San Leandro Bay/Oakland-Alameda Estuary Adaptation Working Group

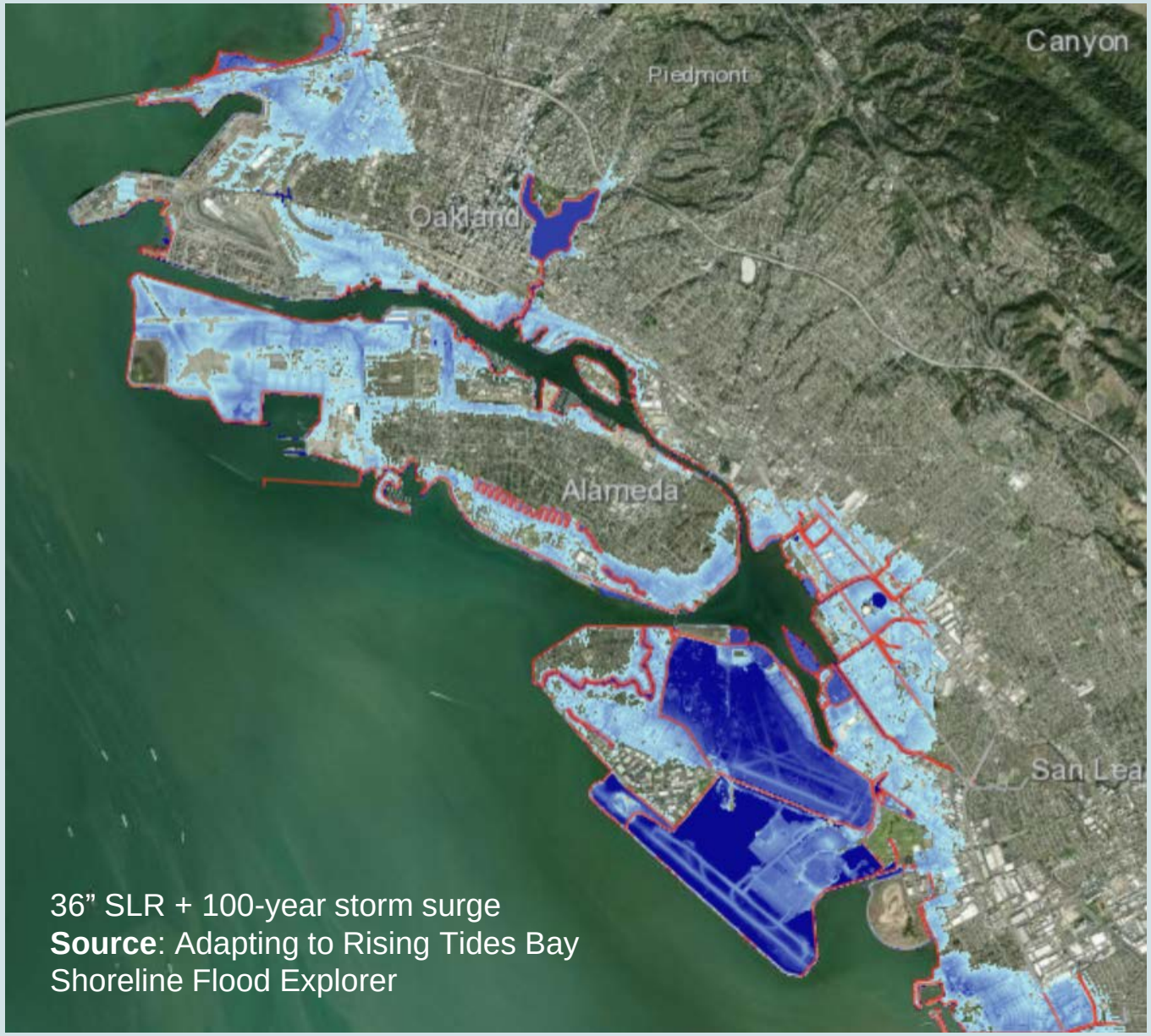
June 2023

San Leandro Bay
Oakland-Alameda Estuary
Adaptation Working Group

Background: Sea Level Rise

2/3 of California's sea level rise impacts will be felt in the Bay Area

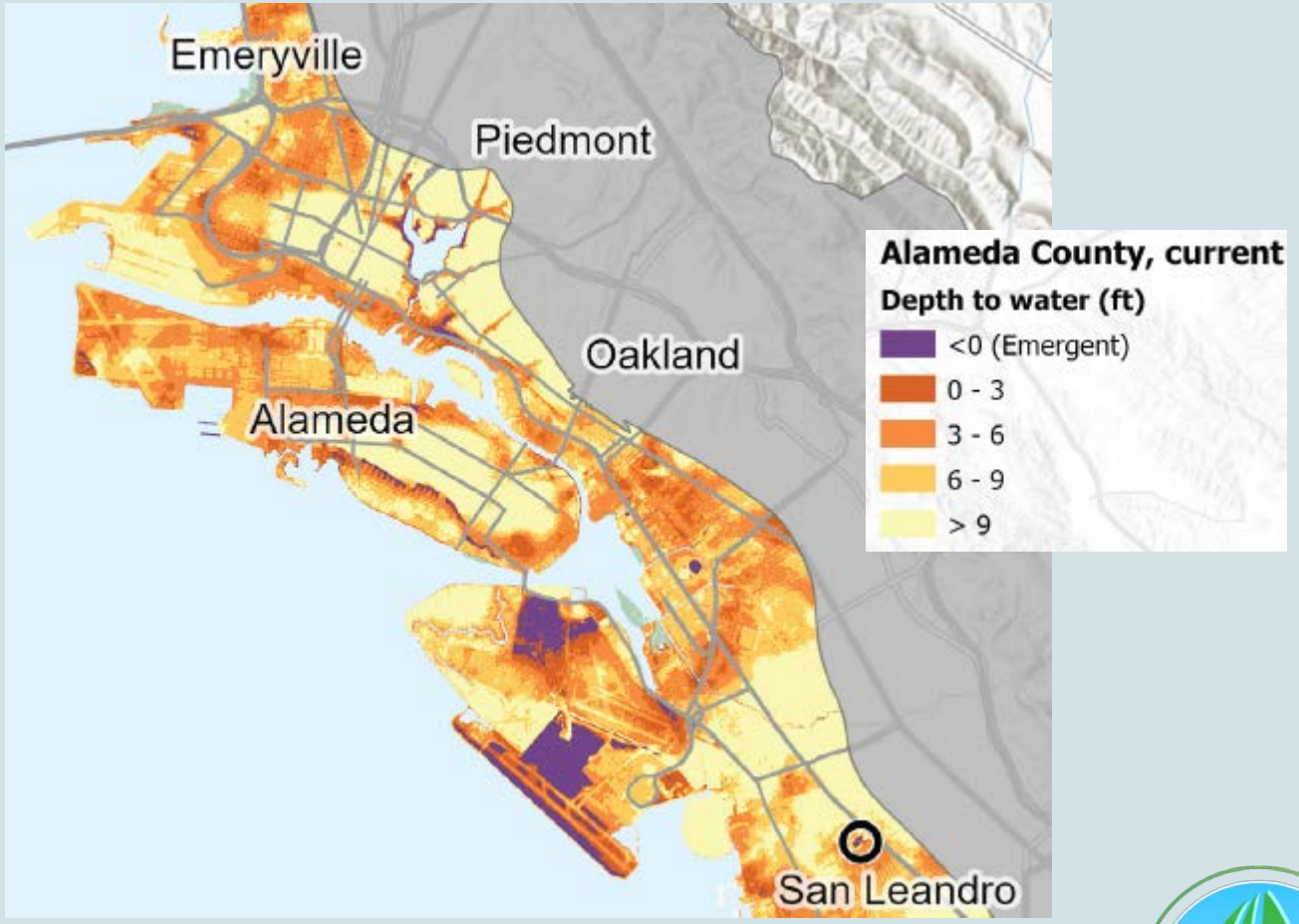
- **Already seen:** +8 inches SLR
- **Projected by 2050:** +12 to 32 inches
- **End of century:** 10+ feet?



36" SLR + 100-year storm surge
Source: Adapting to Rising Tides Bay Shoreline Flood Explorer

Background: Groundwater Rise

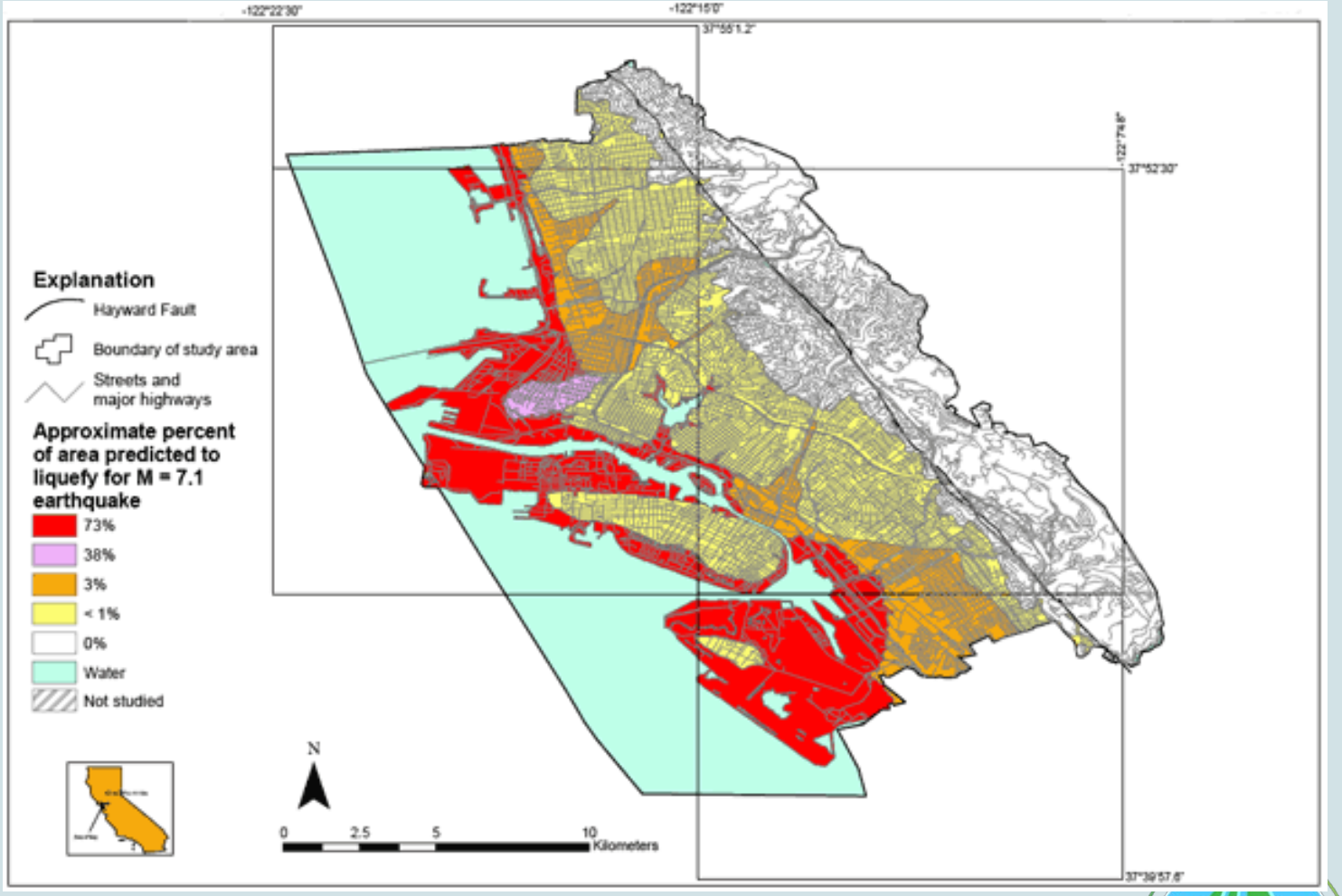
- Infiltration & corrosion of underground infrastructure
- Damage to roads and structures
- Flooding from multiple sources including emergent groundwater
- Contaminated sites
- Increased liquefaction risk



Source: SFEI Shallow groundwater response to sea-level rise

Background: Liquefaction

- Areas most at risk of liquefaction are same areas at risk of rising groundwater
- Rising groundwater may increase risk of liquefaction

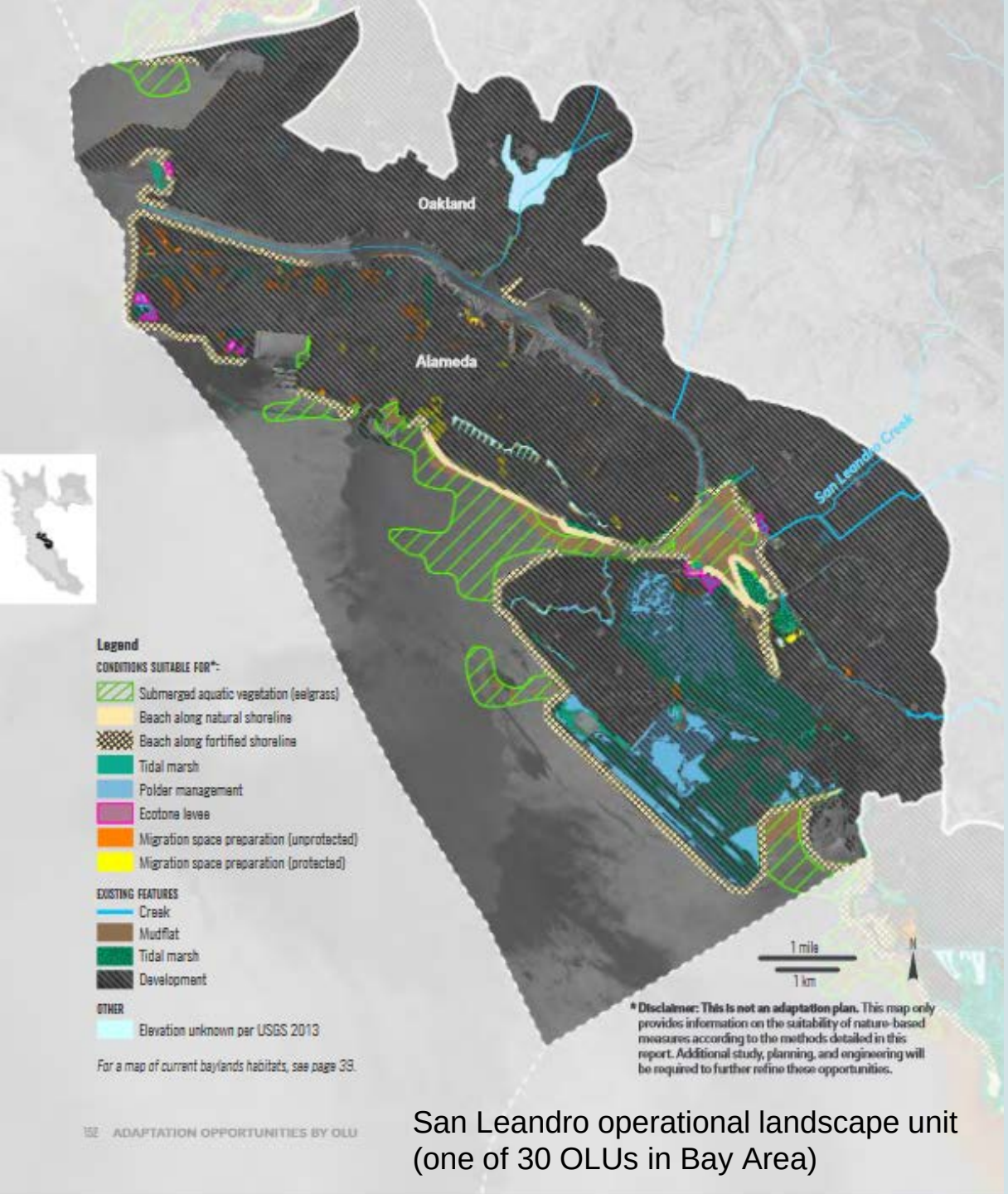


Shaking Hazard Map for Northwestern Alameda County
Source: USGS [Open-file Report 02-296]

Background: Regional Problem & Solutions

- Flooding knows no boundaries
- Communities: Most impacted and fewest resources
- Patchwork of actions
- Inconsistent science
- Competition not collaboration for funding
- Loss of wetlands
- Difficult to measure collective progress

Source: BCDC Sea Level Rise Adaptation Funding and Investment Framework



San Leandro operational landscape unit (one of 30 OLUs in Bay Area)

Working Group coordinates San Leandro Bay/Oakland-Alameda Estuary flood and adaptation projects to protect and restore water quality, habitat, recreation and community resilience.

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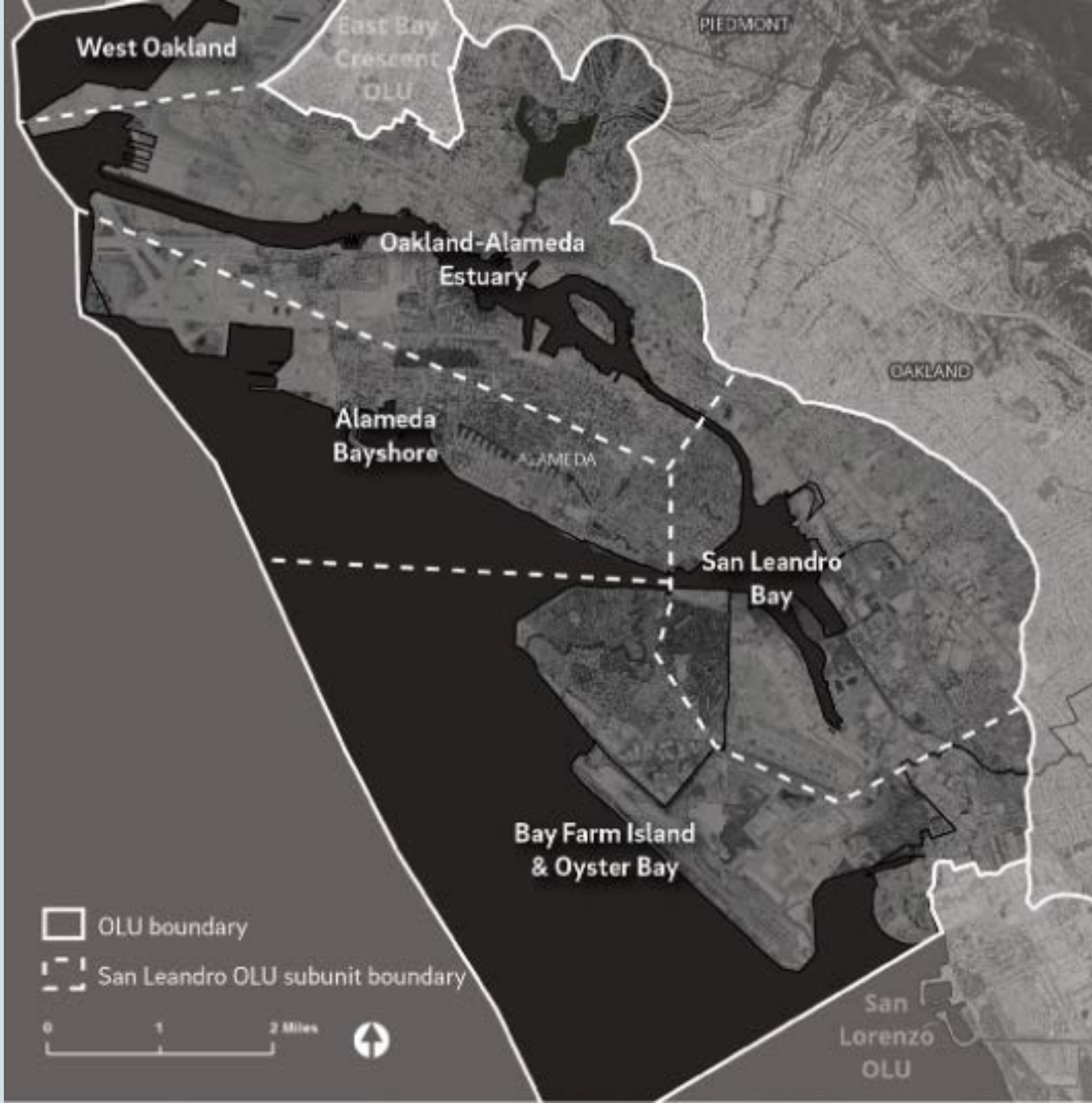
Working Group: Objectives

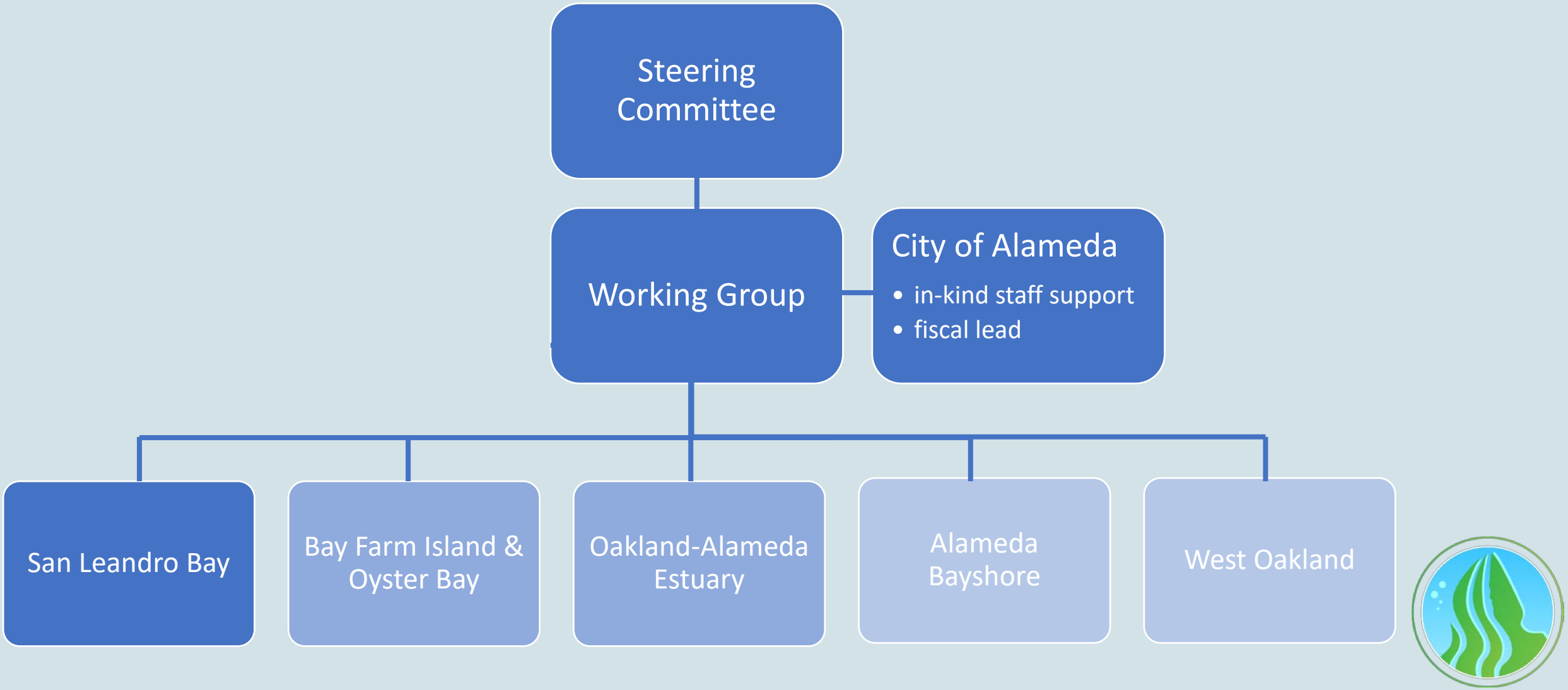
- Prepare for flooding, sea level and groundwater rise
- Prioritize habitat, nature-based solutions and green infrastructure
- Consider sediment management
- Improve recreational access and air quality
- Provide benefit to residents and vulnerable communities
- Contribute to economic opportunities
- Advocate for training and skill development for underserved communities
- Serve as example on sub-regional adaptation

Working Group: Focus Areas

- **West Oakland** – wave exposed with seawalls, quays and subtidal habitat
- **Oakland-Alameda Estuary** – highly urbanized dominated by seawalls
- **San Leandro Bay** – small embayment protected from wave action, patches of marsh habitat and wide mudflats
- **Alameda Bayshore** – wave-exposed with beaches
- **Bay Farm Island & Oyster Bay** – high wave action surrounded by deep subtidal habitat



Working Group: Organizational Structure

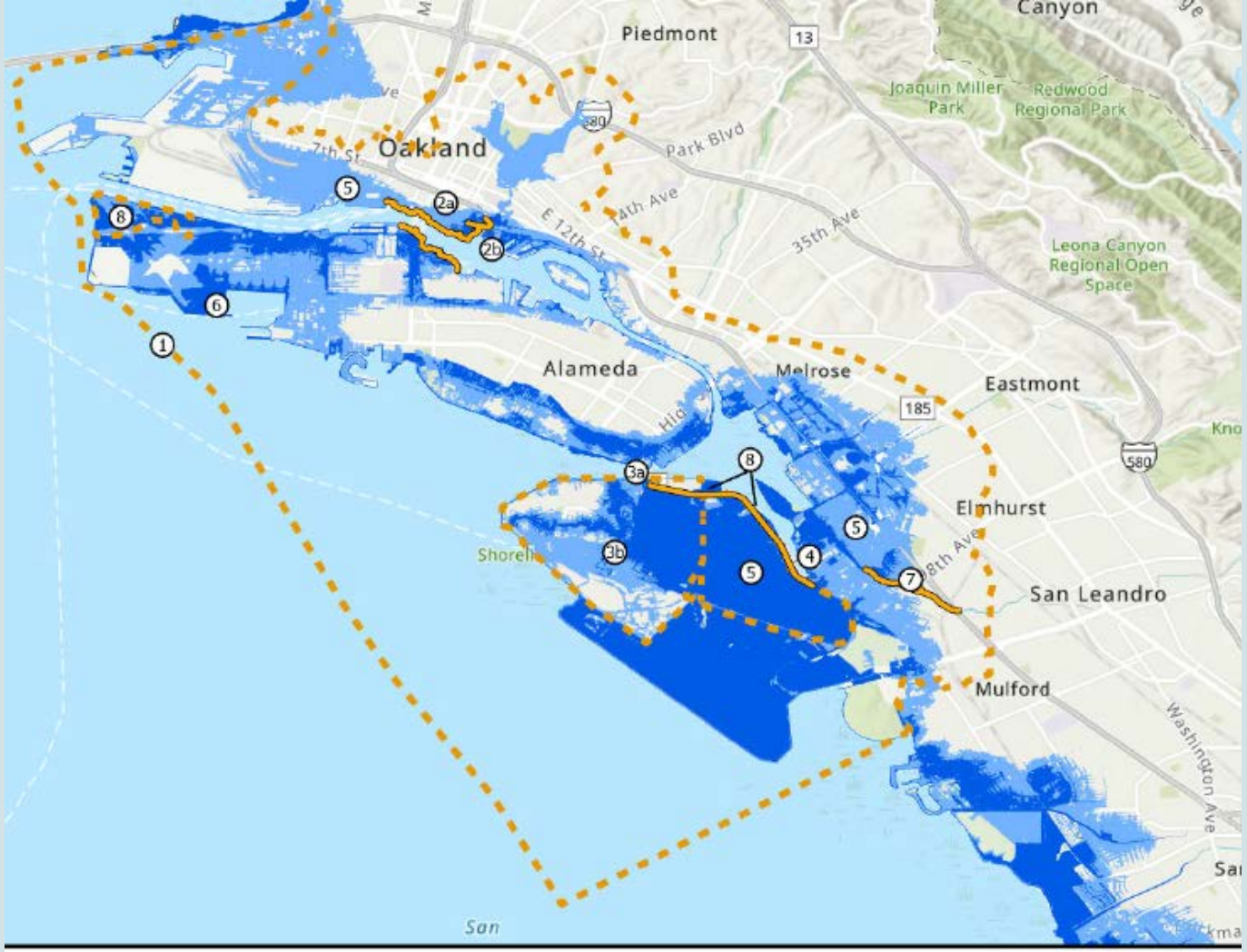


Working Group: Steering Committee

- Caltrans
- City of Alameda
- City of Oakland
- Community Action for a Sustainable Alameda
- East Bay Regional Park District
- Greenbelt Alliance
- Hood Planner/East Oakland Neighborhood Initiative
- Port of Oakland/Oakland International Airport
- San Francisco Bay Regional Water Quality Control Board
- Sogorea Te' Land Trust
- West Oakland Environmental Indicators Project

Working Group: Activities To Date

- Held 8 quarterly meetings (with 27 - 47 participants)
- Formed steering committee and San Leandro Bay group
- Adopted charter and objectives
- Fieldtrips at MLK Jr. park and OAK airport
- Logo by Alameda High School students



Sea Level Rise Adaptation Projects

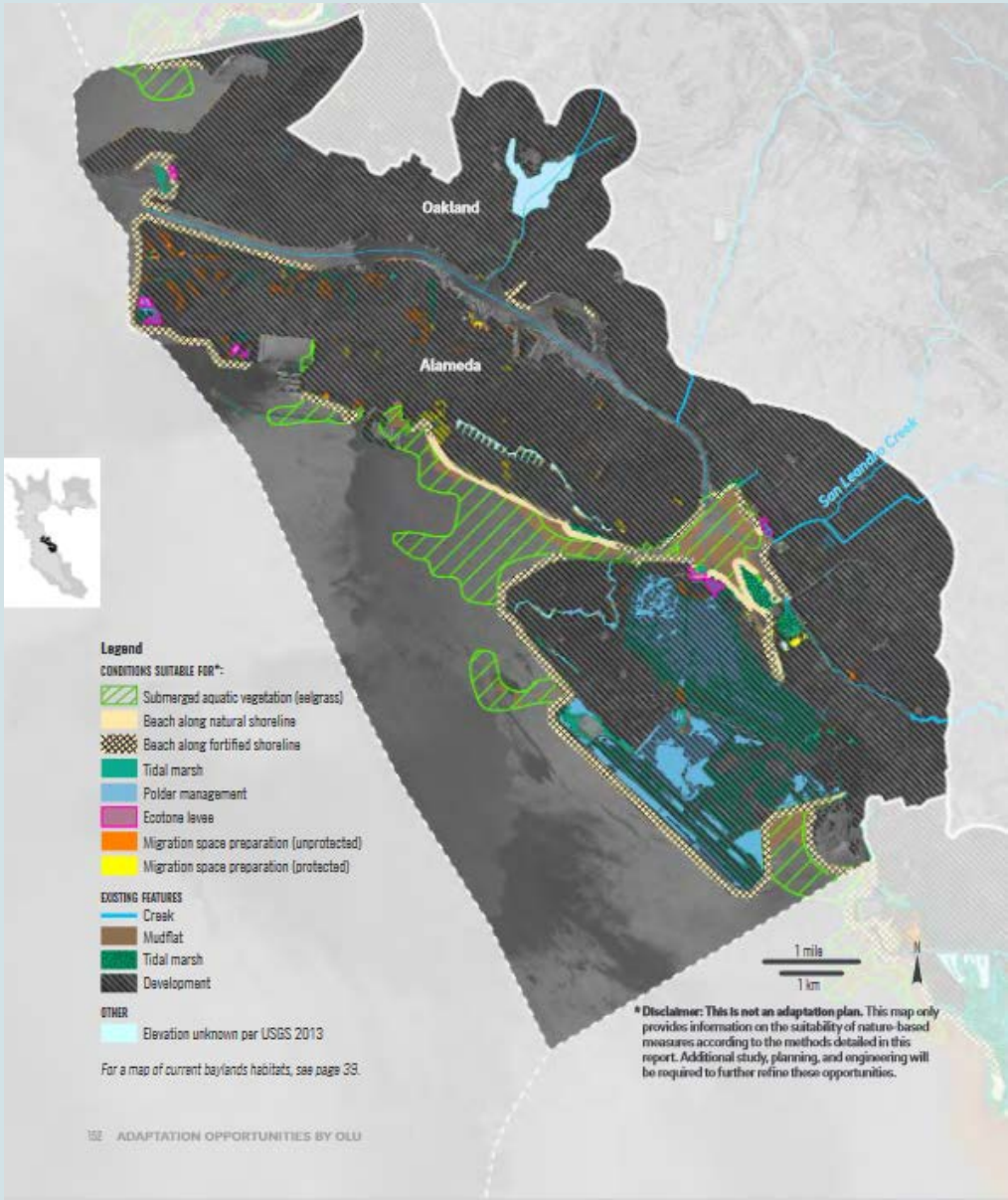
1. Sub-regional Long-term Adaptation Plan
2a. Oakland-Alameda Estuary Adaptation Project
2b. Estuary Park Renovation and Expansion Project
3a. Bay Farm Island Adaptation Project (short-term)
3b. Bay Farm Island Adaptation Project (long-term)
4. Caltrans Doolittle Drive/SR-61 Sea Level Rise Adaptation
5. Port of Oakland Vulnerability Assessment and Plan
6. De-Pave Park Master Plan
7. San Leandro Creek Trail Restoration Project
8. East Bay Regional Park District SF Bay Trail Gap Closure

Working Group: Funded Projects (2023-2025)

Project Description	Funding	Area
1. Long-term Adaptation Plan – Webpage: www.alamedaca.gov/AdaptationLongTermPlan	$300,000 SFEP $540,000 NFWF = $840,000 (federal)	Entire operational landscape unit (Bay Bridge to Oyster Bay in San Leandro)
2a. Oakland-Alameda Estuary Adaptation Project – Webpage: www.alamedaca.gov/AdaptationEstuary	$425,000 Caltrans $75,000 City of Alameda = $500,000	Oakland-Alameda Estuary
3. Bay Farm Island Adaptation Project – Webpage: www.alamedaca.gov/AdaptationBayFarmIsland	$1.5 million FEMA $530,000 Alameda General Fund = $2,030,000	Bay Farm Island & Oyster Bay
Total Funding	**$3.37 million**	

Request: Long-term Plan Grants

- Request: Accept SFEP and NFWF federal grants
- Purpose: Identify actions needed over time as the shoreline changes to protect communities
- SFEP: $300,000 for project and regional agency coordination, governance structure analysis and community engagement
- NFWF: $540,000 for the above tasks, and the draft and final Plan



Request: Community Partners

- Request: Authorize City Manager to enter into contract
- Purpose: To lead community engagement process for three adaptation projects
- Process: RFP with 31 day submittal period; received 4 responses
- Steering Committee selected CASA and Greenbelt Alliance

Next Steps

- Enter into contracts with Community Partners
- Enter into contract with SFEI as Scientific Advisor
- Select Consultant through RFP process
- City Council request approval of Consultant: Sept 2023
- Project kick-off: late 2023

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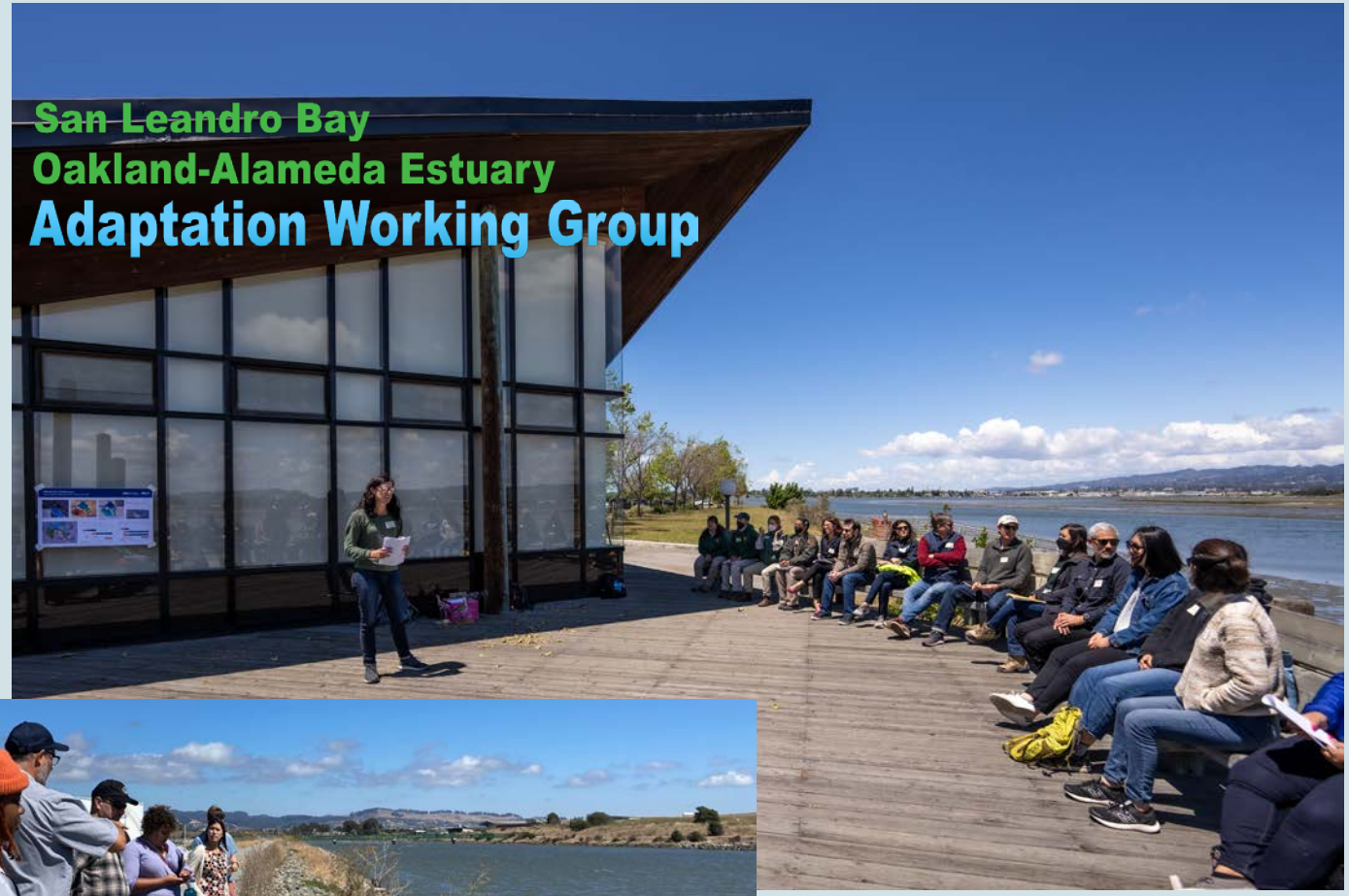
Learn more: www.alamedaca.gov/AdaptationWorkingGroup