitigation cannot be provided. These requirements should be considered in identifying mitigation strategies for particular projects. As any mitigation options are developed, the proponents should undertake community outreach related to any vulnerable, disadvantaged, and/or underrepresented communities located near the Project site and those communities that are located near the compensatory mitigation site. We recommend that USACE and the Port collaborate closely with BCDC, and other relevant agencies, to ensure that mitigation approaches identified are consistent with BCDC's laws and policies and a coordinated approach is developed.

Environmental Justice and Community Engagement

As a requirement of the BCDC permitting process, equitable and culturally-relevant community outreach and engagement should be conducted for nearby communities. Policy No. 2 of the Bay Plan Environmental Justice and Social Equity chapter states "…the Commission should support, encourage, and request local governments to include environmental justice and social equity in their general plans, zoning ordinances, and in their discretionary approval processes." Policy No. 3 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." 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 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." Furthermore, Shoreline Protection Policy 2 states, "[e]quitable and culturally-relevant community outreach and engagement should be conducted to meaningfully involve nearby communities for all shoreline protection project planning and design processes 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."

The Study should incorporate feedback from culturally-relevant community outreach and engagement efforts, identify impacts from adjacent communities from resilience and adaptation measures. Furthermore, the Study should include a more comprehensive explanation for how the Study Area was determined, to ensure the communities within and adjacent to the Study area are aware of why areas that include underrepresented or vulnerable communities, such as Hunters Point, are not included in the Study area. To assist in these efforts, BCDC staff suggest consulting BCDC's Community Vulnerability and Community Based Organization Directory mapping, which was developed by BCDC's Adapting to Rising Tides Program to support shoreline adaptation planning and be used by the public and project proponents to help implement BCDC's Environmental Justice and Social Equity Bay Plan policies.

Climate Change and Regional Sea Level Rise Planning

Regional frameworks such as the Adaptation Atlas (SFEI 2019), Baylands Subtidal Goals (2010) and Ecosystem Habitat Goals Update (2015), Adapting to Rising Tides Bay Area (BCDC, 2020), the Bay Adapt Joint Platform (BCDC, 2021) and BCDC's Adaptation Roadmap: A Practitioners Guide (2022) provide important regional context and guidance, particularly around nature-based approaches and equitable engagement practices. BCDC staff encourages review of these resources in further development of the Study. Through BCDC's Regional Shoreline Adaptation Plan effort currently underway (https://www.bayadapt.org/regional-shoreline-adaptation-plan/), the Commission is also developing guidelines for local governments to develop subregional sea level rise adaptation plans in furtherance of SB 272 (Laird, 2023), as described above, which will be completed by the end of 2024.

The State of California Sea Level Rise Guidance document (OPC Guidance) is currently being revised by the Ocean Protection Council (https://opc.ca.gov/2024/01/draft-slr-guidance-2024/). The Study should be revised to account for the updated projections and scenarios provided for in the updated State of California Sea Level Rise Guidance.

BCDC staff believes the Study is extremely comprehensive in describing possible planning scenarios. The adaptation pathway approach to planning for future actions ("Second Action" and beyond) is generally consistent with BCDC's recommended approach to adaptation planning, as well as being generally consistent with the Climate Change policies in the San Francisco Bay Plan. However, while Section 3.3.1.4 of the Study mentions the updated OPC Guidance, the new draft updated OPC Guidance should be reflected in Figure 3-4 and Table 3-1 as well.

While the general approach of the Study to adaptation is consistent with the Climate Change policies of the San Francisco Bay Plan, alternatives of the TSP at earlier stages with lower sea level rise projections involve flood proofing to the 1% annual exceedance probability coastal flooding level or "no action." It is important to ensure that any projects with fill in the Bay, or incorporating public access, using these early stage alternatives are consistent with BCDC's Climate Change policies. Flood proofing and "no action" may generally meet the requirements for resilience to mid-century of sea level rise projections, but there may be individual projects that require additional measures to ensure resilience and consistency with the Bay Plan. The standards of the Bay Plan should be considered when developing alternatives for specific areas of the waterfront.

Flooding from Emergent Groundwater

Groundwater rise driven by climate change is an emerging concern in the Bay Area and while the full extent of its impacts is still being studied, recent analyses offer initial steps and methods to review the vulnerability of a shoreline site to groundwater rise and flooding. The prevalence and severity of shallow groundwater rise in certain areas may make it infeasible to rely on shoreline protection structures as shallow groundwater rise will lead to flooding that permeates up from the soils (as opposed to overtopping from the Bay). Groundwater flooding can contribute to mobilization of contaminants. While there may be engineering strategies, such as pumping and draining, that would be used in these instances, the long-term cost of these strategies and length of time they will be effective for should be considered early as part of the local planning. While Appendix B.1.5 includes maps of existing groundwater, however the Study should extensively map future scenarios of emergent groundwater flooding consistent with projections for rising sea level and storms. The Study should provide a clearer link between section 2.4.6 and 3.3.1.7 to ensure groundwater flooding is given appropriate context. Furthermore, the impact to groundwater flooding induced from sea level rise to critical infrastructure around the shoreline, such as sewage, should be carefully considered in the strategies identified by the Study. Groundwater pumping impact to subsidence and adjacent communities should also be considered.

Shoreline Protection

Several strategies outlined in the Study involve additional shoreline protection along the waterfront. The San Francisco Bay Plan Shoreline Protection Policy 1 states:

> "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. Professionals knowledgeable of the Commission's concerns, such as civil engineers experienced in coastal processes, should participate in the design."
>
> 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."

Some alternatives described in the Study involve additional shoreline armoring, through additional sheet pile walls, barriers, elevating existing grades, flood walls, etc. These armoring strategies can have direct and indirect impacts on adjacent communities and the Bay caused by changes in hydrology such as wave refraction and impacts to water circulation. The Study should evaluate these impacts, which can occur even far beyond the Study area.

Furthermore, regarding habitat-based shoreline protection measures, Shoreline Protection Policy 5 states, "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."

Development of approaches to resilience and adaptation alternatives should incorporate natural or nature-based features to be consistent with the San Francisco Bay Plan, to the greatest extent practicable. Projects that will result in a future BCDC permit application that do not incorporate natural or nature-based approaches will be required to demonstrate why those approaches are not feasible. The Study currently identifies some areas of the shoreline as appropriate for natural or nature-based solutions but not others, and the feasibility of natural or nature-based solutions in areas not identified for those alternatives is not clear. The Study should evaluate the feasibility of natural or nature-based or hybrid solutions for the entire waterfront to support the design basis for future projects.

Aquatic Resources

The habitats listed in Appendix K do not match the aquatic resources listed in 2.3.1 or the upland resources in 2.3.2. It is suggested that consistent source for naming vegetation types and habitat types is used throughout the Study, preferable the MCV.

Seismic Hazards

Many locations along the waterfront have been identified as or could serve as critical facilities for emergency evacuation via water transit services. It is imperative to protect and maintain the usability of these facilities. BCDC's Engineering Criteria Review Board have commented on the necessity of ensuring the seismic stability of these structures so they remain viable in the event of an emergency. (This is based on the findings from BCDC Permit No. 2016.001.03) BCDC staff recommend considering additional critical response points, such as Pier 35/Alcatraz landing; Pier 27 Cruise Terminal; Pier 3, Piers 38-40, Oracle Ferry Dock, and Bayfront Ferry Terminal.

Public Access and Recreation

The Commission policies direct it to ensure that *"any project within its jurisdiction provide maximum feasible public access to the Bay's shoreline consistent with the project.*" Public Access Policy 1 states in part that, "*A proposed fill project should increase public access to the Bay to the maximum extent feasible."* When public access is not feasible on site, the Commission looks to the project proponent to provide offsite, but nearby public access, such as overlooks and viewing opportunities, or funds for alternate public access in the affected community commeasure with the project. Further, when in lieu public access is necessary and cannot be located nearby the project, the policies support developing public access in vulnerable communities.

Public Access Policy 8 states that public access "improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should provide barrier free." Water-based recreation like wakeboarding, windsurfing, and kiteboarding are all activities that happen along the waterfront but more so outside the study area. Within the study area, open-water swimming and kayaking are more common water-based activities. Consider highlighting other landside water-oriented recreation along the shoreline such as beaches, if feasible. Additionally, Public Access Policy 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."

There are a number of water-oriented recreation providers that are located within the study area. BCDC staff recommend consulting with these providers, if they have not been included, to ensure continued access for existing users and future access for recreational activities.

Shoreline Circulation

As stated in the Study, the Embarcadero Promenade, and the Blue-Greenway, both elements of the San Francisco Bay Trail that provide miles of access along San Francisco Bay, are significant recreation resources and are among the most heavily used trails for walking, jogging, and cycling in the city. Bay Plan Transportation Finding I recognizes "[a] continuous network of paths and trails linking shoreline communities and crossing the Bay's bridges is a vital component in a regional transportation system and provides travel alternatives to the automobile." When classifying projects for approaches to reduce risk, trails and bike routes that are included in urban and regional trail networks, such as the Bay Trail, should be treated and maintained as critical transportation infrastructure.

The Study includes reconstruction and redesign of the Embarcadero roadway. While BCDC staff recognize that surface design of the Embarcadero roadway and promenade will be determined in future project phases, BCDC policies in the Bay Plan, San Francisco Waterfront Special Area Plan, and finally Public Access Design Guidelines by BCDC should be considered in early planning stages.

Bay Plan Public Access Policy 9 states, in part, "[a]ccess to and along the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available." Within waterfront parks, Recreation Policy No. 2 states "[t]rails that can be used as components of the San Francisco Bay Trail… [should be] located near the shoreline."

On the design of roads near the shoreline, Bay Plan Public Access Policy 10 states, in part, "[r]oads near the edge of the water should be designed as scenic parkways for slow-moving, principally recreational traffic. The roadway and right-of-way design should maintain and enhance visual access for the traveler, discourage through traffic, and provide for safe, separated, and improved physical access to and along the shore. Public transit use and connections to the shoreline should be encouraged where appropriate."

View Corridors

Bay Plan Appearance Design and Scenic Views Policy No. 2 states, in part that "[a]ll bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay," with "[m]aximum efforts…made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore." Policy No. 8 stresses that "[s]tructures and facilities that do not take advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline. Shoreline developments should be built in clusters, leaving open area around them to permit more frequent views of the Bay."

From Shoreline Spaces Public Access Design Guidelines for the San Francisco Bay guidance document, Objective No. 3 states “Provide, maintain and enhance visual access to the Bay and shoreline,”and Objective No. 4 further informs us to “Maintain and enhance the visual quality of the Bay, shoreline and adjacent developments.”

Lastly, the San Francisco Waterfront Special Area Plan General Policy No. 7 states, in part, that “[i]mportant Bay views along The Embarcadero and level inland streets should be preserved and improved.” Potential view corridors should be evaluated and identified as part of the Study’s overall review of public access opportunities. In addition, shoreline protection strategies, such as walls and elevating the shoreline can impact views to the Bay. These impacts should be carefully considered and designs to avoid impacts to views, preserve or improve viewing to the Bay should be incorporated in the design and selection of alternatives.

Plan Communication

To improve the clarity and understandability of the Study to the public, BCDC staff recommend reducing the number of acronyms in the Study. In addition, the Study should include more maps and graphics throughout the document. Of particular need is to pair maps and graphics when different reaches and alternatives are discussed, to better orient and inform the reader.

Conclusion

BCDC staff thank USACE and the Port for the opportunity to comment on the Study, and look forward to continuing our close collaboration as the study develops.

Sincerely,

DocuSigned by:
Erik Buehmann
DE28A8DB779F45C...

ERIK BUEHMANN
Planning Manager

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March 29, 2024

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

Dear U.S. Army Corps. of Engineers,

On February 7, 2024 and March 20, 2024, the SF Historic Preservation Commission (HPC) held public hearings for the Commissioners to hear public testimony and to provide comments on the U.S. Army Corps. of Engineers (USACE) Integrated Feasibility Report, and Environmental Impact Statement (EIS) for San Francisco Coastal Flood Study that addresses sea level rise threats to the waterfront under the jurisdiction of the Port of San Francisco (Case No. 2019-004879CWP).

After presentations from the Port's Waterfront Resilience Program staff, the Commission asked a series of questions and arrived at the comments below on the documents reviewed:

Scope of Draft Plan

The Coastal Flood Study is limited in scope and does not address the sea level rise at Aquatic Park, the Presidio or the Marina. Also, the Historic Preservation Commission is questioning how resilience is being addressed in other coastal areas beyond the Port's waterfront. The HPC would like to understand the interrelationship between the different efforts and would request that a full presentation on all city, state and federal resilience efforts be arranged at a future informational hearing to ensure that there is a holistic plan to address sea level rise particularly as it affects historic properties.

Further, questions were raised as to whether the proposed coordinated efforts are utilizing consistent sea level rise data, time horizons and assumptions. The HPC believes that the economic impact of the draft plan is an important component of the project analysis and encourages the USACE and Port to look at resilience efforts nationally to understand how other entities are approaching this important topic and the treatment of cultural and historic resources. In short, HPC would like to see a comprehensive strategy taking place and remains concerned that the adaptation of some portions of the waterfront might accidentally worsen sea level rise risks in other areas.

Also, the HPC acknowledges that the Fort Mason Center is not included in the draft plan as it is located on federal property, and thus their plans are addressed through a separate USACE process. It should be noted, however, that

the Fort Mason piers are higher in elevation than those on the Embarcadero. Fort Mason has begun a climate initiative study that will use City sea level rise projections in coordination with the Presidio Trust, the property owner.

The HPC would like to request a project timeline and detail on the various phases of the project implementation. Specifically, which projects will be delivered first and how that relates to vulnerable populations like the Islais Creek area. Also, of interest is whether projects will be building on one another or replacing earlier work to achieve increasing levels of resilience.

The 60-day comment period for such an important and large scale NEPA process does not provide adequate time to notify and receive comment from the many stakeholder organizations that will be affected by the plan. Some organizations meet infrequently or on a monthly basis and need time to disseminate information to their membership. While we understand that the Section 106 process will continue beyond the 60-day comment period for NEPA/EIS, it would be appropriate for the USACE to provide a comment period proportional to the size and complexity of the project in the future. Each step of the process is important and historic preservation and community stakeholders must have adequate time to respond to both the EIS and the Section 106 and Programmatic Agreement.

The HPC also had questions about the Independent Measures. The Port staff explained that these are project components proposed by the Port/City which are included in the NEPA analysis that can be considered for inclusion in the Draft Plan as the plan is being refined. Examples of a Ferry Building basement and the replacement of bulkhead wharves in the Piers 27 and 35 stretch of the Embarcadero Historic District are two of the Independent Measures included in the draft plan. The HPC supports the Independent Measures that help to protect and rehabilitate historic properties and believe they should be included in the draft plan.

Identification of Historic Properties

The HPC would also encourage cooperation between the USACE and Planning Department to identify historic properties outside of the Port's historic districts. The Planning Department's Citywide Survey process underway may provide the best approach for evaluating the significance of properties that will reach the 50-year age threshold within the draft plan timeframe and so that they can be considered for eligibility on the California and/or National Registers.

Secretary of the Interior's Standards for the Treatment of Historic Properties

The adaptation of the Port's historic resources to address seismic and sea level rise threats needs to be evaluated for consistency with the Secretary of the Interior's Standards for the Treatment of Historic Properties (SOIS) and the NPS Flood Adaptation policy guidance. The draft plan adaptation approaches appear to follow the NPS policy.

However, the HPC recognizes that the USACE investment in the historic districts will impact contributing resources. The HPC acknowledges that the draft plan will not fully address the needs of the historic districts and that the Port will be seeking investment in the historic districts using its capital funds and private investment and if possible federal rehabilitation tax credits to adapt some district resources.

Ferry Building and Bulkhead Wharves

The HPC requests information on the results of proposed adaptation measures and how the elevated buildings like the Bulkhead and Ferry Buildings will be designed. The treatment of these contributing and landmark resources to address sea level rise is very important and will require in-depth analysis and discussion among the various stakeholders.

The HPC appreciates the opportunity to participate in the EIS review and looks forward to further involvement in the design and implementation of resilience projects as well as the on-going Section 106 process.

Sincerely,

Diane Matsuda
President
SF Historic Preservation Commission

March 29, 2024

Melinda Fisher
U.S. Army Corps of Engineers
Tulsa District, ATTN: RPEC-SFWS
2488 E81st Street, Tulsa, OK 74137
SFWFRS@usace.army.mil

RE: San Francisco Waterfront Coastal Flood Study

Dear Ms. Fisher,

This letter is to provide comments on the National Environmental Policy Act (NEPA) portion of the San Francisco Waterfront Coastal Flood Study ("Flood Study" or "Study") Draft Integrated Feasibility Report and Environmental Impact Statement ("Draft Report"). As lead agency for the City and County of San Francisco ("City"), the Port of San Francisco ("Port") is submitting these comments on behalf of the City.

The following comments are related to the NEPA impact analysis, impact conclusion, and mitigation measures. Further environmental review will be required once design details and construction information are developed at a project level.

Thank you for your partnership in developing and evaluating the Draft Plan and continuing to work toward the Final Report. If you have any questions about City comments or if additional input is needed, please let us know.

Sincerely,

Bradford J Benson

Brad Benson
Waterfront Resilience Director
Port of San Francisco

Section	Page Number	Category	Comment
General Comment		Transportation	To ensure the feasibility of the transportation mitigation measure, the draft report/EIS should include a comprehensive transportation disruption mitigation program to fund alternative transit planning, active transportation facilities, emergency services access, and traffic rerouting. The mitigation program should identify clear roles and responsibilities necessary to implement the measure and be designed in close coordination with the community and project stakeholders.
General Comment		All NEPA disciplines	Project level design detail and construction sequencing will be required to fully evaluate potential impacts of construction and operation of the project and to develop adequate mitigation.
App. D-1-4 2.1.1	1-3	Transportation	Include additional planning efforts such as the ConnectSF Transit Strategy and Streets and Freeways Study, Link21, Railyards, Pennsylvania Ave Extension (PAX), Muni Metro Modernization, Central Subway Extension, Geary/19th Ave Subway Study, Active Communities Plan, Muni Service Equity Strategy, Embarcadero Enhancement, General Plan, 20 Year Capital Plan and the SF Transportation Plan. Also recommend including the BCDC/MTC Sea Level Rise Investment Framework.
App. D-1-4 2.1.3.1	8	Transportation	In the “N Judah” section, there is reference to the portal at Howard St and Embarcadero and also indicates it is a BART/MUNI asset, but the “Folsom Portal” is not a BART asset.
App. D-1-4 2.1.3.1	9	Transportation	Recommend clarifying the various portals as it is not clear what the “Ferry Portal” is referencing.
App. D-1-4 2.1.3.1	10	Transportation	1399 Marin is owned by the Port. Recommend clarifying the role that this facility plays and also organizing the info on page 10 and 11 so that facilities are distinct from other assets such as the portals, special trackwork, etc
App. D-1-4 2.2.1	15	Transportation	Noting that MTA does update its transit network to meet demand so please keep this in mind. For example, there may be new service for the Mission Bay Ferry Terminal.
App. D-1-4 2.2.2	16	Transportation	Consider including significance criteria that specifically address safety and accessibility and evaluate potential transportation impacts against those criteria. Potential effects could also include damage to assets, loss of access, congestion and a suite of economic, equity and mobility related impacts.

Section	Page Number	Category	Comment
App. D-1-4 2.2.3.1	21	Transportation	The language on page 21, does not appear to capture the critical role of the bridges to accessing MME for operations/maintenance and for citywide LRV service. The section should be updated.
App. D-1-4 2.2.3.1.1	23	Transportation	The table does not include transportation infrastructure such as substations and supporting infrastructure which is important for aspects of the transportation sector for providing transit service. Update the table to include transportation infrastructure.
App. D-1-4 2.2.3.1.2	24	Transportation	There is a statement that says “The TNBP would have minimal impact on the transportation infrastructure along the waterfront”. Impacts from construction, operation, and maintenance of the TNBP would be significant and in some cases unavoidable, even with mitigation. Recommend reviewing the impact analysis and revising conclusions.
App. D-1-4 2.2.3.1.2	24	Transportation	During construction, implementation of the TNBP would reduce capacity at the SFMTA’s 1399 Marin Facility by 50%, Islais Creek Facility by 20% and Muni Metro East by 50%. Capacity at Mission Bay Loop would be reduced by 100% during construction and operation. This was identified as a less than significant impact with implementation of AMM TR-4 and AMM-TR-9. Please further clarify what the estimated capacity reductions at these facilities would mean for Muni operations to that SFMTA can further consider whether these mitigation measures would be adequate to ensure the reductions would result in a less than significant impact. Additional mitigation may be needed to reduce the impact to less than significant
App. D-1-4 2.2.4	49	Transportation	SFMTA recommends an additional mitigation measure to increase redundancy in the transportation network to avoid significant impacts during construction, such as expanding rail, bike, and pedestrian infrastructure. This mitigation measure should be developed in close coordination with SFMTA and include elements identified in the forthcoming Embarcadero Connective Plan, among other relevant plans.
App. D-1-4 2.2.4	49, AMMTR-1	Transportation/ Mitigation Measure	In addition to the measures identified in AMM-TR-1, the SFMTA recommends inclusion of the following:

Section	Page Number	Category	Comment
			• Coordination with SFMTA and other City agencies on the development of a robust public outreach plan. • When detours for transit, other vehicles, and/or pedestrians and bicyclist are implemented, require that police officers or parking control officers monitor critical locations along the detour to promote unobstructed travel by vehicular traffic, transit, and people walking and bicycling. • Require contractors to provide carpool, bicycle, walk and transit access for construction workers. • In addition to "emergency services alternative routes for essential services" say something like: The construction contractor(s) shall submit a project corridor segment-specific emergency access response plan as part of compliance with bid specifications. This plan shall include fire department and emergency service access to construction areas and maintainability of access of emergency services such as fire hydrants.
App. D-1-4 2.2.4	49-50, AMM-TR-2 & AMM-TR-3	Transportation/ Mitigation Measure	The mitigation measure/avoidance and minimization measure should include a requirement to identify or develop performance standards for items such as bus bridges for rail transit, transit rerouting, and other mitigation actions to allow evaluation to determine that it meets the needs of the people who use the infrastructure, including evaluation of alternative pedestrian and bicycle access measures. Performance standard must be identified in coordination with the SFMTA.
App. D-1-4 2.2.4	50, AMM-TR-4	Transportation/ Mitigation Measure	The mitigation measure/avoidance and minimization measure should include a requirement to develop a performance standard by which to evaluate whether alternative transit access – including paratransit access- during construction provides adequate service to users of the affected routes. This performance standard must identified in coordination with the SFMTA.

Section	Page Number	Category	Comment
App. D-1-4 2.3	51		The “Cumulative Impacts” section only mentions Bayview / Hunters Point but modifications to the Muni system could impact other neighborhoods.
All Figures		Transportation	Recommend that all figures include critical supporting infrastructure such as substations, grid, communications infrastructure, etc.
All Figures		Transportation	The F Line trackwork is not identified in D-1-4-1A and should be referenced accurately in all Figures.
All Figures		Transportation	The 4th and Townsend Caltrain Yard should be referenced in all Figures such as D-1-4-1C.
All Figures		Transportation	The Islais Creek Facility and other facilities such as the Burke Facility should be identified as “SFMTA infrastructure” in all relevant Figures such as D-1-4-1D and also reference the Caltrain / HSR corridor. Is the rail line south of Islais Creek referenced in D-1-4-1D?
All Figures		Transportation	The Muni Metro Turnaround (MMT) structure and associated components should be referenced in all relevant Figures such as D-1-4-1B.
Figure D-1-4-1C		Transportation	Transit lines such as the 78X to Chase Center are missing from Figure D-1-4-1C.
App. D-1-3 1.1	1	Transportation	Recommend including and reviewing the Muni Equity Strategy and Environmental Justice Framework for the General Plan.
App.D-1-3 2.3.3.2.2	30-31	Transportation	In addition to the air quality and noise effects identified in the analysis, construction-related effects would include transportation effects (transit and general mobility). This is because the Muni lines what would be most affected during construction (e.g., T-Third) serve EJ communities in the Bayview.
App.D-1-3 3.0	55-56	Transportation	SFMTA comments on AMM-TR-1, AMM-TR-2, AMM-TR-3, and AMM-TR-4 would also apply to AMM-CIA-EJ-2 and AMM-CIA-EJ-2.
App. D-1, 4.3.5	4-9	Mitigation Measures	The top sentence of the page states, "all ground disturbance for access and staging areas would be temporary and fully restored to result in no permanent loss." Is this a mitigation measure? If so, please revise to identify as a mitigation measure.
Appendix D-1 4.8.8	4-40	Climate, Climate Change, and Relative Sea Level Change/ Mitigation Measures	One of the mitigation measures listed is "purchase carbon offsets" - is there a general idea about where these projects would be located? Please revise to add that offsets should be for the most local GHG offsets available.

Section	Page Number	Category	Comment
Appendix D-1, section 4.8.8	4-40	Climate, Climate Change, and Relative Sea Level Change/ Mitigation Measures	One of the mitigation measures says, "Future construction located within 1,000 feet of sensitive receptors would be required to perform an HRA." - when would this HRA occur and recommend specifying this in the mitigation measure. Also, are multiple HRAs going to occur across all these reaches for various different implementing components of the project? Please clarify the mitigation measure. State that during subsequent environmental analysis there would be an HRA.
Appendix D-1-1	3	Air Quality and Greenhouse Gases	Has the Army Corps implemented a program where it "provided financial assistance for high efficiency air filtration systems to those affected for use in residences"? If the Army Corps has, could you please share details of how this program works and local involvement in this mitigation measure?
Appendix D-1, section 4. 29	4-177	Cumulative Effects	Similar to the comment for page 4-41, what is the timing for modeling for construction air quality impacts? The text says, "As of now, no compensatory mitigation is necessary. However, if modeling indicates emissions are greater than de minimus levels once the designs have been refined, compensatory mitigation will need to be considered and would likely include funding an off site emission reduction project."
Appendix D-1-1, section 2.3.4	30	Air Quality/ Mitigation Measures	Recommend adding in more specifics for timing for when the detailed construction assessments are conducted in AMM-AQ-2. Right now, the measure states, "as the design progresses, and after detailed construction assessments are conducted and project-specific impacts are identified...."
Appendix D-1-1	33	Air Quality	Recommend defining sensitive receptors in Mitigation M-AQ-2.
Appendix D-1-2	27	Noise and Vibration	Recommend defining sensitive receptor in AMM-NOI-1
Section 4.8.8			Include mitigation measures that address marine equipment that may be required during construction- such as use of renewable diesel and higher tier engines, such as Tier 3 or 4, as feasible. There are no measures that specifically address emissions from marine equipment and barges, etc.
Appendix D-1, Section 4.8.8	4-39	Climate, Climate Change, and Relative Sea Level Change/	Text says: Require all on-road heavy-duty trucks to be zero-emission vehicles or meet the most stringent emissions standard at the time of construction, such as a model-year

Section	Page Number	Category	Comment
		Mitigation Measures	(MY) standard, as a condition of contract. This text is unclear. Propose the following edit: Require all on-road heavy-duty trucks to be zero-emission vehicles or meet the most stringent emissions standard as feasible at the time of construction, such as a model-year (MY) standard, as a condition of contract.
Appendix D-1, section 4.8.8	page 4-41	Climate, Climate Change, and Relative Sea Level Change/ Mitigation Measures	Health risk mitigation measures: add "Use electric equipment to the degree feasible"
Appendix D-1, Section 4.8.8	page 4-40 to 4-41	Climate, Climate Change, and Relative Sea Level Change/ Mitigation Measures	Health risk mitigation measures: Many of these measures are infeasible or impractical. For example, using equipment when receptors are not present may not be practicable in this urban environment. We should not assume that all people leave their homes during the day.
Appendix D-1-1 page 30-31	page 30-31	Air Quality/ Mitigation Measures	Construction air emissions mitigation: See comments above about adding mitigations to address emission from marine equipment and to use electric equipment to the extent feasible. Also recommend a catch all that refers to "other measures to reduce emissions as they become feasible in the future"
Appendix D-1-1: page 32	MM-AQ-1	Air Quality/ Mitigation Measures	MM AQ-1: recommend making this more general without reference to the air district and simply stating that emissions would be offset. There should also be a prioritization where emissions are offset as close to the emissions source as practicable, and then if impracticable, within the City with a preference within overburdened communities (as shown either by the air pollutant exposure zone or Calenviroscreen, or other similar data), and finally within the air basin.
Appendix D-1-2, Section 2.2	12	Noise and Vibration	Construction noise analysis: for actions that require pile driving please also assess impacts to commercial uses using FTA criteria of 100 dBA 1 hour Leq
Appendix D-1-2, Section 2.3	28	Noise and Vibration/ Mitigation Measures	AMM-NOI-2 Vibration Control: This measure only addresses vibration mitigation from pile driving activities. However, other equipment, like bulldozers used for demolition could generate high levels of vibration that if near other buildings

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			could exceed the building damage criteria. Recommend adding that a vibration analysis be conducted and based on that analysis if there is the potential to have building damage or interfere with vibration sensitive equipment, then the measures listed in the mitigation be applied to that activity.
Appendix D-1-2		Noise and Vibration	Reconsider overall conclusion for alternatives that find construction noise as less than significant in consideration of the full scale of the project and duration of construction activities necessary to implement the program. A less than significant conclusion does not seem supported.
General Comment		All Construction related Mitigation Measures	Construction related mitigation measures should specify notifying persons adjacent to construction activities of the duration of construction, mitigation imposed, persons to call for questions/complaints, etc. Notices should be multilingual
Appendix D-1, Section 4.22		Utilities	Unclear the extent to which environmental effects associated with the disruption or relocation of utilities has been considered in the environmental analysis for other topics such as transportation, air quality, noise, archeological resources, etc. These activities could also require imposition of mitigation measures.
Appendix D-1-4, Section 2.2.4	49	Transportation	AMM-TR-1 and similar minimization measures that require multiple agencies to participate: it is unclear the extent to which these agencies have reviewed the measures and committed to working with the USACE and PORT to implement the measures. Consider agreements with agencies to facilitate their participation.
Appendix D-5 and D-6	4-105	Special Status Species	This page number references Appendix D-5 and D-6 as a BA prepared for implementing the TSP. These appendices appear to be missing.
Appendix D-1, Section 4.16	4-105	Special Status Species	It appears that the EIS mitigation and minimization measures for impacts to special status species defers to regulatory processes. Such measures, even if amended by regulatory agencies, should be disclosed.
Appendix G G-10-11, Section 3		MAP management structure	This section lays out overview of Gov and Management Structure for monitoring, adaptation, and phasing process. While it identifies that other City agencies are to be involved, primarily POSF and USACE to lead. Suggest that other city agencies with technical expertise could be identified specifically as part of proposed government structure for Adaptation

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			Management Team (AMT). Also says "charter defining the AMT's decision making and reporting process will be developed during PED" Suggest who all involved in drafting and reviewing that charter is identified.
Plan, Appendix D-1 Section 3.13.2	3-53 – 3-56	Existing Conditions	Section (text is include in both Plan and Appendix D-1) states that 14 archeological sites identified in IC record search, all historic-period. This doesn't match the information in Appendix D-3 NHPA Section 106, which lists additional resources include Native American resources. Confirm record search information. Suggesting adding into this overview list of types of Native American resources that could be discovered within study area.
Plan, Appendix D-1, Appendix D-3 PA		Cultural Resources	In general, the summary and analysis for cultural and tribal cultural resources in the POSF Waterfront Plan EIR does not appear to inform this analysis. Suggest that specifically review of archeological resources sensitivity, summary of TCRs, and survey of aboveground historic resources along the waterfront from that EIR would inform this cultural resources analysis. Additionally, organizing analysis by planning district rather than Reach adds to confusion of the cultural resource analysis, especially as planning districts do not correspond to reach areas for this project. Suggest revising to summarize cultural resources by reach instead.
Appendix D-1, Section 3.13	3-52	Cultural Resources Regulation	Suggest including Secretary of the Interior's Standards for the Treatment of Historic Properties into Federal regulation. Suggest separating out CEQA and California Register of Historic Resources in State regulations.
Appendix D-1, Section 3.13	3-53	Cultural Resources Regulation	Include reference to Article 10 and 11 of SF Planning Code and include reference to HPC Charter to provide review and comment of CEQA NEPA, and NHPA documents.
Appendix D-1, Section 4.18	4-120	Cultural Resources	Review summary of resources on this page, summary doesn't appear to include resources listed or eligible for the NR, although those are mentioned in historic resources summary (see 3.13) and in the PA.
Appendix D-1, Section 4.18		Cultural Resources Impacts	Impact determination in this section is confusing and requires further clarity. The finding of "too speculative for meaningful consideration" for aboveground resources is confusing as there are known National Register resources that are proposed for demolition, additionally this

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			determination is unclear as the determination for archeology is "significant and unavoidable" although the analysis of archeological resources appears to be more speculative (as likely buried resources are yet to be identified). Also how this impact determination relates with other determinations later in the cultural resources section could use further explanation. Additionally, the measures ranked in Tables 4-45 to 4-47 don't clearly align with the proposed measures/actions discussed in the analysis, making the justification for the numerical ranking unclear. For example, in Table 4-45, why is Roadway Impact a five (5)? Finally, an overview table that captures each of the impact determinations for each type of cultural resources (above ground, archeological, and TCP) for each of the alternatives would be very helpful.
Appendix D-1, Section 4.18		Cultural Resources Impacts	Baseline for cultural resources impact determination doesn't appear to be consistently applied throughout this section. Inundation impacts are determined to be LTS as a smaller area will be inundated for most alternatives than for FWOP. However, it isn't clear how treatment of especially aboveground historic properties will occur in FWOP, although Cultural Resources summary in Table 4-8 indicates that historic resources could be impacted under the No Action. Suggest that further development of impacts to historic resources under the No Action would help to further inform impacts under the other alternatives.
Appendix D-1, Section 4.18	4-128	Cultural Resources	Pre-construction archeological testing can be very useful to identify buried or deeply buried archeological sites. Suggest that the treatment plan for archeological resources make it clearer that such testing programs would be undertaken, rather than discussing treatment methods for known sites and discovery provisions for those sites identified during construction, as it would be rare for sites to be discovered as they are impacted by deep foundation work. This discussion would be aided by discussion of known and likely archeological resources within the study area.
Appendix D-1, Section 4.18	4-133	Cultural Resources	Ensure that description of archeological sensitivity is consistent. For example, Page 4-133 says that construction into sea floor could result in impacts to archeological resources while

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			Page 4-128 states that construction into the floor of the bay has low potential to impact archeological resources. Depending upon reach and depth, construction into bay mud / marine sands / Colma formation could result in impacts to significant archeological resources.
Appendix D-1, Section 4.18		Cultural Resources	Tubbs Cordage Company Office Building is called out several times in discussions of demolition of aboveground resources or abandonment. This small frame building has already been moved several times. Suggest that proposed treatment would be to move this building again to area that would not be inundated.
Appendix D-1, Section 4.18	4.18	Cultural Resources Mitigation	Reference to the PA and production of a PHPMP is vague, suggest adding types of specific mitigation measures that could result from the PHPMP.
Appendix D-3	2	Programmatic Agreement Parties	Please add San Francisco Planning Department to list of consulting parties. Suggest that San Francisco Planning Department, who maintains archeological expertise on staff for the City and County of San Francisco, would assist the Port regarding treatment of archeological resources. Suggest that HPC should be a signatory and not a consulting party on the PA.
Appendix D-3		Programmatic Agreement - I.B - Qualifications and Standards	Suggest that work conducted under this PA be undertaken by qualified professionals that have experience working in San Francisco Bay Area, are familiar with resource types found in SF Bay area and/or have experience in Urban Archaeology and geoarchaeology.
Appendix D-3		Programmatic Agreement - II. Identification of Historic Properties	Suggest specifically calling out review of SF Planning Department data as part of this process, as SF Planning is responsible for the citywide survey of historic properties (SF Survey) and holds citywide archeological data and sensitivity analysis.
Appendix D-3		Programmatic Agreement - II.A.1	Add additional details on how SHPO, Tribes, and consulting parties will consult on the PHPMP. Suggest that RFQs or other solicitations for consultants for the PHPMP are reviewed by SHPO, Tribes, and consulting parties along with scopes and outlines for the PHPMP. Provide at least 45 days for outside review of the PHPMP, suggest that 60-90 days is more appropriate for document of that scale.
Appendix D-3		PA VIII. Post Review	Port and SF Planning/HPC should be included in notification of unanticipated archeological

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		Changes and Discoveries	discoveries and concurrence on treatment and reporting and receive copies of all reports.
General Comment	Cultural resources terminology		SF Tribal representatives have requested that we use Native American (preferred) or precontact (if temporal period is needed) instead of prehistoric. Also, suggest that summary of local Native Americans include: "San Francisco was traditionally inhabited by the Yelamu people, who spoke the Ramaytush dialect of the Costanoan languages."
Appendix D-1		Cultural Resources	Please update the impact analysis under the Future without Project Scenario under Section 4.6 to reflect the analysis in Appendix E, Economic and Social Considerations, Section 5. Non-G2CRM Benefit Categories (pages E-117 – E-131). That analysis suggests more impacts under the FWOP Scenario to the Embarcadero Historic District than the TNBP, including potential loss of the District due to loss of historic wharves to either earthquakes or age and deterioration by the 2050s. By contrast, the Draft Plan will extend the life of the Embarcadero Historic District.
App D-1-8 Section 1.6	10	Regulatory Framework	Should this be “Estuary Restoration Act of 1968”?
App D-1-8 Section 3.7	27	Regulatory Framework	Include San Francisco Bay Water Trail