

### Adaptation and Resiliency Planning at the Port of Long Beach

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# **Importance of Resiliency at POLB**

- Climate stressors already impacting Port Complex & SoCal region
  - Sea level rise & storm surge
  - Greater frequency & magnitude of storms
  - Greater number of hot weather days
  - Stress on the electrical grid



- Decision making for port staff, tenants, and stakeholders
  - Prioritization of staff and budgetary resources

#### The port is electrifying!

- Energy resilience will be crucial as the climate changes
- Potential for black- and brown-outs due to extreme heat
- Strategies to address energy concerns underway (power systems resilience programs on marine terminals)
- Projects to add renewable energy generation and storage to enhance resilience at critical Port response facilities

## **Climate-Related Compliance**

- Climate Adaptation and Coastal Resiliency Plan (CRP)
  - Ensure business continuity and identify risks, vulnerabilities, and adaptation strategies for Port infrastructure
  - Climate change considerations incorporated into various Port plans & policies
  - Sea level rise vulnerability assessments in Harbor Development Permit and Coastal Development Permit applications
    - Applicants use vulnerability maps/GIS to determine if project is subject to temporary or permanent inundation
  - Planning for full overhaul of CRP—SLR and extreme heat

### Updated sea level rise inundation maps

- Planning horizons for 2030, 2050, 2080, 2100, and 2120 at low, medium-high, and extreme risk aversion scenarios (MHHW & 100-year storm tide)
- Focus on 2080 (+4.3 ft. of rise) for most Port assets
- Bringing 2024 OPC guidance into SLR assessments
  - Pier Wind 2085 horizon



## **SLR Inundation Mapping (2080)**



## **New Project – Pier S Shoreline**

- Highlighted as a near-term (~2035) vulnerability through inundation mapping & overtopping analysis
  - Sheet pile wall + adjacent low berm are access point for all inundation
  - Multiple critical port facilities in flooding pathway
  - Complex dynamic—private & public property, neighboring tenants/port, and historical subsidence
  - Feasibility study followed by shoreline enhancement project
  - Potential for grant funding
    - Planning and design



