## **Embarcadero Early Projects**

## Pier 15 Bulkhead Wall and Wharf Substructure Earthquake Safety Retrofit Project



## **About the Project**

Pier 15 is a rehabilitated and seismically strengthened historic finger pier that is home to the popular Exploratorium science museum as well as small- and medium-sized vessel berths that can support earthquake response. Most of the pier and shed have low earthquake risk, however, Seawall earthquake risk is high, and movement of the Seawall may damage the bulkhead wharf compromising safety in the supported historic building and along the Promenade and adjacent open spaces. The project focuses on more easily implementable solutions to improve safety by retrofitting the wharf substructure and utilities to better accommodate earthquake movement of the Seawall. Current flood risk is lower here, and thick Bay Muds make improvements to stabilize the Seawall very challenging and costly. For these reasons, seismic stability improvements of the Seawall and improved coastal flood defenses will likely be part of the longer-term sea level rise adaptation strategy.

	Project Phase		
r,	~	Planning	
	٨	Pre-Design	
		Detail Design	
of .e		Construction	
е		Closeout	
		Complete	

	Project Details	Responds to Community Feedback	Project Update, Q1 2023
Port PM:	Matt Bell <u>matthew.n.bell@sfport.com</u>	<ul> <li>Prioritizes life safety and emergency response.</li> </ul>	<ul> <li><u>Pre-Design Status</u></li> <li>Needs Assessment: Done Q4/2022</li> </ul>
Total Cost:	TBD*	<ul> <li>Supports an adaptable and equitable waterfront.</li> </ul>	<ul><li>Alternatives Analysis: In-Progress</li><li>Conceptual Engineer: Start Q3/2023</li></ul>
Duration:	TBD*	✓ Protects and preserves maritime	Highlights
Complexity:	Low	resources. ✓ Ensures public access to the	<ul> <li>Advancing design of a range of alternatives.</li> </ul>
*To be determined at the end of Pre-Design		waterfront and historic places and an inviting waterfront for all.	



Waterfront Resilience Program