



Planning for Sea Level Rise Port of Oakland

**2025 Storms, Flooding & Sea Level
Defense Conference**

November 19, 2025

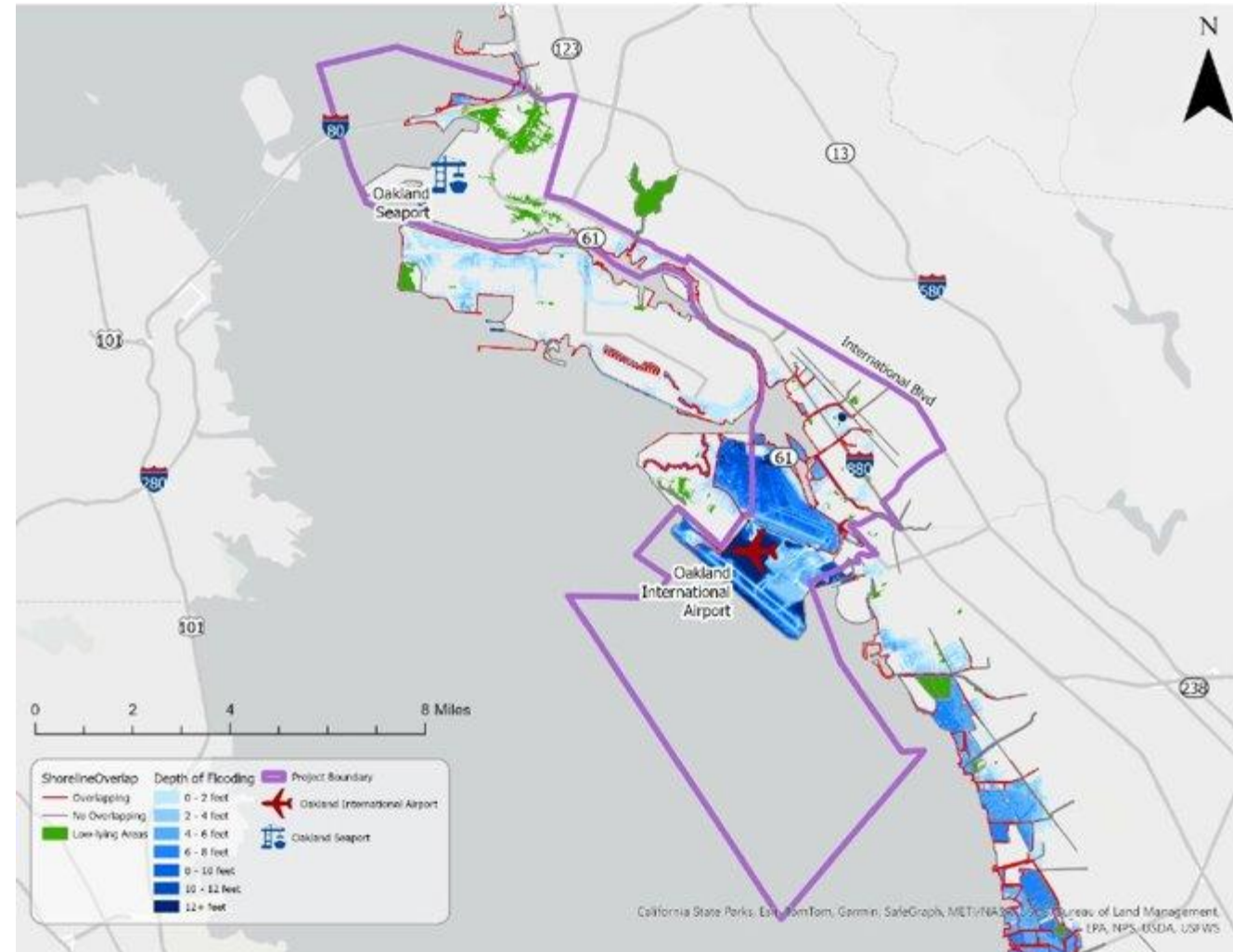


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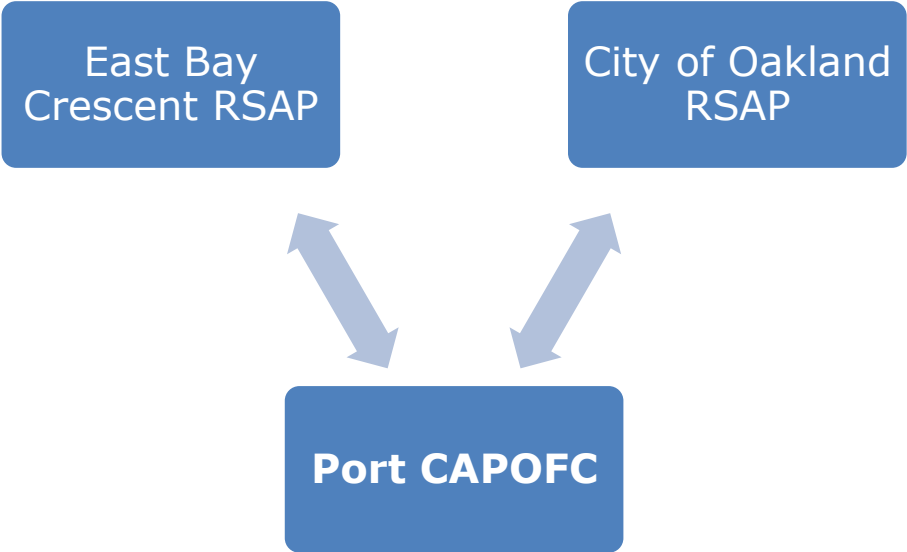
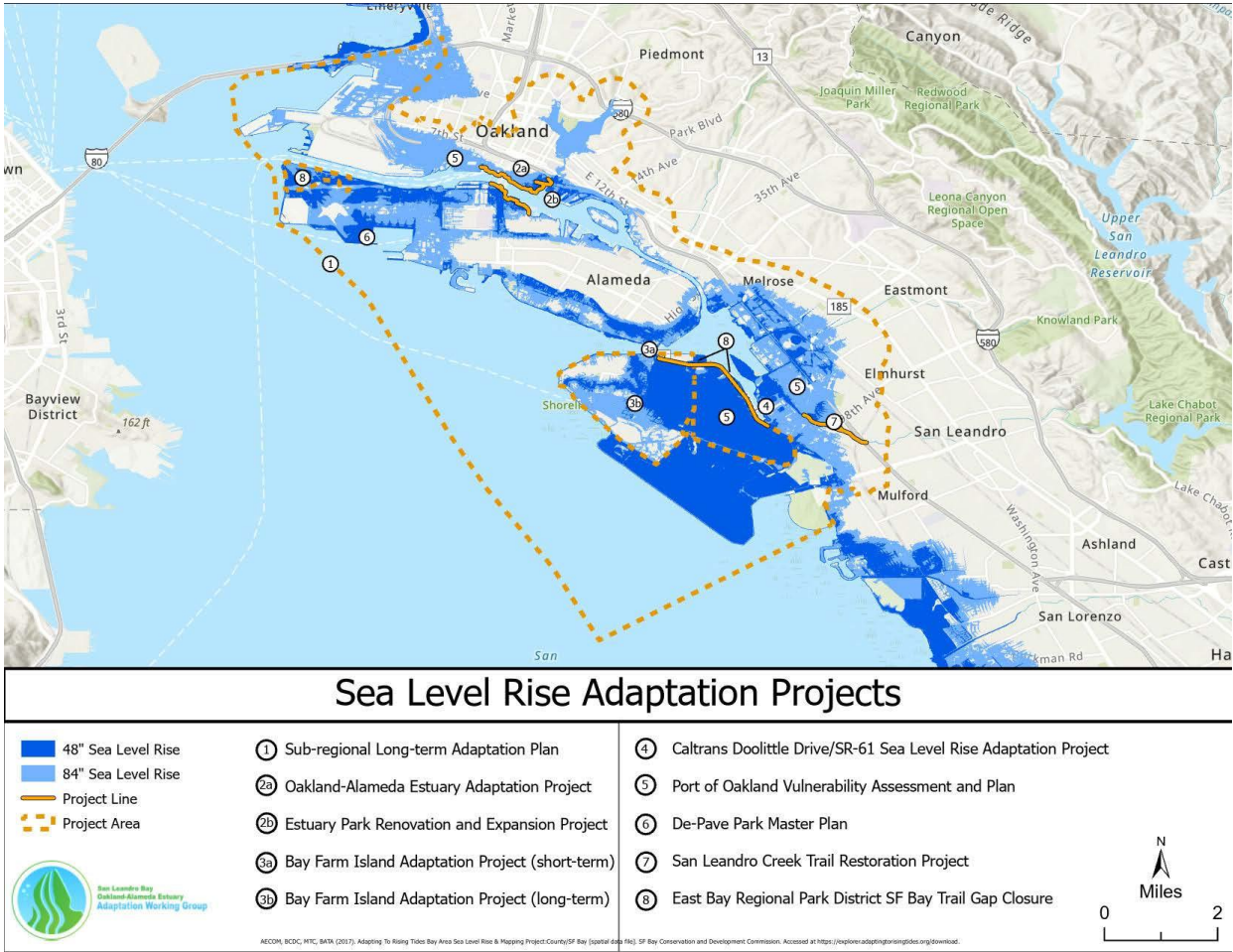
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Port of Oakland Sea Level Rise & Groundwater Intrusion Study

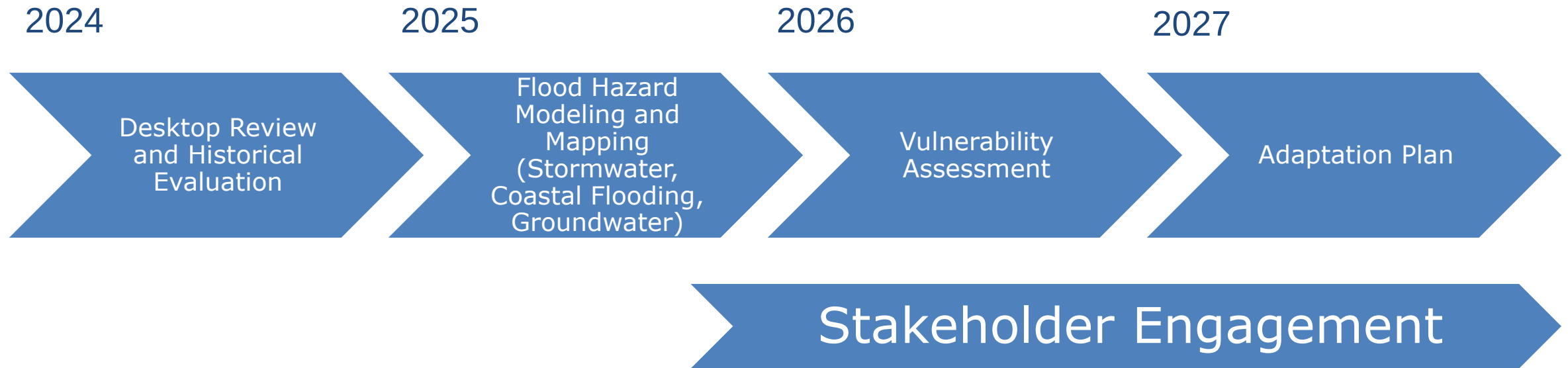
- Title: *Climate Adaptation Planning for Oakland's Frontline Communities (CAPOFC)*
- \$3 million Caltrans grant
- Scope: detailed sea level rise modeling and adaptation planning across the entirety of Oakland's shoreline.
- Partnership-focused approach- City of Oakland and other stakeholders.



Regional and Inter-Jurisdictional Planning



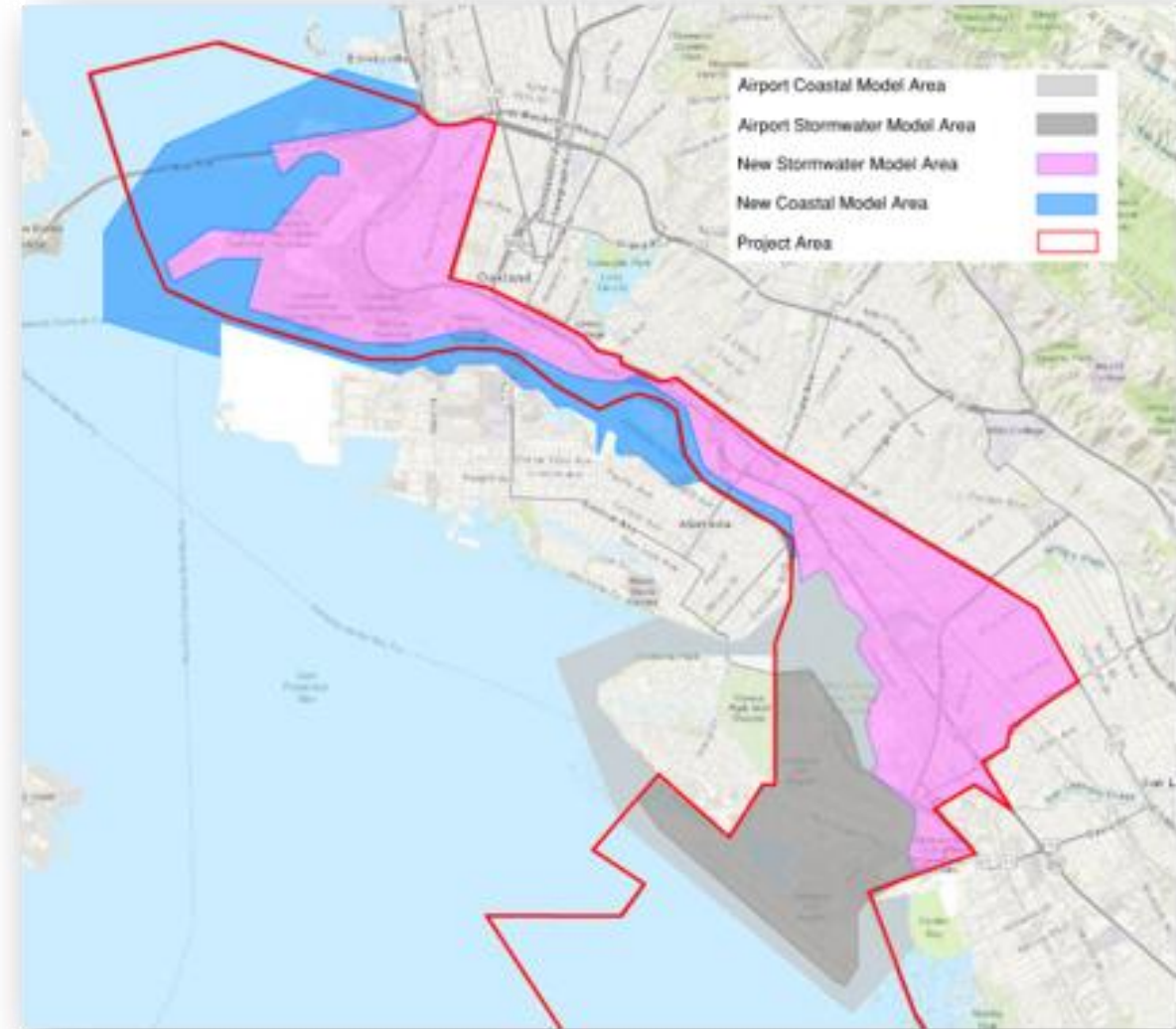
CAPOFC Project Timeline



Coastal and Stormwater Modeling

- Evaluate tidal and precipitation flood hazards
- Evaluate current and future climates
 - Sea level rise
 - Increased precipitation

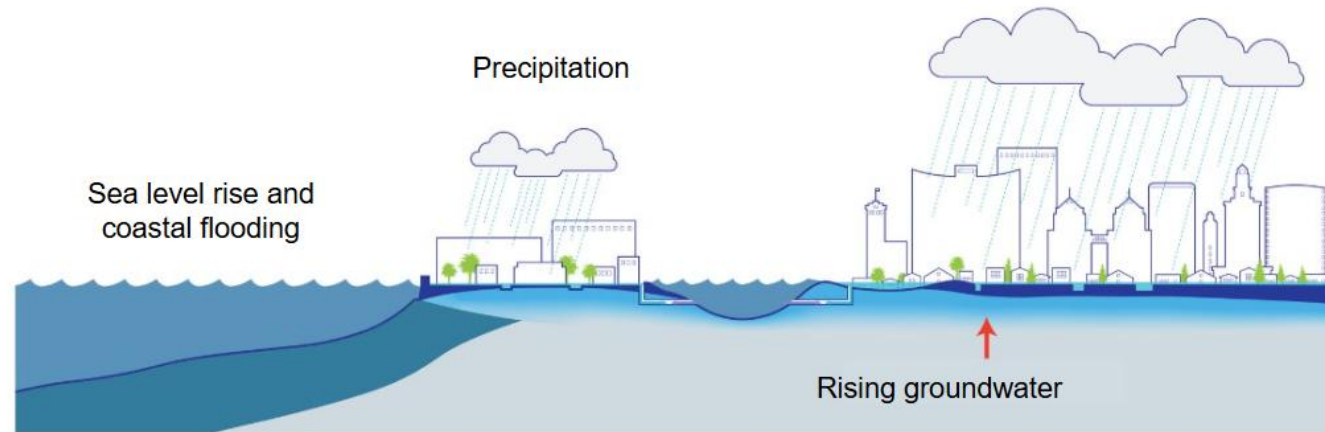
Combined maps- GIS Layers showing extent and depth of flooding



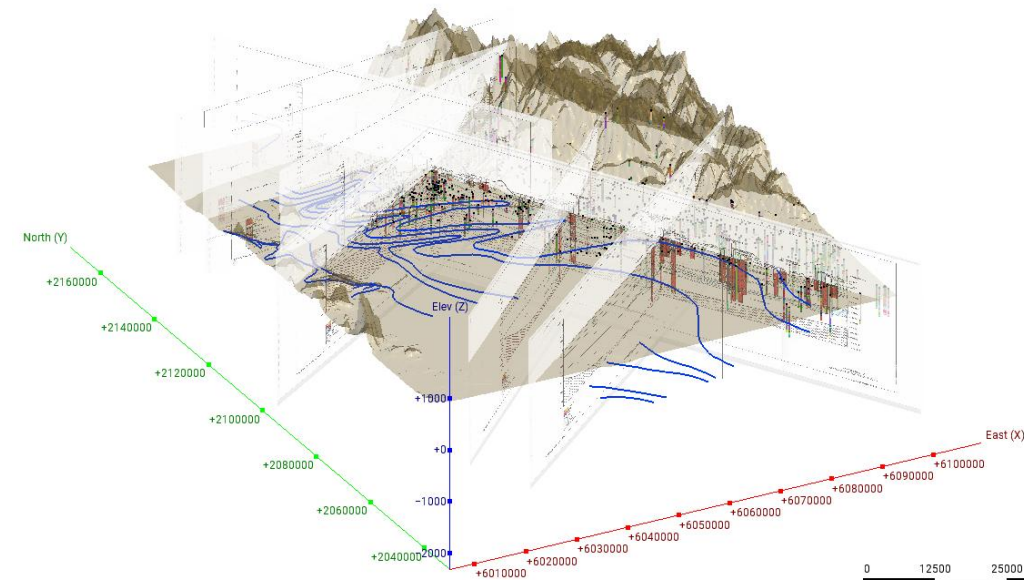
Groundwater Model

- Develop 3D Geologic model
 - Geo reports, cross sections, contours
 - Boreholes, groundwater well logs
 - Hydraulic properties
 - Tidal data
 - Stream and groundwater pumping data
 - More!
- Groundwater flow models
- Current & future climates
 - SLR
 - Increased precipitation

1. GIS layers showing depth to groundwater, and emergent groundwater
2. Will combine with Coastal & Stormwater models to view aggregate flooding scenarios



Source: OAAC Adapt Community Engagement Workshop December 2024



Source: CAPOFC 3D Geologic Model

Next Steps

- Kick-off Stakeholder Engagement
- Complete SLR modeling
- Vulnerability Assessment
- Adaptation Plan



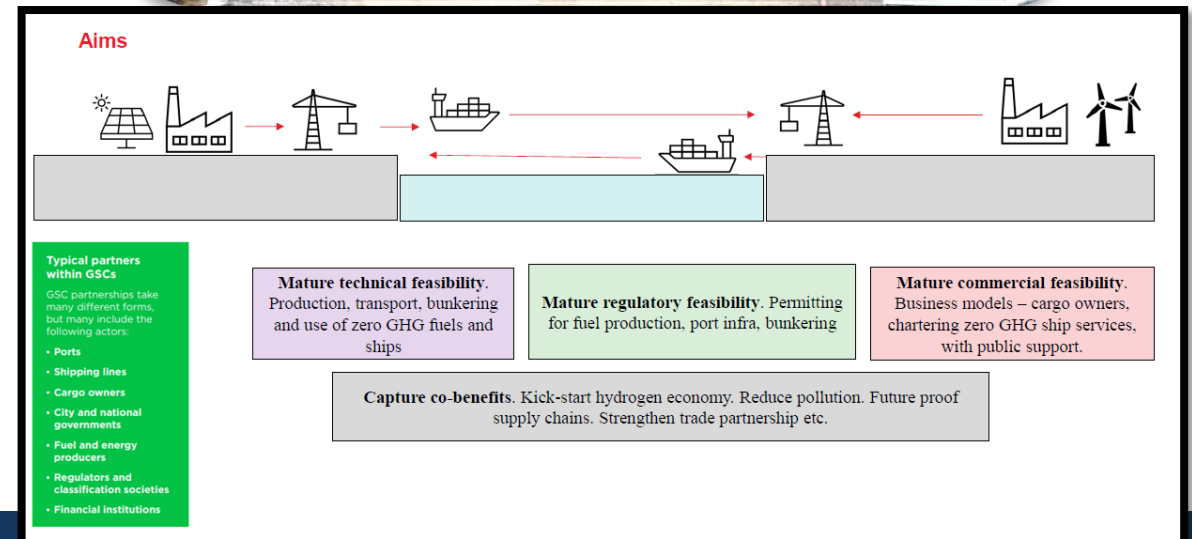
Zero Emission Projects Underway

- **Clean Ports Program, U.S. EPA: \$322M** to convert nearly 100% of all Port cargo handling equipment and over 400 drayage trucks to ZE technologies.
- **Clean Heavy-Duty Vehicle Program, U.S. EPA: \$10.5M** to replace 60 Class 6 UPS delivery trucks with ZE battery vehicles and install chargers in Oakland, San Francisco, and Richmond.
- **Green Power Microgrid Project, CA Transportation Commission: \$42M** to increase the port's ability to deliver green-sourced power to its seaport operations.



Environmental Studies & Initiatives

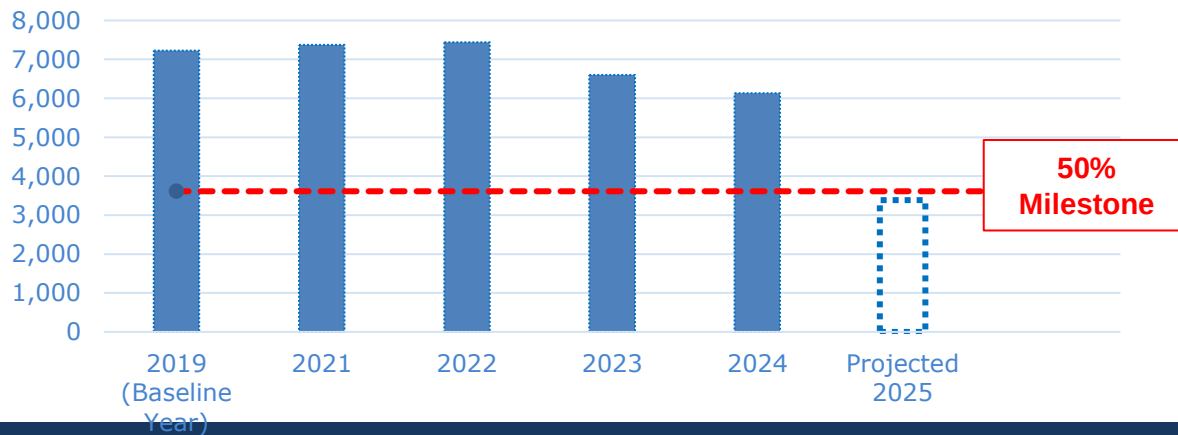
- Zero Emission Construction Equipment Program
- Zero Emission Plan
- Hydrogen use case study
- Green Shipping Corridor
- Sustainable Aviation Fuel (SAF)



Port Environmental Accreditations



OAK GHG Emissions



RESULTS OF 2024



Sustainability Management Plan

Climate Change

Air Quality

Energy Source

Transportation

Resiliency and
Adaptation

Water
Conservation
and Water
Quality

Waste
Management

Purchasing/
Materials

Wildlife
Conservation

Environmental
Justice & Social
Responsibility

Workforce
Development

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Thank you

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