

THE EMBARCADERO SEAWALL AND SEA LEVEL RISE

THE CITY AND PORT OF SAN FRANCISCO UNDERSTAND that sea level rise poses a significant and increasing threat to San Francisco's communities, businesses, environmental resources, and infrastructure. In recognition of this threat, the City adopted the Sea Level Rise Action Plan and the Port has been a strong partner in implementing the actions recommended by the Plan. Sections of the Embarcadero Seawall account for some of our shoreline's lowest elevations and most significant community and business assets.

The City, acting through the Port, launched the Embarcadero Seawall Program to improve seismic performance, provide near-term flood protection improvements, and plan for long-term resilience and sea level rise adaptation along the Embarcadero Seawall.



(ABOVE): RENDERING OF THE EMBARCADERO SEAWALL DURING FLOODING DUE TO SEA LEVEL RISE.

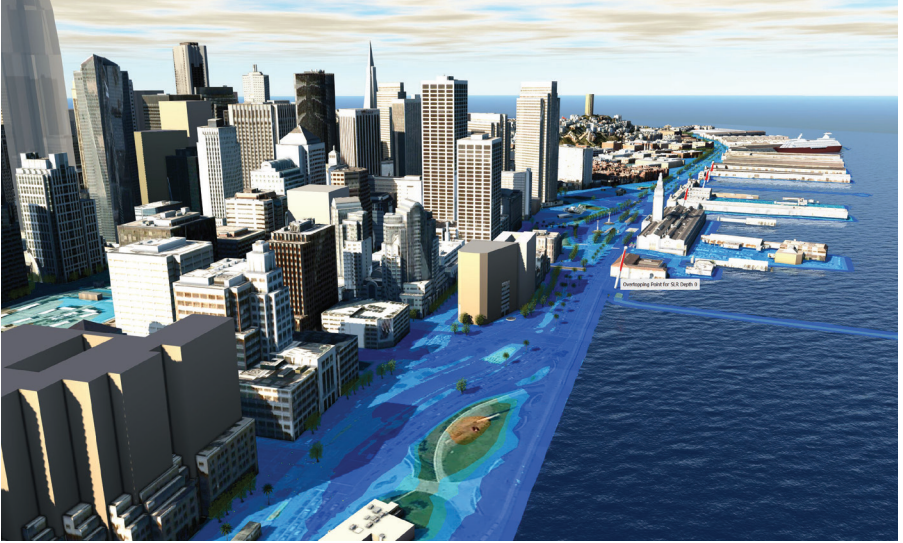
(RIGHT): TODAY, SAN FRANCISCO'S WATERFRONT IS SUBJECT TO FLOODING.



IMPACTS OF SEA LEVEL RISE TODAY

TODAY, THE EMBARCADERO floods intermittently, requiring sidewalk and lane closures. A 100-year flood event would send the Bay over the Embarcadero Seawall and into the BART and Muni tunnels, disrupting transit and the regional economy.

Unfortunately, the threat from sea level rise and flooding is increasing. The San Francisco Bay could rise up to 6 feet by 2100, which would result in daily flooding downtown.



UP TO 6 FEET OF WATER FROM SEA LEVEL RISE WILL RESULT IN DAILY FLOODING AND EXTEND INTO DOWNTOWN.

STRENGTHEN, ADAPT, AND ENVISION

THE PORT UNDERSTANDS the increasing risk that sea level rise poses to the San Francisco waterfront. As part of the Port's Waterfront Resilience Program, the Seawall Program has an adaptive planning and implementation framework to address sea level rise with three elements—**Strengthen**, **Adapt**, and **Envision**.

The **Strengthen Element** focuses on protecting life safety and emergency response access due to seismic activity and includes current and near-term flood risk. The **Adapt and Envision Elements** consider higher water levels and provide an opportunity to create

a resilient waterfront over the next 50 years, and envision the waterfront in 2100 and beyond.

As part of the Seawall Program, the Port is developing an inundation analysis that combines a 500-year flood event with up to six feet of sea level rise to better understand flood risks along the Embarcadero Seawall. Additionally, the Port will conduct a wind wave, wave run-up, and overtopping assessment with new bathymetry and additional analysis of the Embarcadero Seawall to better understand future water levels and the effects on waterfront assets and services.