

Assembly Select Committee on Sea Level Rise and the California Economy

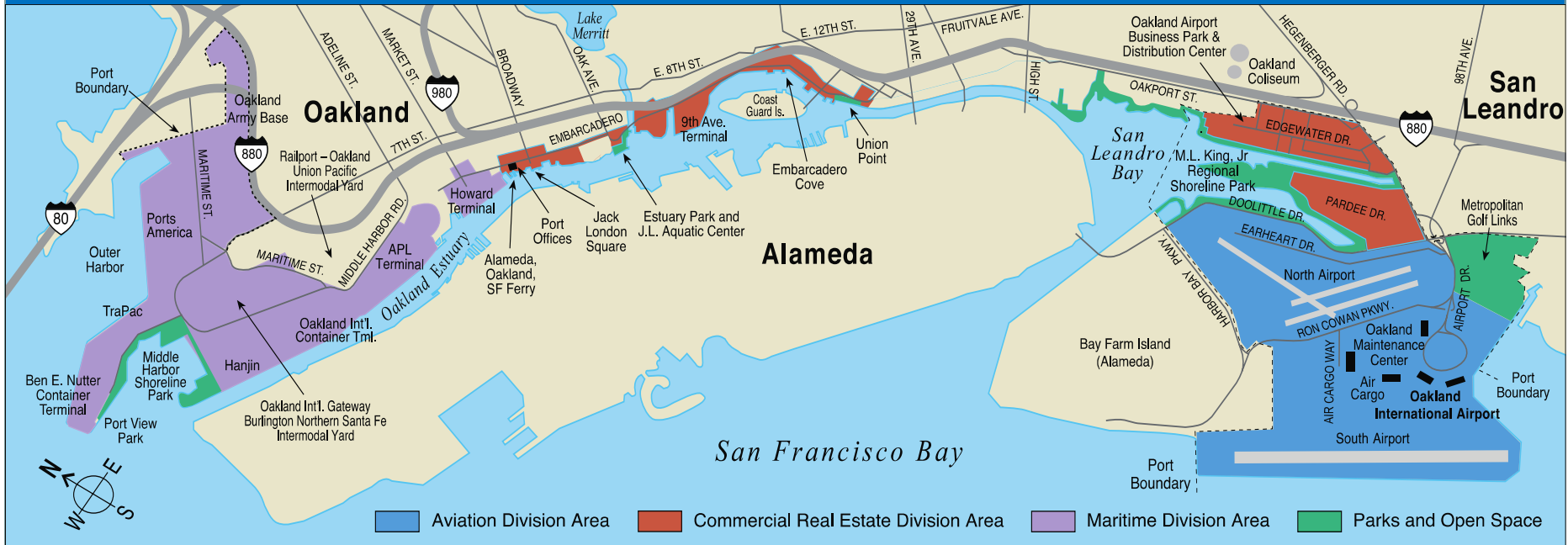
Kristi McKenney
Chief Operating Officer
Port of Oakland/Oakland International Airport
February 7, 2020



Port of Oakland Overview

- Established in 1927 as an Independent Department of the City of Oakland
- Separate budget, with no local tax revenue for annual operations
- As a landlord, we manage portions of nearly 20 miles of waterfront from OAK to Jack London Square and the Seaport

The Port is a State Tidelands Trust Asset



Maritime Operations



Aviation Operations



Commercial Real Estate



Parks and Open Space

Economic Impact of the Port of Oakland

84,144 Jobs
Supported by Port
Activity



\$5.6 Billion
Total Personal Income &
Local Spending

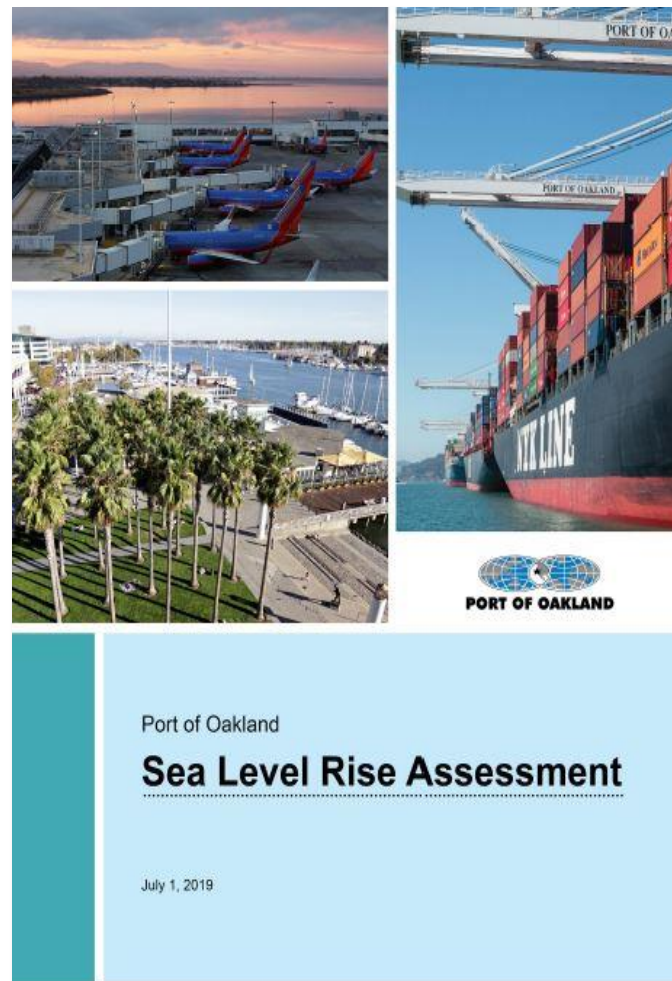


\$698 Million
State And Local Taxes



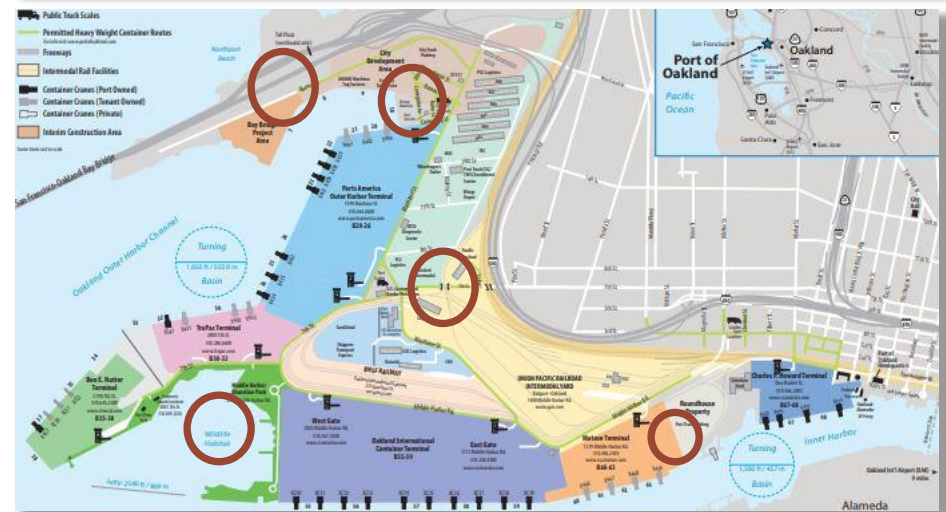
Sea Level Rise – Assessing the Impact

- Port has completed the AB691 Assessment
 - Included significant data from a variety of existing Port SLR analyses
- Review included:
 - Asset Inventory
 - Vulnerability Analysis
 - Adaptive Management Strategies (High Level)
- Looked at SLR projections in 2030, 2050, and 2100



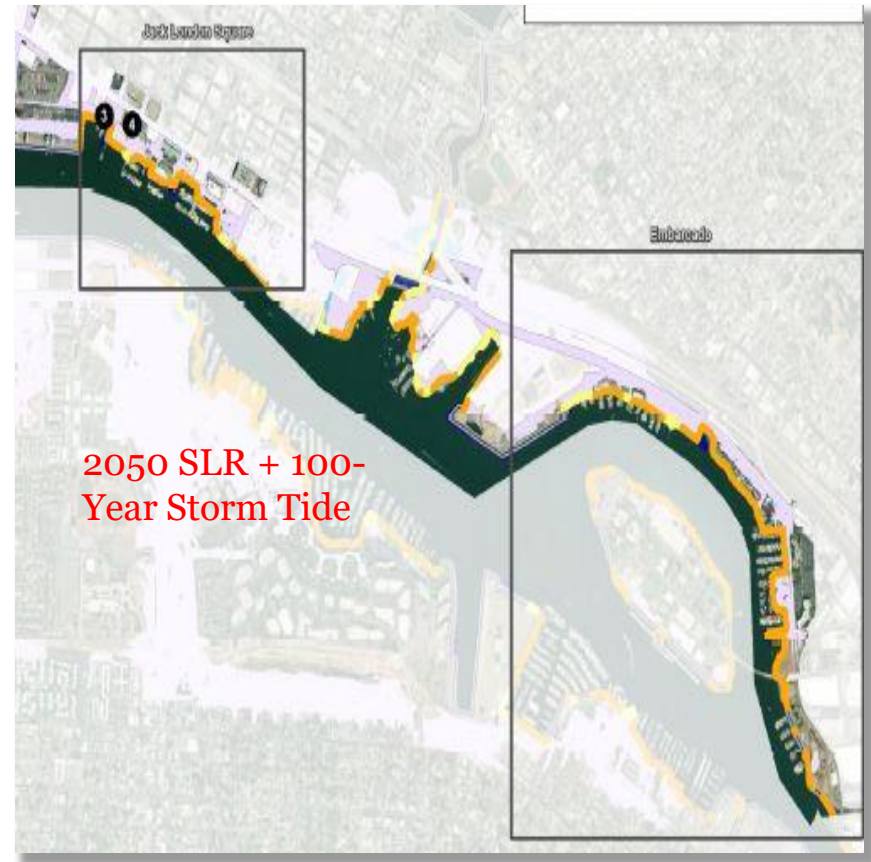
Seaport

- 2050: Exposure to extreme storm flooding at various locations in seaport
- 2100: Potential for daily tidal inundation
- Open space, marine terminal, roadway, and utility infrastructure will need resiliency improvements



Commercial Real Estate

- 2050: Low-lying waterfront, including Jack London Square, may be exposed to extreme storm events
- Several key assets along Oakland Estuary may not be under Port jurisdiction
- Tidelands serves as a lens for AB691, but does not capture the full scope of future SLR risk



Oakland International Airport

- 2050: Extreme flooding could affect North Field
- 2100: Daily tidal inundation could impact both North and South Fields
- Additional studies and plans will require a multi-jurisdictional approach (e.g. City of Alameda, Caltrans)
- Work underway to strengthen and prepare South Field Airport Perimeter Dike for SLR



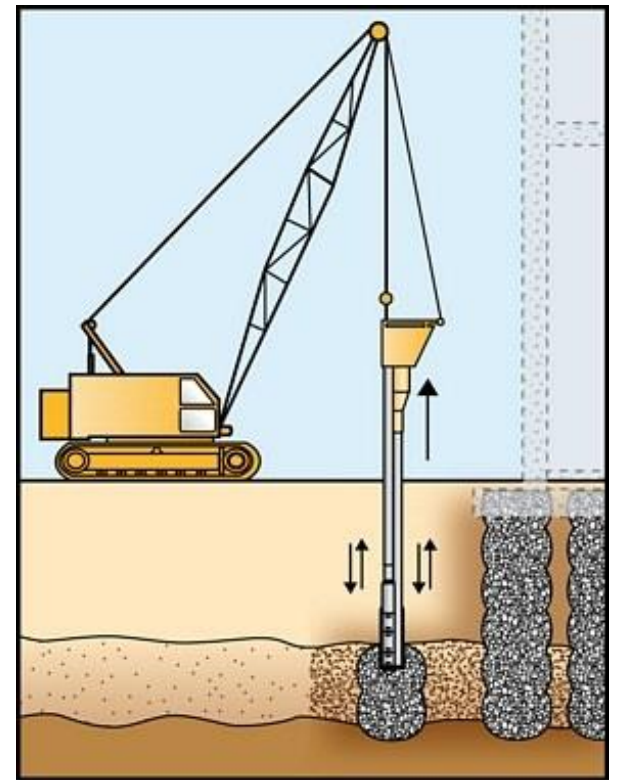
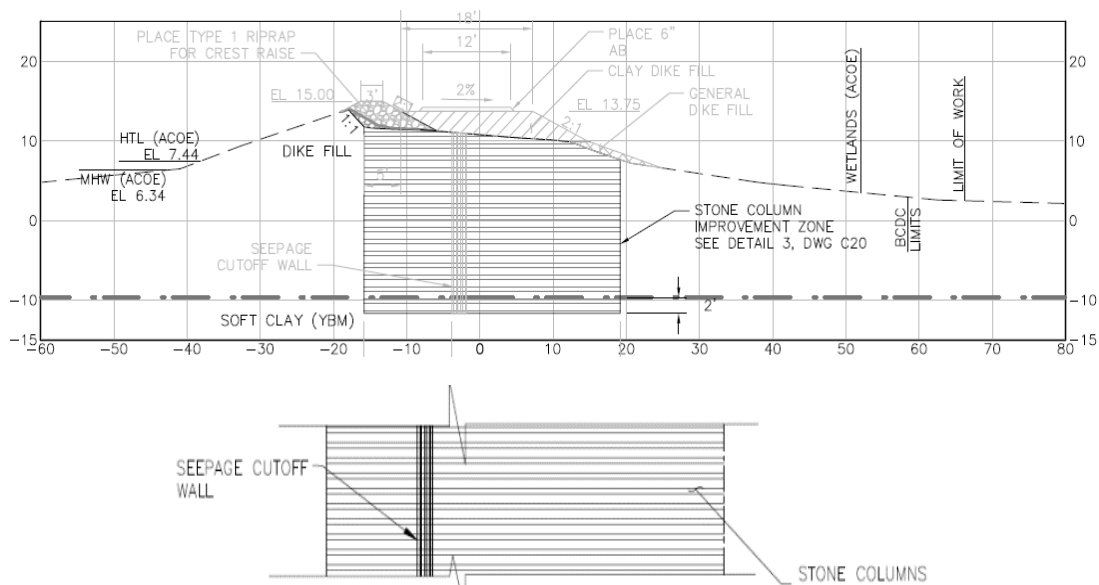
Airport Perimeter Dike Project

- 1950's Original "clay" dike installed for South Field
- 1970's Dike lengthened for the extension of Runway 12/30
- 2007 First Vulnerability Study for Airport Perimeter Dike (APD) Improvement Project to meet FEMA Standards
- Phase 1 Construction: FEMA/Army Corps Accreditation for Flood Protection
- Phase 1 to begin Summer/Fall 2020
- Phase 1 Budget: \$18 million



Airport Perimeter Dike Project (cont'd)

- Phase 2: Seismic Improvements, including construction of dense columns to reinforce soils
- Critical for SLR Resiliency
- Phase 2 Estimated Cost: \$40 Million



Innovative Partnerships

Buoyant Ecologies Float Lab

- Floating research station in Middle Harbor Shoreline Park at Seaport
- Three-year testing period to examine effects on marine habitat and breakwater effectiveness
- Partnership with CA College of the Arts; support from BCDC and U.S. Army Corps of Engineers



Photo credit: Joshua Eufinger and
California College of the Arts



Photo credit: Michael Layefsky

Policy Implications and Perspectives

- **Sea Level Rise does not respect jurisdictional or agency boundaries**
 - Greater regional cooperation and leadership is essential to address all of the vulnerabilities & gaps
- **2030, 2050, and 2100 SLR resiliency approaches differ greatly in scope, cost and complexity**
 - The Port is focused on areas of highest vulnerability and risk that will have the greatest impact now
- **Regionally-serving infrastructure like the seaport and airport are critical Bay Area assets**