Port of San Francisco Draft Waterfront Adaptation Strategies

STRATEGY C – LOWER SEA LEVEL RISE

Adapts the shoreline to withstand 1.5 feet of sea level rise using a combination of structural and non-structural measures

Draft Waterfront Adaptation Strategies

The Port of San Francisco, in partnership with the U.S. Army Corps of Engineers and San Francisco city agencies, has developed seven Draft Waterfront Adaptation Strategies based on over five years of public engagement. Draft Adaptation Strategies are ready for public feedback, with a goal of reaching a Draft Waterfront Adaptation Plan (Tentatively Selected Plan) by summer 2023. Learn more at sfport.com/wrp/waterfront-adaptation.

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Strategy C – Lower Sea Level Rise

Strategy C addresses lower rates of sea level rise than is typically considered for local and state projects in order to understand the costs and benefits of a smaller scale of interventions.

Strategy C addresses flooding in all areas where 1.5 feet of sea level rise introduces coastal flood risks. These areas are typically in the lowest lying areas along the waterfront, including Fisherman's Wharf, Ferry Building area, Mission Creek, Terry Francois Blvd, Warm Water Cover, Islais Creek, and Piers 80-90.

Some areas of the shoreline would include nature-based solutions and natural features that can reduce flood risks, while also enhancing Bay ecology and habitat. This strategy would only involve one construction period, so future actions to adapt to a higher rate of sea level rise would need to go through the planning and approvals process if needed.

The flood defense measures would not be adaptable to higher rates of sea level rise. Foundations would not be sized to support a future adaptation construction period. Measures such as floodwalls would be prioritized as they are less expensive and easier to implement if future adaptability is not required. Although the floodwalls would consider seismic risks, consistent with state and local building codes, the seismic risks associated with the aging Embarcadero Seawall and other shoreline infrastructure would not be comprehensively addressed.







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Strategy C Flood Defenses in 2040



Strategy C 2040 Flood Defenses Across the Waterfront

Islais Creek / Bayview

- Raise creek shorelines in the lowest-lying locations to defend against 1.5 feet of sea level rise.
- Enhance public access and wildlife habitat along the northern, inner shoreline of Islais Creek.
- Raise the southern facing Piers 80 and 96 edges and use deployable flood defense structures to maintain maritime access and uses.

Mission Creek / Mission Bay

- Raise creek shorelines to defend against 1.5 feet of sea level rise.
- Enhance public access and wildlife habitat along the southern shoreline of Mission Creek.
- Raise the bay shoreline and use deployable flood defense structures to maintain maritime access and uses at limited locations between planned development projects.

Embarcadero

 Raise the bay shoreline and use deployable flood defense structures to protect against 1.5 feet of sea level rise from the Bay Bridge to Pier 7, and near Pier 45. Deployable structures will maintain maritime access and uses at some locations. **Port of San Francisco Draft Waterfront Adaptation Strategies**

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Strategy C Flood Defenses in 2090

No long-term actions are included. The flood defense measures would not be adaptable to higher rates of sea level rise; so future actions to adapt to a higher rate of sea level rise would need to go through the planning and approvals process if needed.

Overview of All Seven Draft Waterfront Adaptation Strategies

Adaptation Strategies are different ways for the City to create a resilient, sustainable, and equitable waterfront for the next 100 years. Each one is a combination of construction projects and policy changes that will guide such decisions as where, when, and how high to build flood defense and how and when to adapt key buildings and infrastructure to ensure continued operations of City services.

Draft Waterfront Adaptation Strategy Summary				
Strategies		+1.5' Sea Level Rise	+3.5' Sea Level Rise	+7' Sea Level Rise
A – No Action	No Action			
B – Nonstructural Option	Nonstructural Option	✓	✓	✓
C – Lower Sea Level Rise	Lower Projected Sea Level Rise	✓		
D – Lower Sea Level Rise – Adaptable		✓	✓	
E – Hold the Line	Higher Projected Sea Level Rise	✓	✓	✓
F – Manage the Water		√	√	✓
G – Align with Watersheds		✓	✓	√

The Port Wants to Hear from You!

Public feedback on the Draft Waterfront Adaptation Strategies will inform further strategy development, with a goal of reaching a Draft Waterfront Adaptation Plan (Tentatively Selected Plan) by summer 2023.

There is no single approach to adaptation that will meet the needs of San Francisco along the entire waterfront. The different risks, topography, and historic development of the waterfront means that we will need to use a combination of approaches. The intent is not to choose one but to use the best ideas from all of them to create a Draft Waterfront Adaptation Plan.

Visit **sfport.com/wrp/our-waterfront** for more information about upcoming community events.