



# Deep East Thrives! Leveraging Three Scales to Ensure Equitable Outcomes for Community Adaptation

August 1, 2023

WRT with Hood Planning Group and the City of Alameda + Estuary Adaptation Working Group

WRT

# AGENDA

- 01** INTRODUCTIONS & FRAMING
- 02** EAST OAKLAND GRASSROOTS ADVOCACY AND COMMUNITY PLANNING
- 03** RAAPP + OLU APPROACH
- 04** OAKLAND ALAMEDA WORKING GROUP
- 05** QUESTIONS + DISCUSSION

# 01

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# INTRODUCTION & FRAMING

# ACTION ACROSS SCALES



Regional



Sub-Regional



Grass Roots

# OPERATIONAL LANDSCAPE UNITS (OLU)

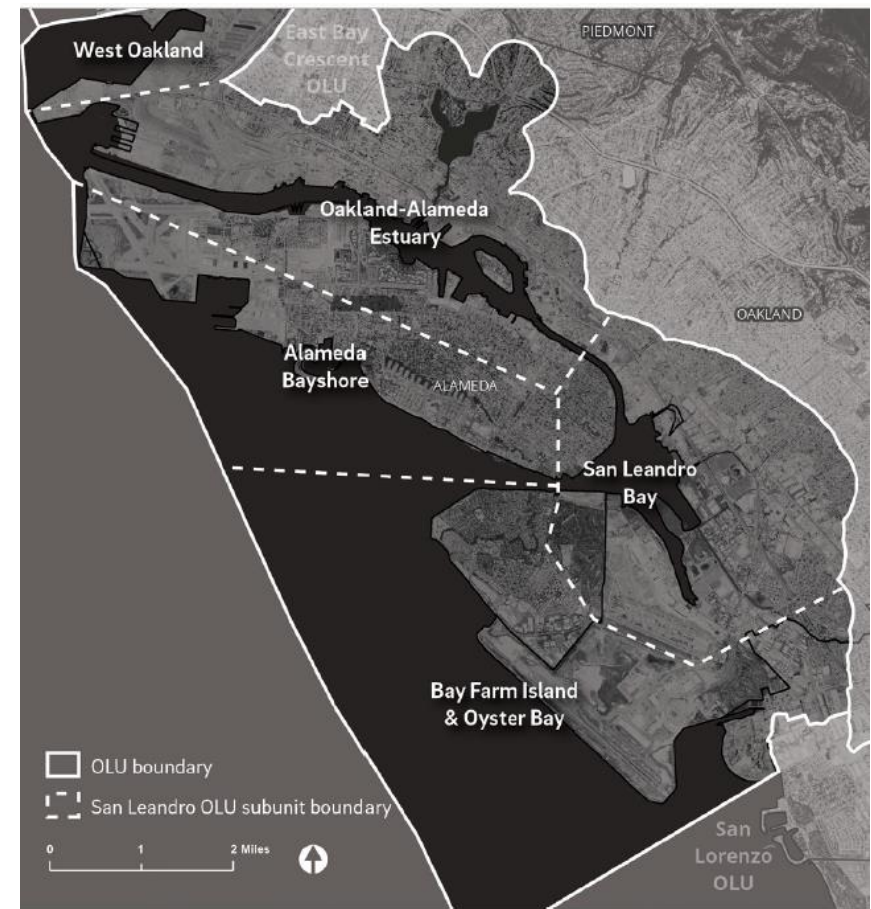
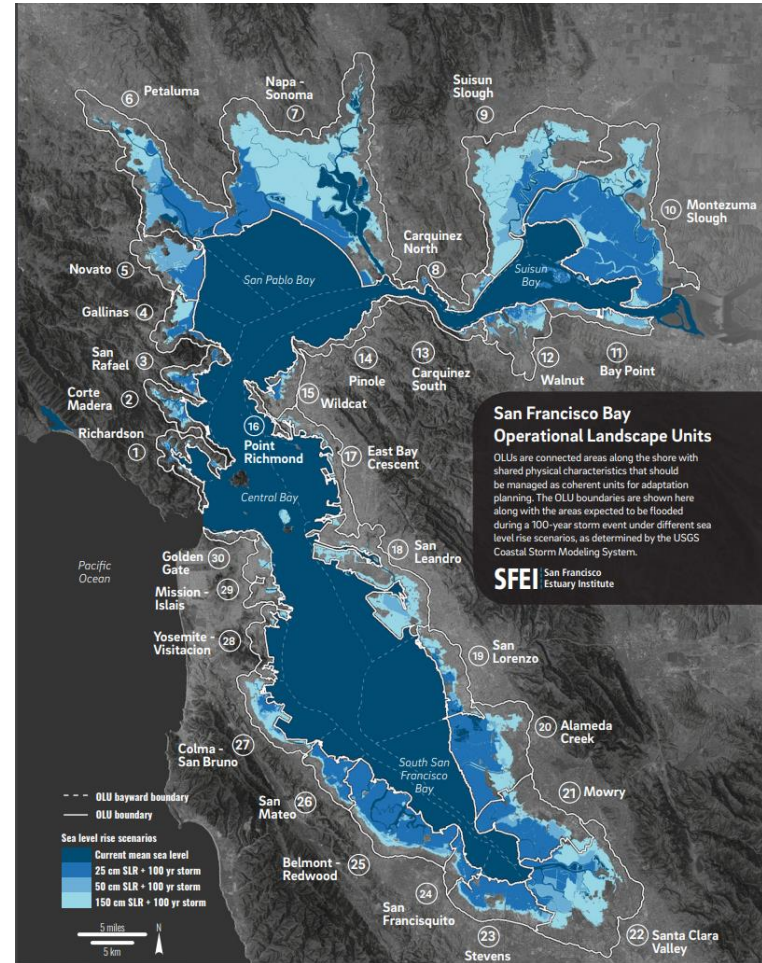
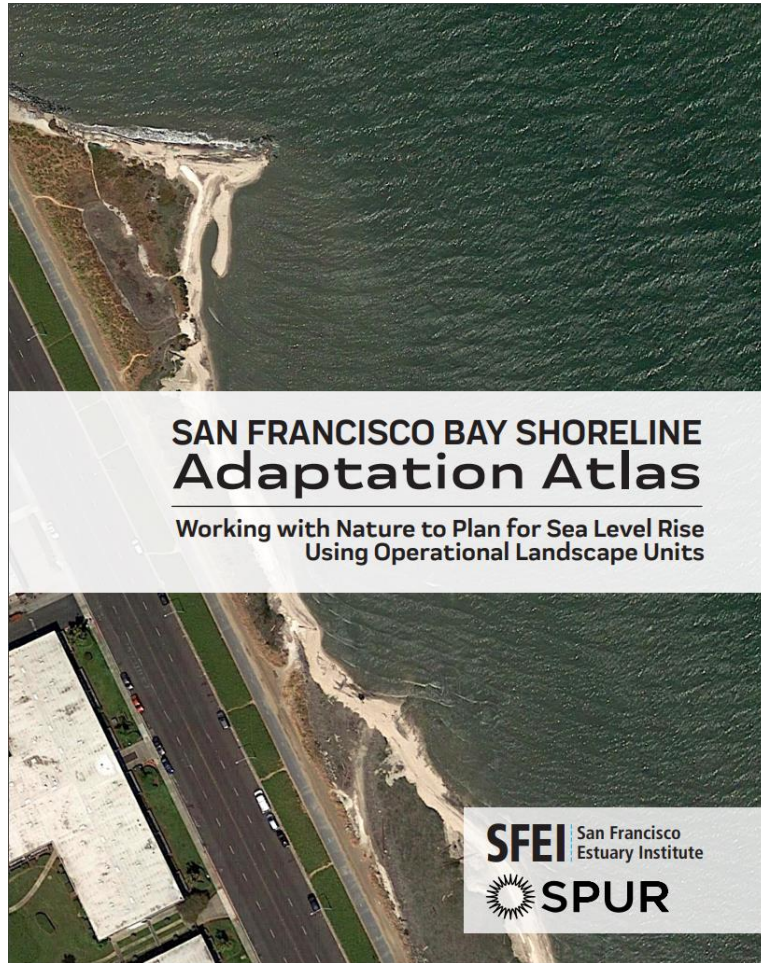


Figure 5. Suggested subunits for the San Leandro OLU.

# MEET OUR PANEL



**John Gibbs**

Principal  
WRT



**Marquita 'Keta' Price**

The Hood Planner  
Hood Planning Group



**Cristina Bejarano**

Senior Associate  
WRT



**Gail Payne**

Project Manager  
City of Alameda &  
Estuary Adaptation Working Group

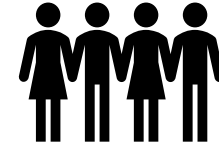
# 02

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## **EAST OAKLAND GRASSROOTS ADVOCACY AND COMMUNITY PLANNING**

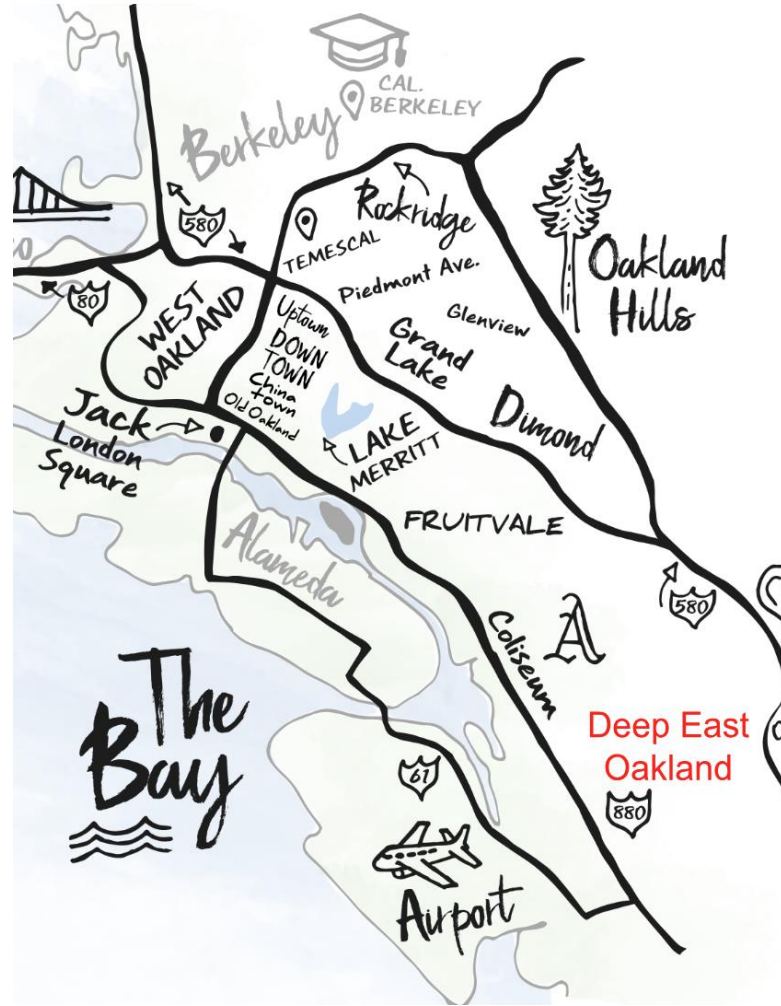
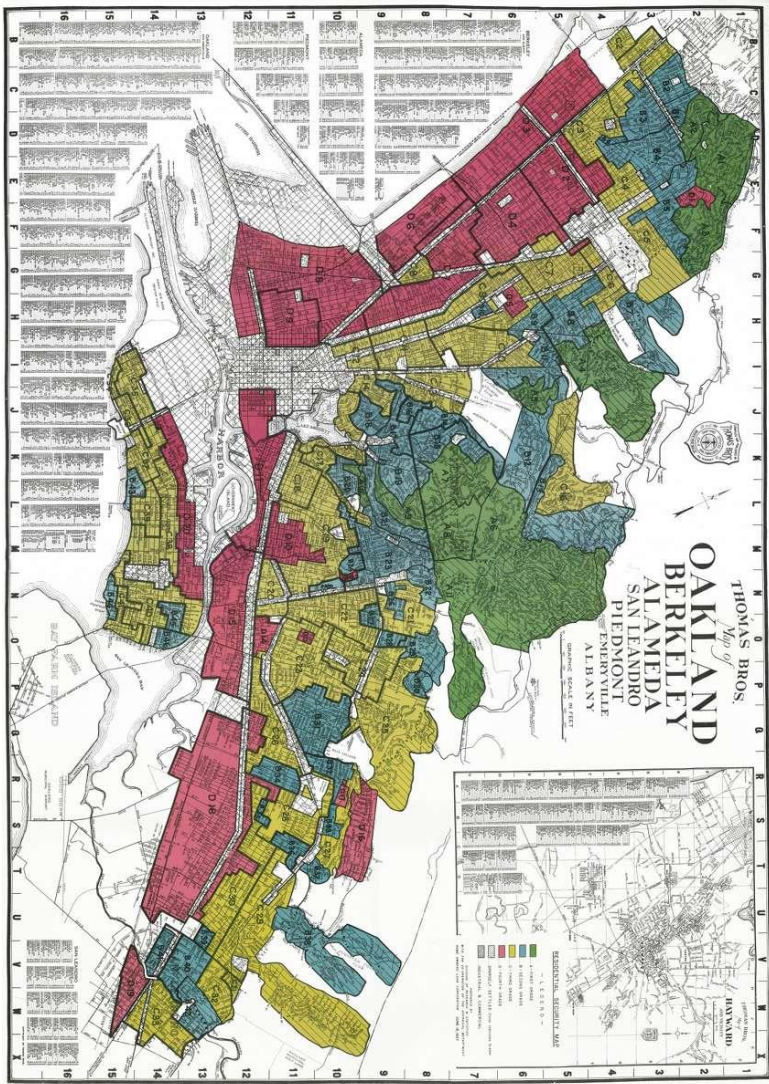
**Hood  
PLANNER**

# WHO AM I? WHY COMMUNITY PLANNING?



**Hood Planning Group (HPG)** is on a mission to inspire and empower Bay Area 'hoods to reclaim their built environment through community-centered planning and development, 'hood activations, and multi-stakeholder collaboration on policy.





**WHO I SERVE:  
DEEP EAST  
OAKLAND**



# DEEP EAST OAKLAND

**Real life challenges, stressors and desperation experienced by this community**

# DEEP EAST OAKLAND

People, Place, and Culture



# ADVOCACY & COMMUNITY PLANNING

Approach to connecting people and culture to the shoreline

## Racial and Economic Equity

Move with integrity. Acknowledge historical harm done to the community. Equitable redistribution of resources and power. Pay residents for lived experience!

## Culturally-affirming outreach and engagement

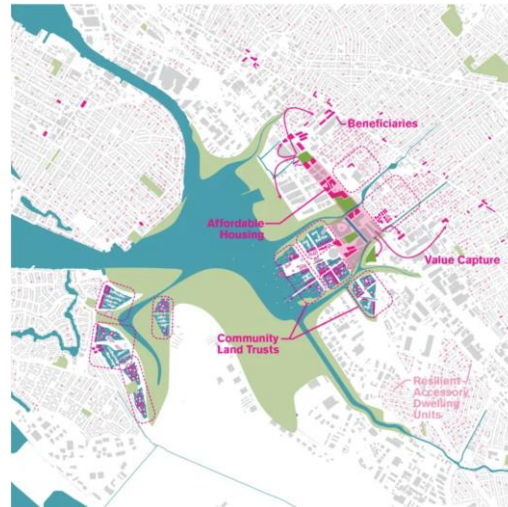
**Know your audience** Meet residents where they're at; Conduct on-going research of how residents want to be engaged.

**'Hood Activations.** Activate people, places, and spaces. Promote outdoor recreation and reconnecting to nature as a form of healing. Encourage residents to become stewards of their 'hoods.



# RESILIENT BY DESIGN: ESTUARY COMMONS

People, Place and a Path forward





# EAST OAKLAND NEIGHBORHOOD INITIATIVE (EONI)

Building neighborhood capacity for community driven planning and development

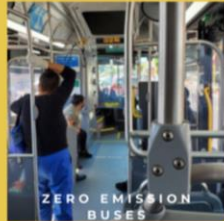


# POWER THE PEOPLE: MLK JR. SHORELINE ACCESS STUDY

Access and Recreation to the MLK Jr. Shoreline



## HEALTH AND ENVIRONMENTAL IMPACTS OF DIFFERENT TRANSPORTATION OPTIONS



Zero emission buses can reduce respiratory symptoms, including asthma in our neighborhoods. Buses improve air quality of neighborhoods by reducing pollution.



Riding a bike leads to better overall fitness, reduces risk for cardiovascular disease, and lower rates of diabetes.



A 20-minute walk a day can improve memory, sleep, and learning. It also reduces anxiety symptoms.



Skateboarding is known to boost your mood, with an emphasis on self-expression through physical exercise that improves agility, balance, and coordination.



According to a study on electric scooters they are better for the environment than personal automobiles but worse than buses with higher ridership or electric bicycles.



A significant amount of air pollutants are caused by motor vehicle exhaust. Electric vehicles reduce or eliminate tailpipe emissions, improving air quality and promoting better health.

## 4. Priority Recommendations



### TRANSPORTATION & MOBILITY

- Free EV Shuttle Bus
- Mobility Hubs (Liberation Park)
- Discounted carshare, rideshare and scooter share options
- Infrastructure Improvement Needs
- Charging/docking stations
- Paving plan
- Bike Plan Implementation



### REIMAGINING THE SHORELINE

- Cultural markers (murals, statues, signage, etc.) that highlight MLK, activism, and East Oakland
- Free community events, e.g. vendor pop-ups, music festivals
- Opportunities for community stewardship, e.g. jobs for returning residents, outdoor activities for Black and Brown youth



### SHORELINE ACCESSIBILITY & ENVIRONMENTAL IMPACTS

- Access and entrance points improvements
- San Leandro Creek clean-ups/development and other projects that reverse pollution
- Closing the Bay Trail gaps and improving connections

The East Oakland Collective - 2022



# SAN LEANDRO (LISJAN) CREEK TRAIL

A 1.2 miles class 1 bike and ped trail to MLK Jr. Shoreline from deep East Oakland





# OAKLAND SHORELINE LEADERSHIP ACADEMY

Exploring and planning restoration and community development plans for the Oakland shoreline



# OAKLAND SHORELINE LEADERSHIP ACADEMY: SACRED SPACES

Shoreline restoration and adaptation that creates thriving habitats for wildlife, and healing, reconnective space for people



# 03

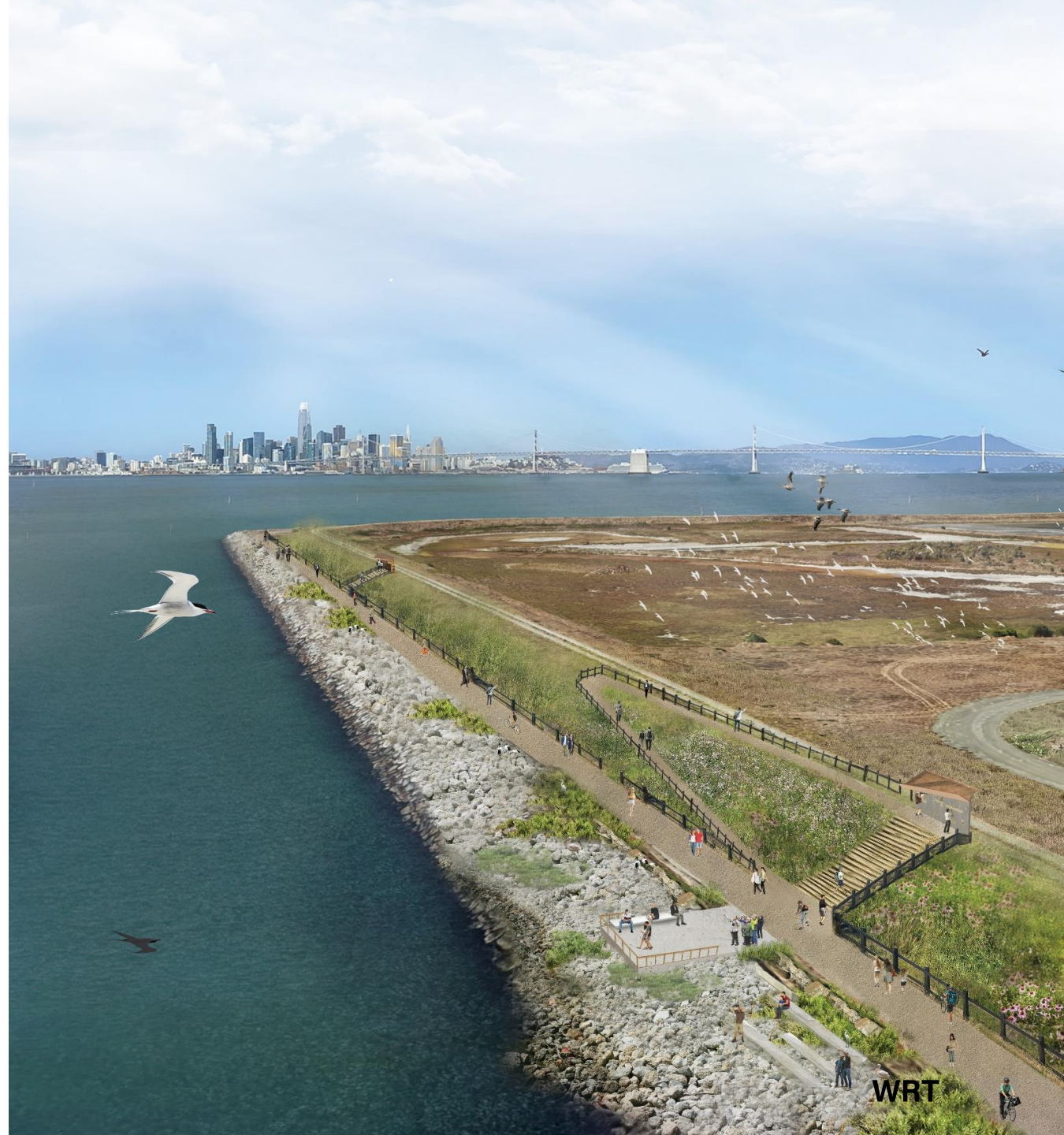
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## RAAPP + OLU APPROACH

# SF BAY TRAIL RISK ASSESSMENT & ADAPTATION PRIORITIZATION PLAN (RAAPP)

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- Large-scale analysis of climate hazards and framework for resilient adaptation of Alameda and Contra Costa County shorelines
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RESILIENCY + ADAPTATION PLANNING

## SF Bay Trail RAAPP

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### PARK DISTRICT MISSION

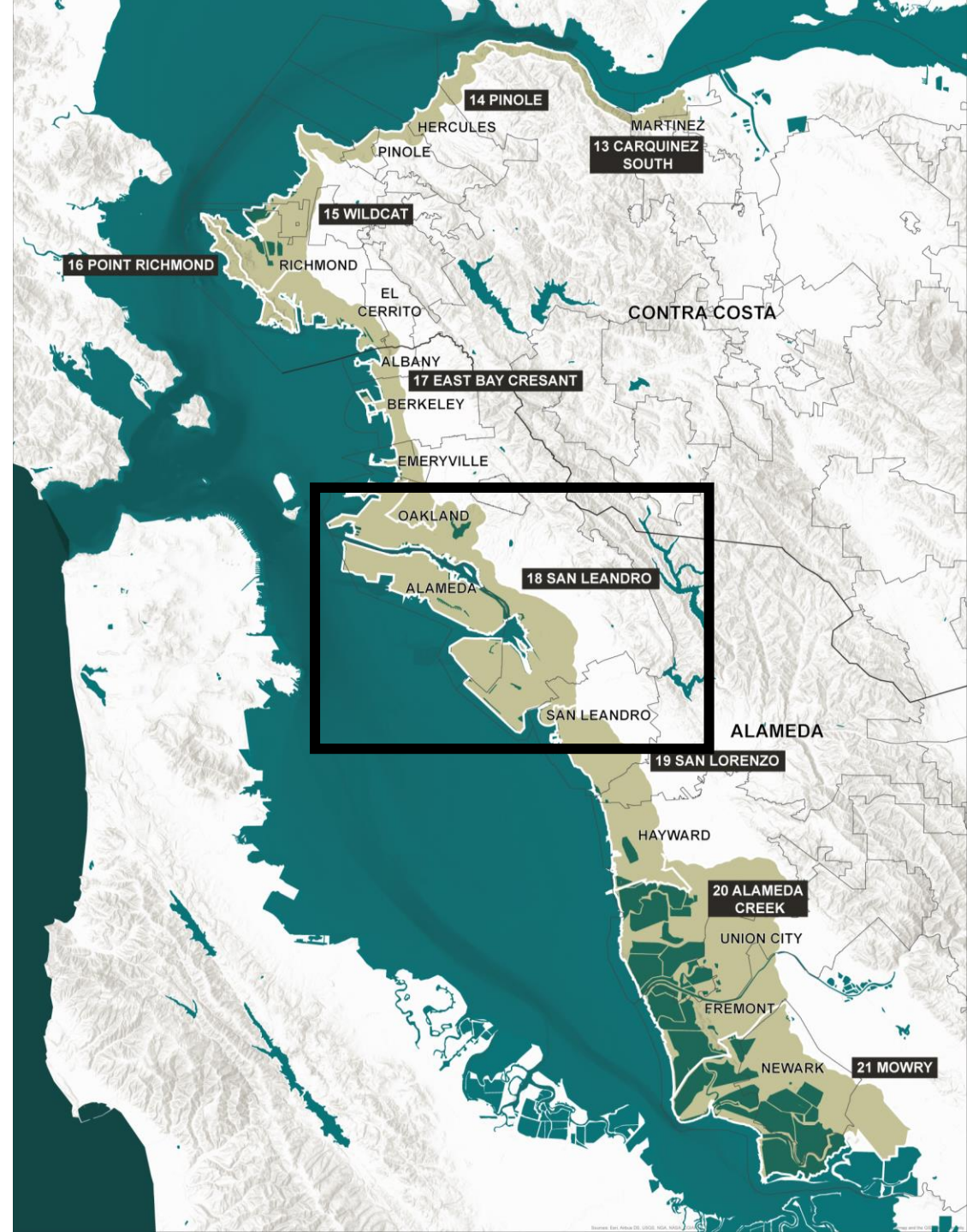
The East Bay Regional Park District preserves a rich heritage of natural and cultural resources and provides open space, parks, trails, safe and healthful recreation and environmental education. An environmental ethic guides the District in all of its activities.



# SF Bay Trail RAAPP

## FRAMING THE CHALLENGE

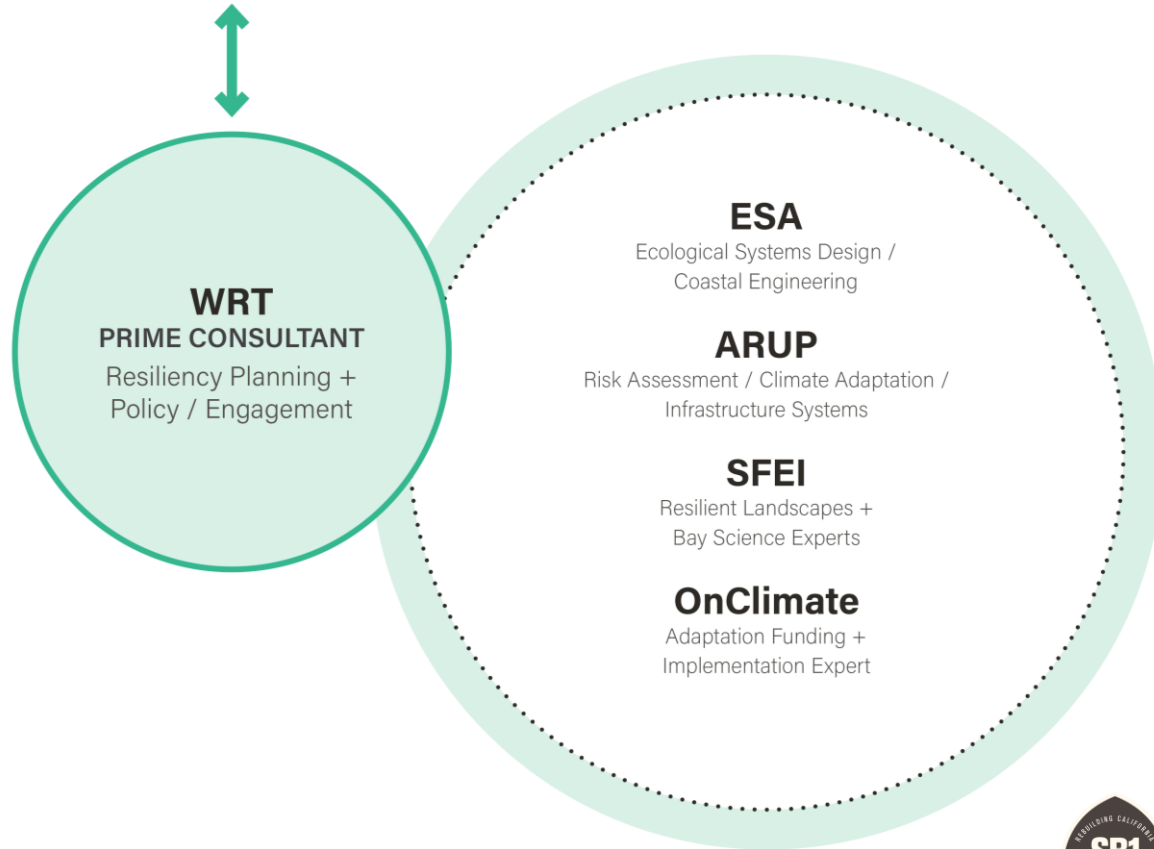
- 40+ miles of Bay Trail within Park District jurisdiction
- Contra Costa & Alameda Counties
- Nine Operational Landscape Units (OLUs)
- Dozens of cities and communities
- Miles of inundated trails and shoreline areas



RESILIENCY + ADAPTATION PLANNING

# SF Bay Trail RAAPP

## East Bay Regional Park District (EBRPD)



California SB 1 –  
Adaptation Planning Grant



# SF Bay Trail RAAPP

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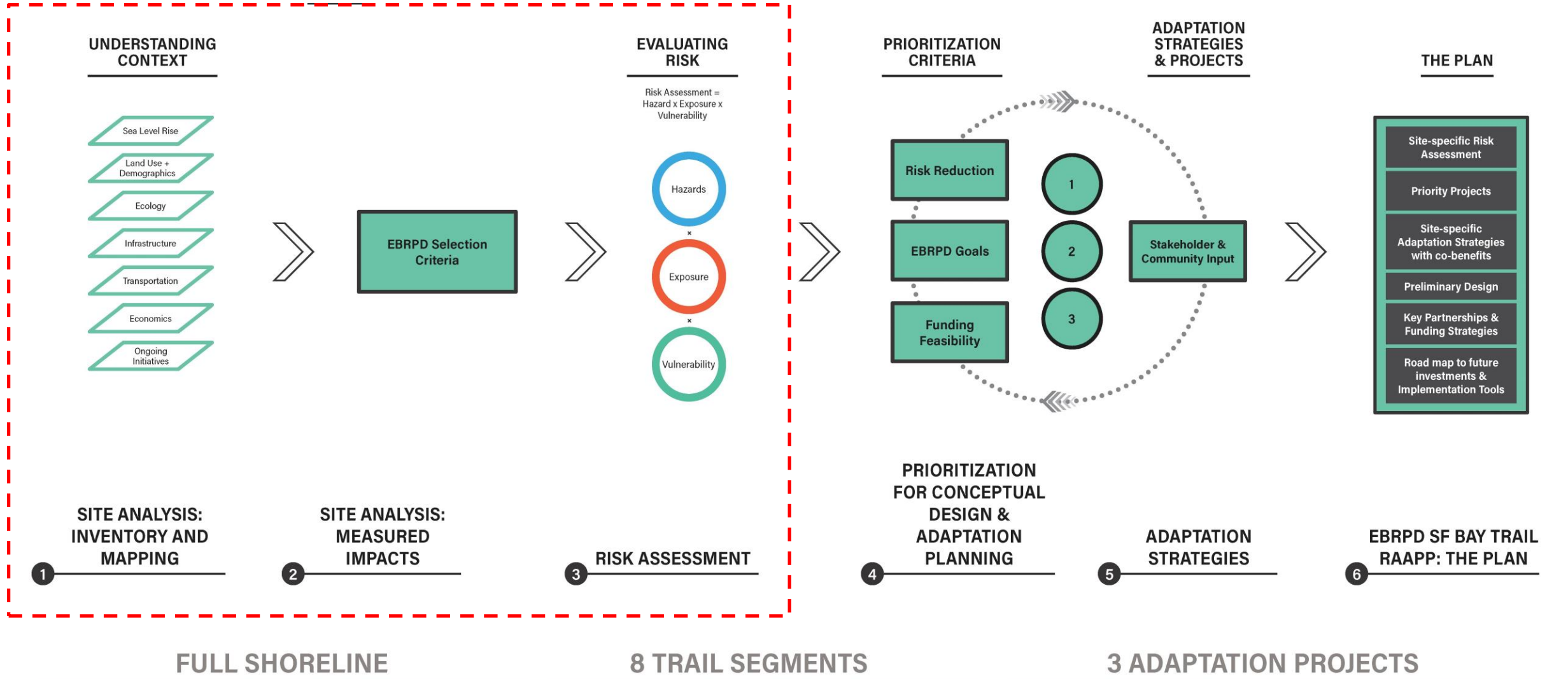
## Key Issues

1. Sea-level Rise
2. Ecological Impacts
3. Public Access Impacts
4. Strategic Partnerships





# SF Bay Trail RAAPP



## SF Bay Trail RAAPP

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### PARK DISTRICT PROJECT GOALS

1. Resilience to Coastal Hazards
2. Restoration Potential
3. Minimize Recurring Maintenance
4. Adjacency to Critical Infrastructure
5. Serving Disadvantaged Communities
6. Access to Nature/User Experience
7. Funding and Partnership Potential
8. Alignment with Park District Master Plan Goals and Priorities
9. Representation of a diversity of coastal conditions and geographies

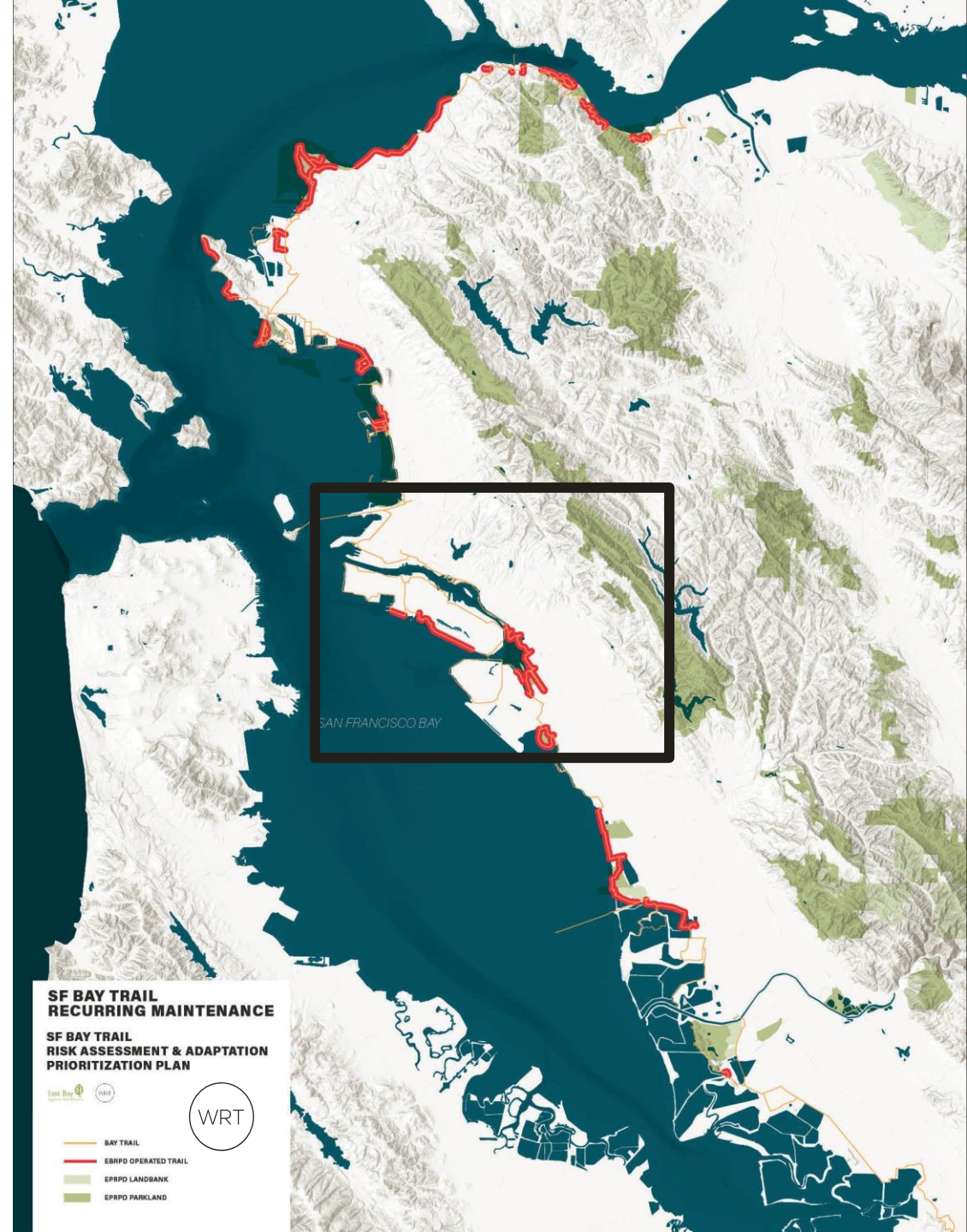
RESILIENCY + ADAPTATION PLANNING

## SF Bay Trail RAAPP

### HIGH-LEVEL GUIDANCE ACROSS EBRPD'S SHORELINE

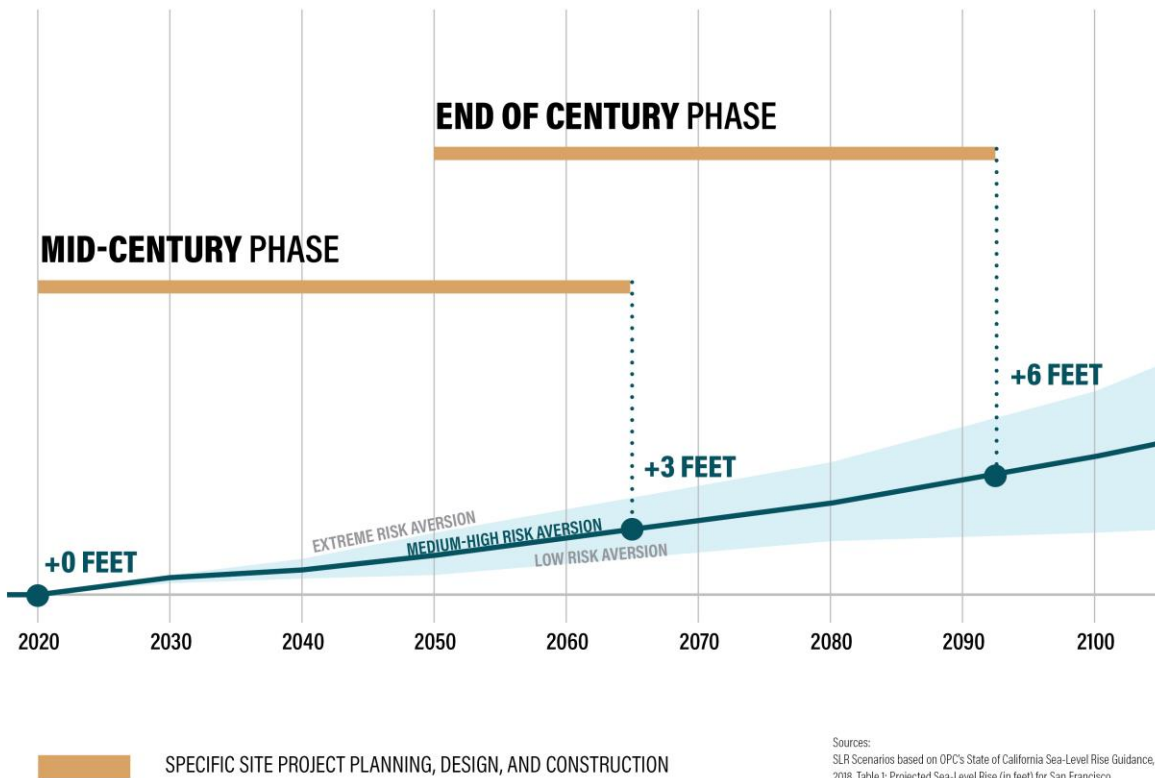


High level guidance/road map for what adaptation might look like for different trail conditions (within EBRPD jurisdiction).



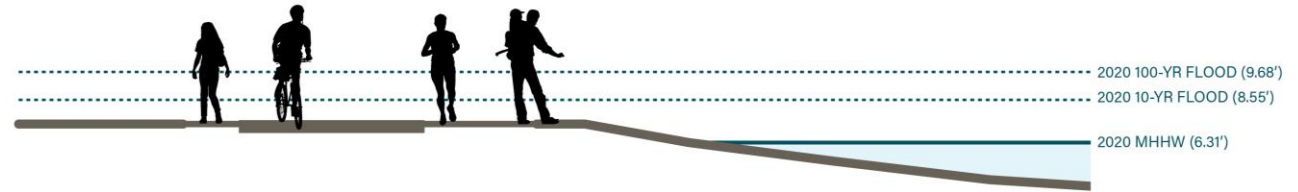
# SF Bay Trail RAAPP

## PLANNING HORIZONS & CONCEPTUAL PHASING

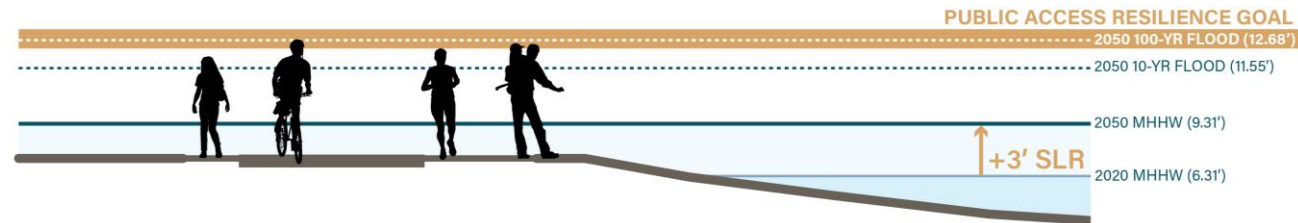


Sources:  
SLR Scenarios based on OPC's State of California Sea-Level Rise Guidance, 2018, Table 1: Projected Sea-Level Rise (in feet) for San Francisco.

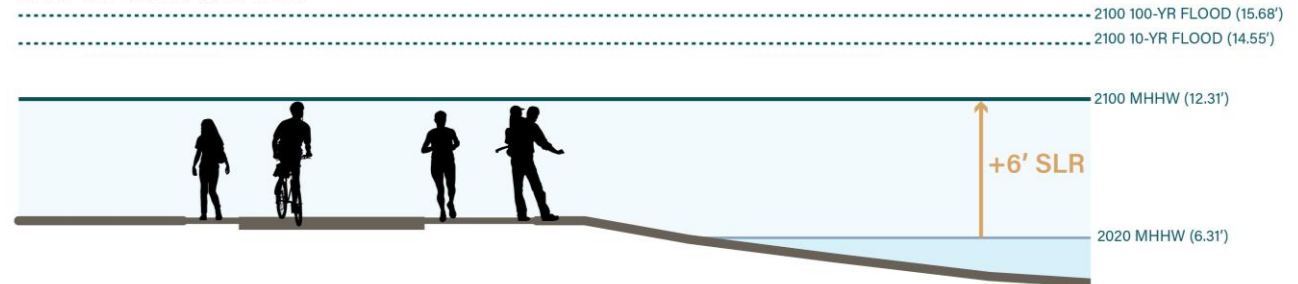
TODAY



**NEAR TERM**  
MID-CENTURY SLR



**LONG TERM**  
END OF CENTURY SLR

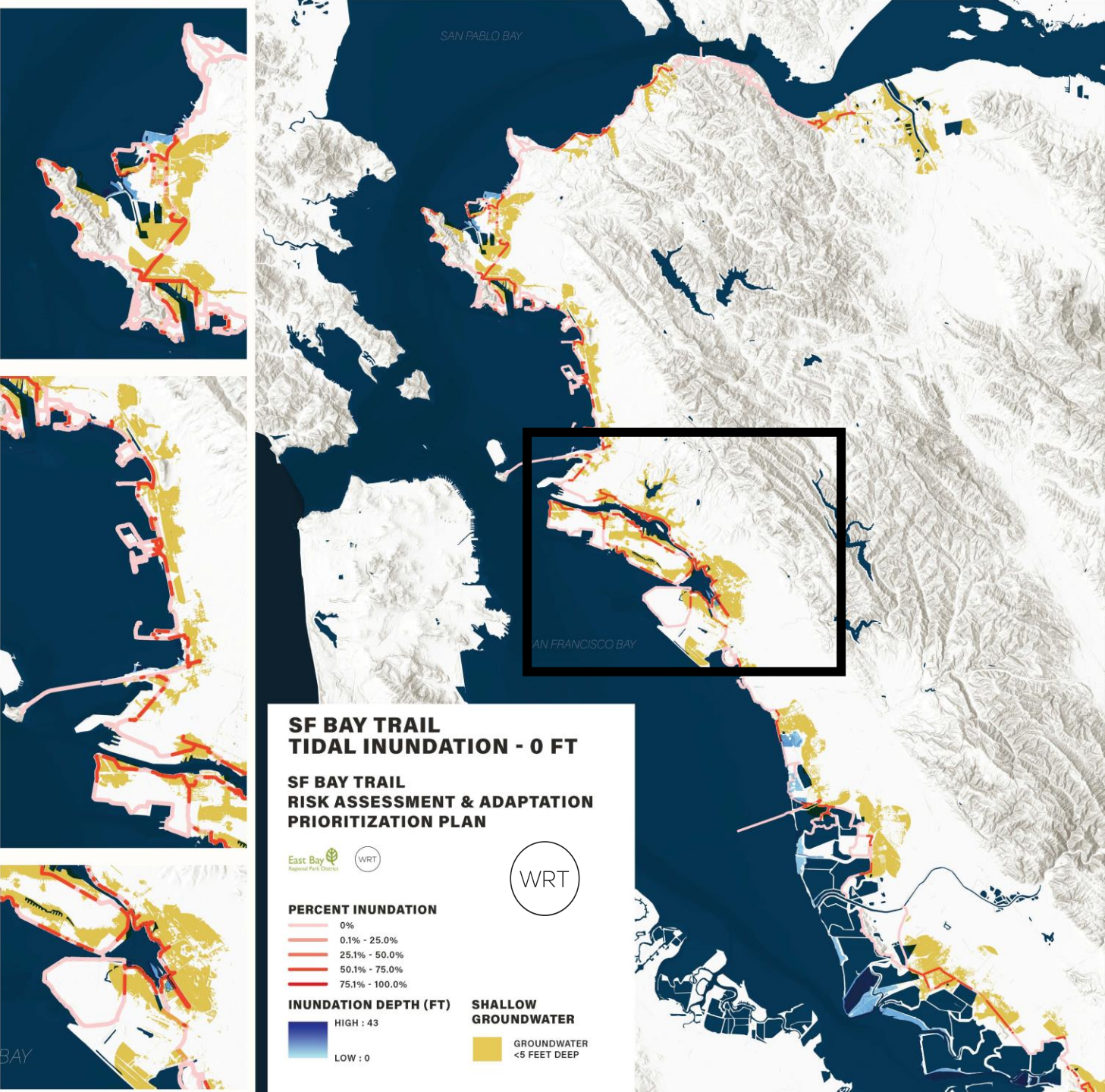


# COASTAL HAZARDS

- Tidal Inundation
- Storm Flooding
- Wave Conditions
- Groundwater Emergence

# TIDAL INUNDATION W/ GROUNDWATER +0 FT

SOURCE: ADAPTING TO RISING TIDES (2017); PLANE, HILL & MAY (2017)

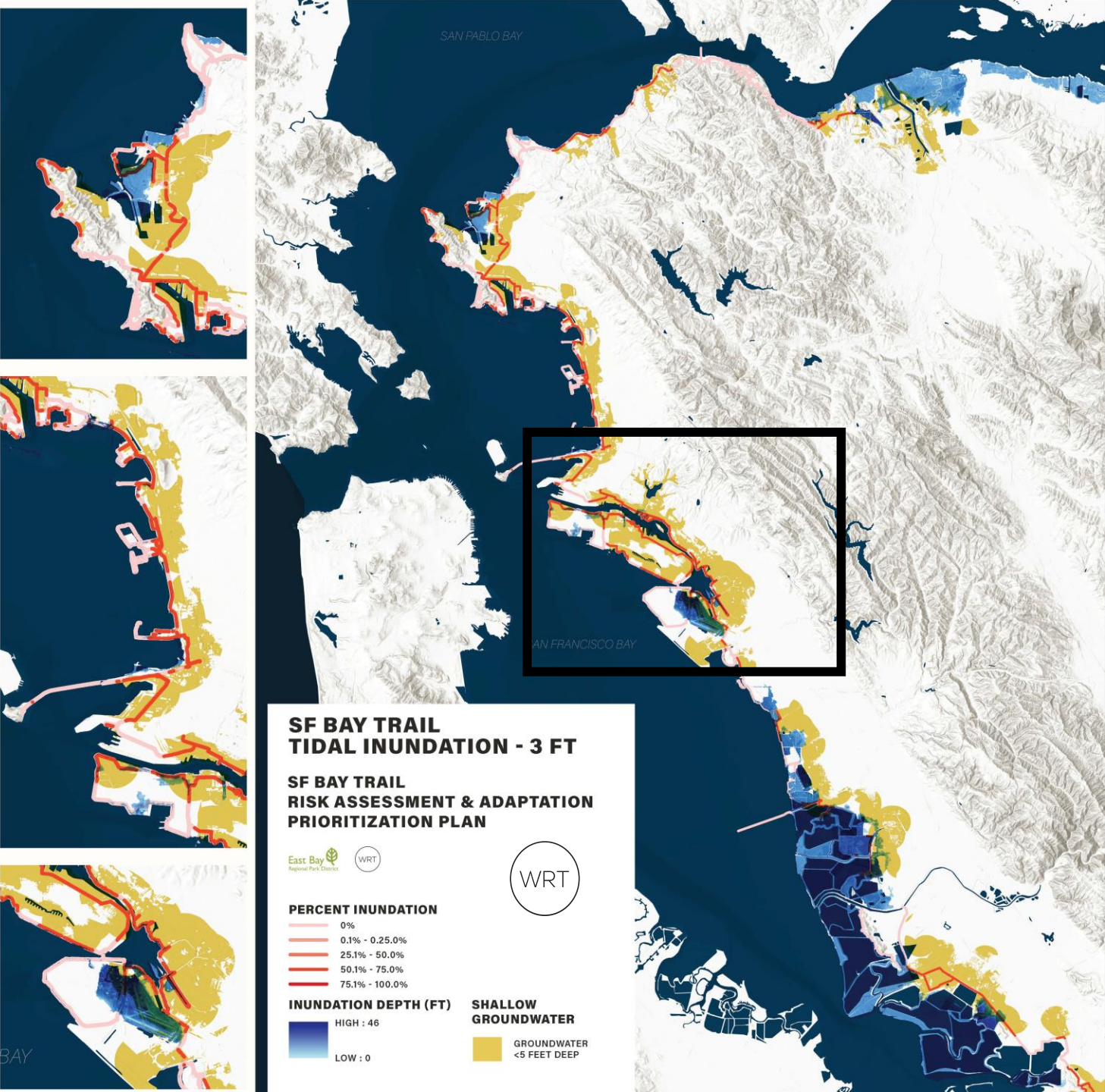


# COASTAL HAZARDS

- Tidal Inundation
- Storm Flooding
- Wave Conditions
- Groundwater Emergence

# TIDAL INUNDATION W/ GROUNDWATER +3 FT

SOURCE: ADAPTING TO RISING TIDES (2017); PLANE, HILL & MAY (2017)

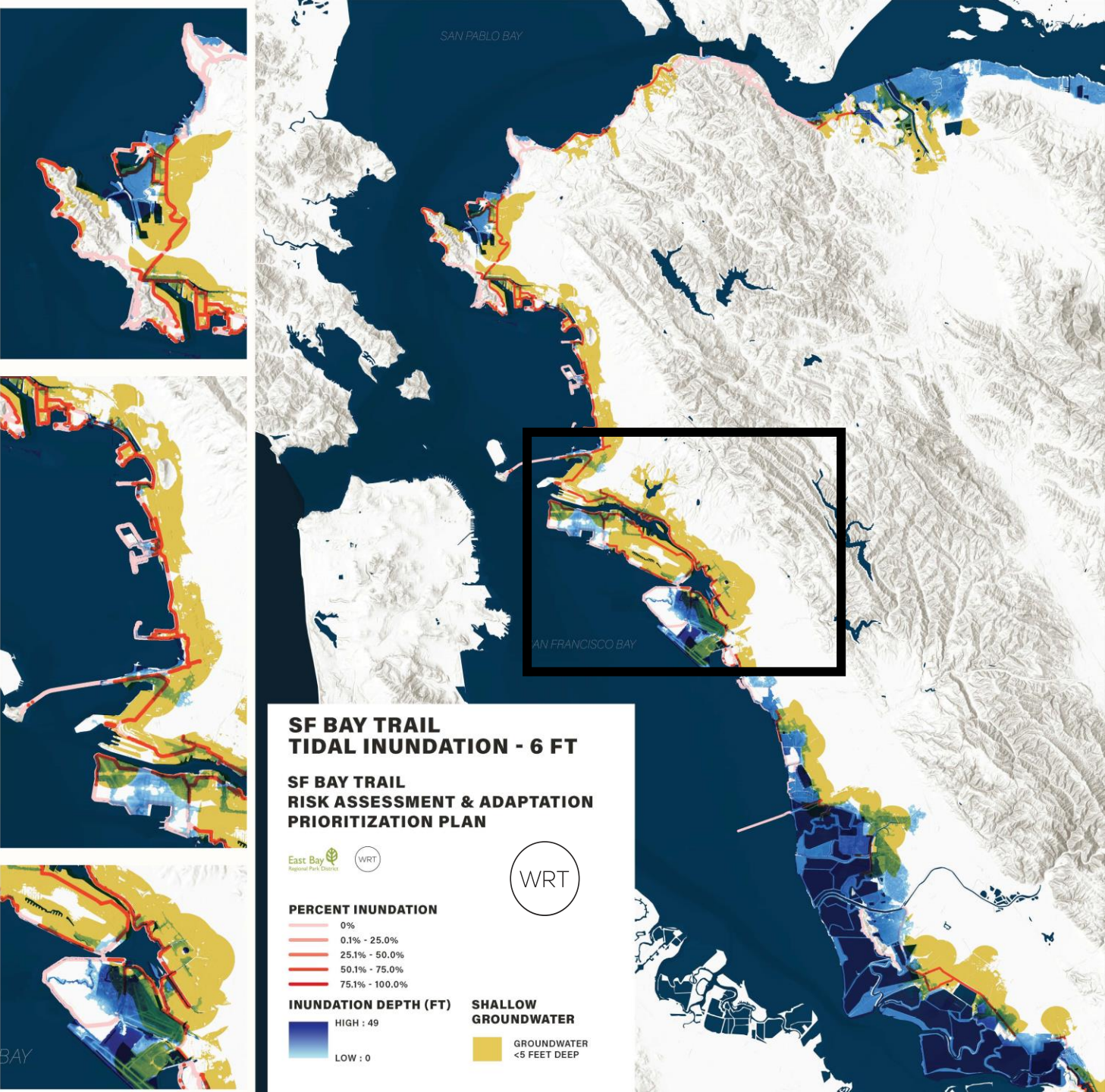


# COASTAL HAZARDS

- Tidal Inundation
- Storm Flooding
- Wave Conditions
- Groundwater Emergence

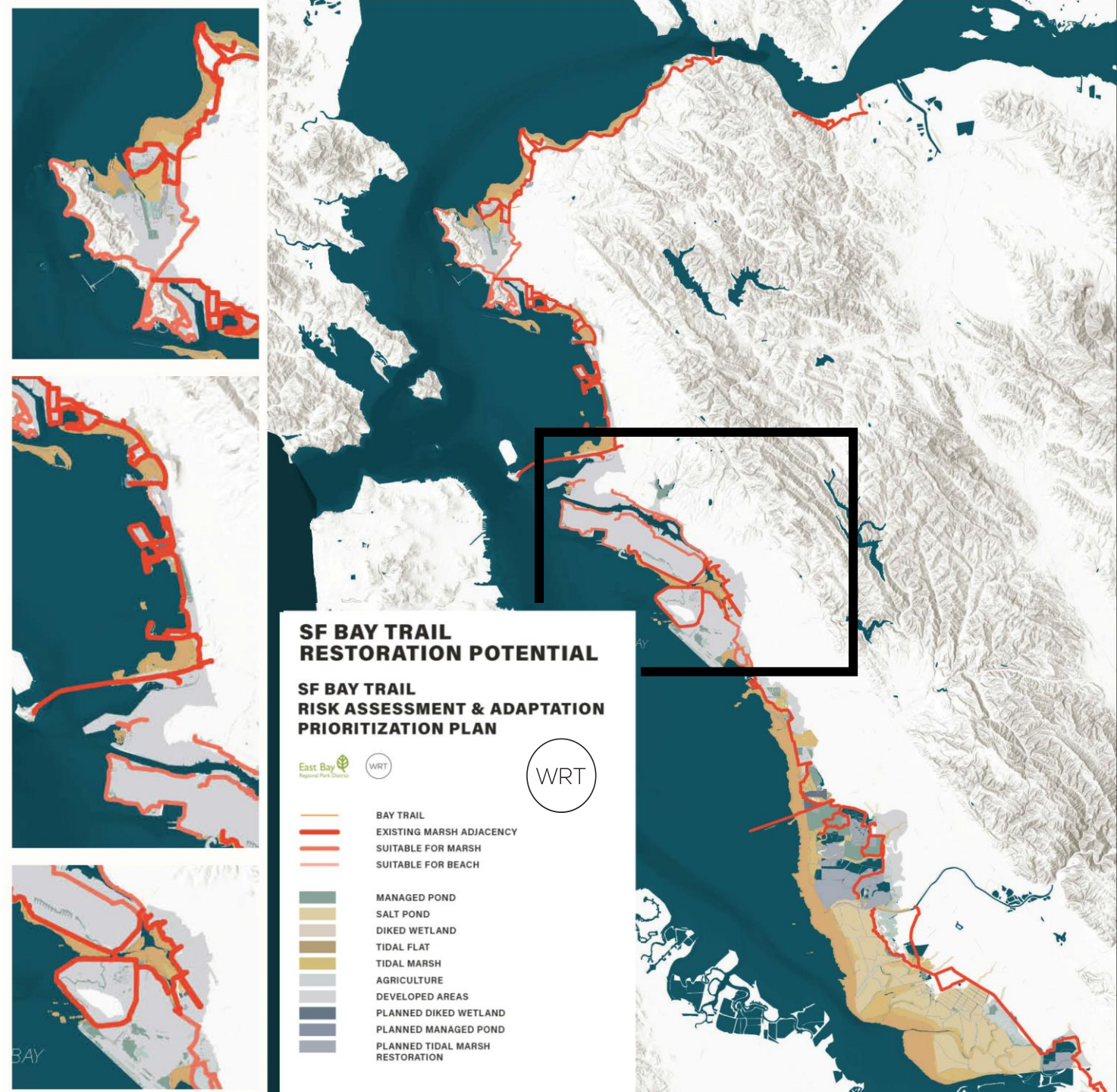
# TIDAL INUNDATION W/ GROUNDWATER +6 FT

SOURCE: ADAPTING TO RISING TIDES (2017); PLANE, HILL & MAY (2017)



# RESTORATION POTENTIAL

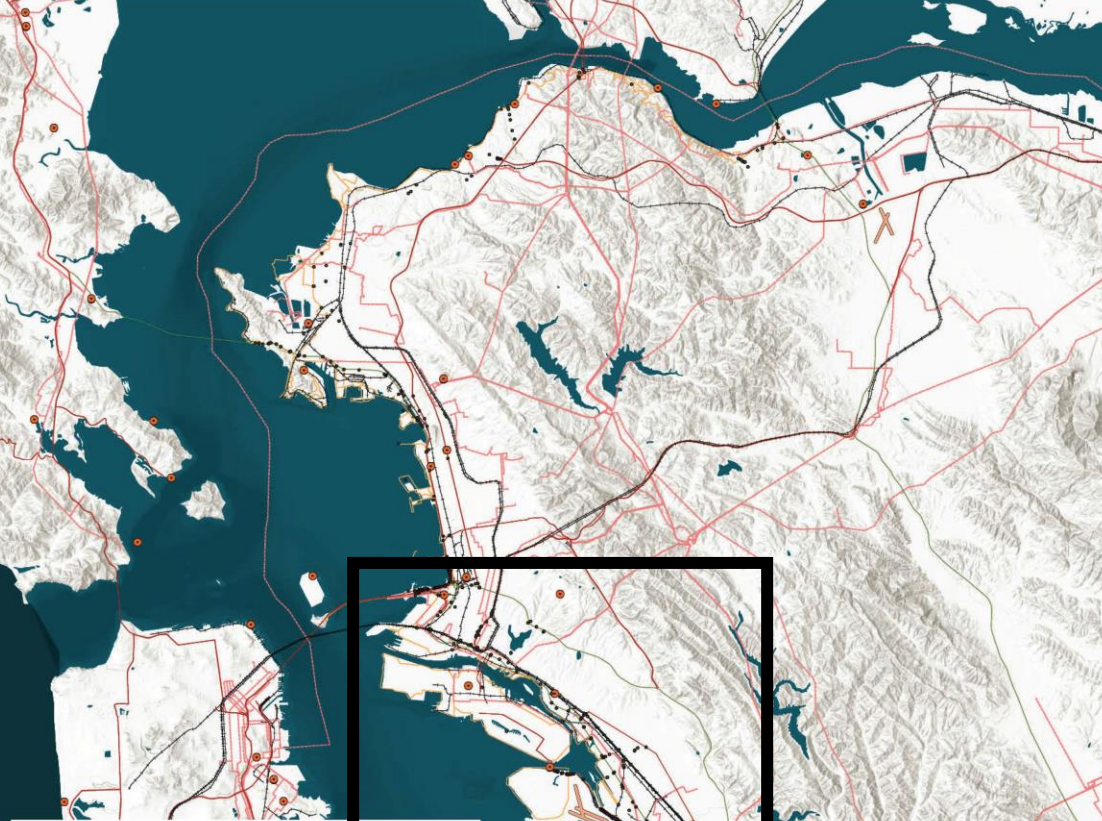
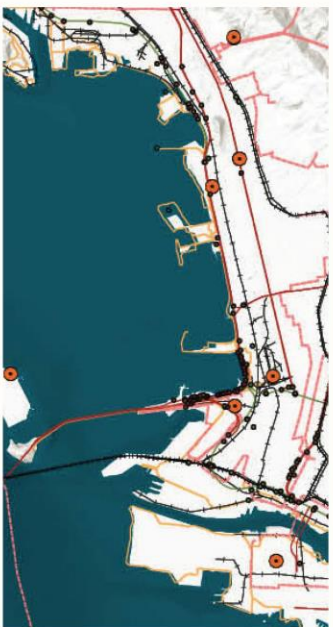
- Existing marsh
- Marsh migration potential
- Existing beaches
- Beach suitability potential





# CRITICAL INFRASTRUCTURE

- Landfills
- Wasterwater Treatment Plants
- Highway
- Rail
- Airports
- Utilities



## SF BAY TRAIL CRITICAL INFRASTRUCTURE

### SF BAY TRAIL RISK ASSESSMENT & ADAPTATION PRIORITIZATION PLAN

East Bay Regional Park District WRT

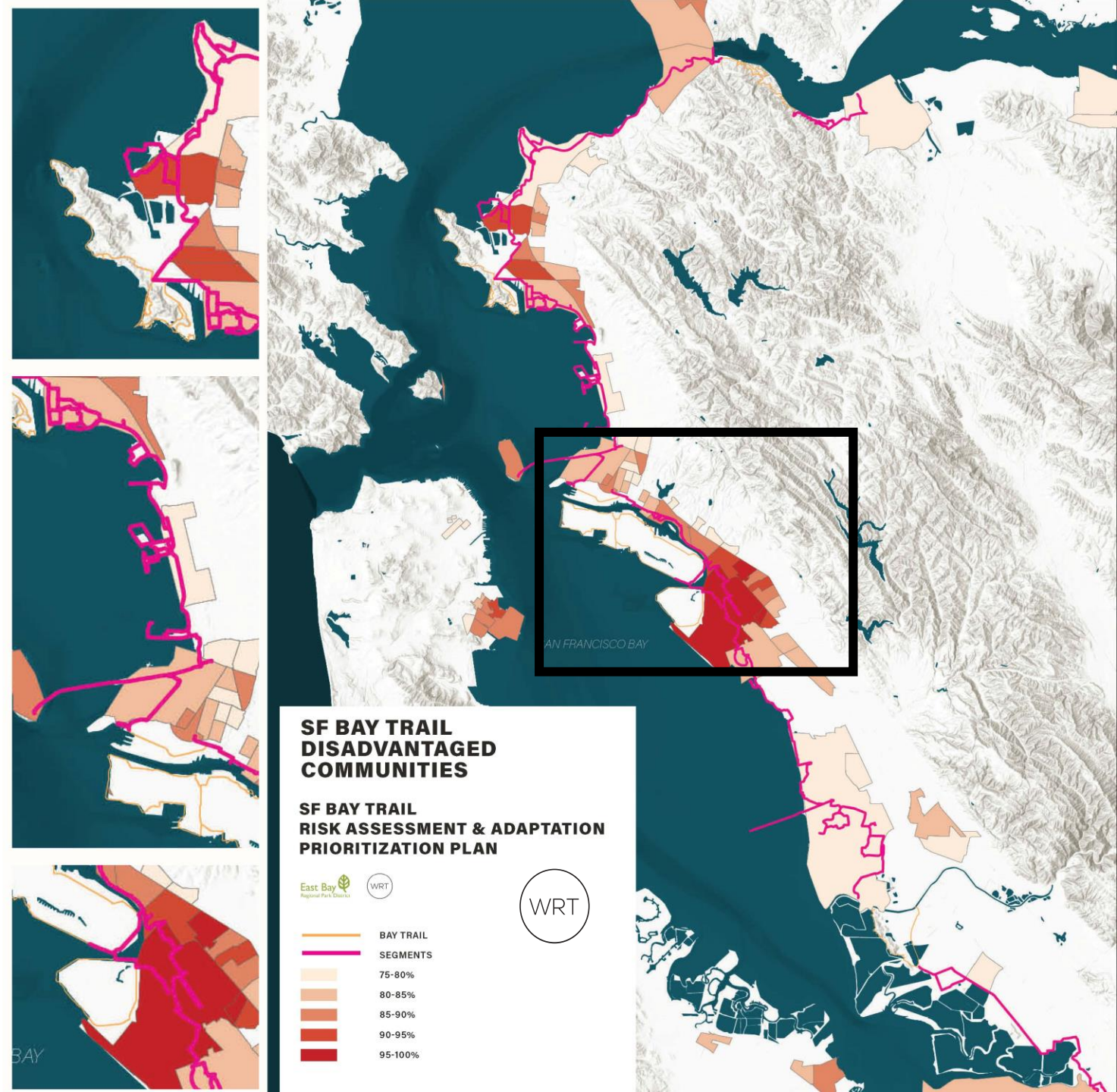
WRT

- US FREEWAY
- INTERSTATE
- RAILROAD
- AIRPORT RUNWAY
- TRANSMISSION LINE
- STATE HIGHWAY BRIDGES
- PARK AND RIDE LOTS
- MAINTENANCE FACILITIES
- LOCAL BRIDGES
- CULVERT END TREATMENTS
- WASTEWATER TREATMENT PLANT
- LANDFILLS

SOURCES: CALTRANS, CA ENERGY COMMISSION DATA, BART, AC TRANSIT, COUNTY CONNECTION, SFEI

# DISADVANTAGED COMMUNITIES

- Cal EnviroScreen 3.0:  
Census tracts with greater than 75% disadvantaged residents



RESILIENCY + ADAPTATION PLANNING

# SF Bay Trail RAAPP

## RISK ASSESSMENT RESULTS

### FIRST PRIORITY SITES

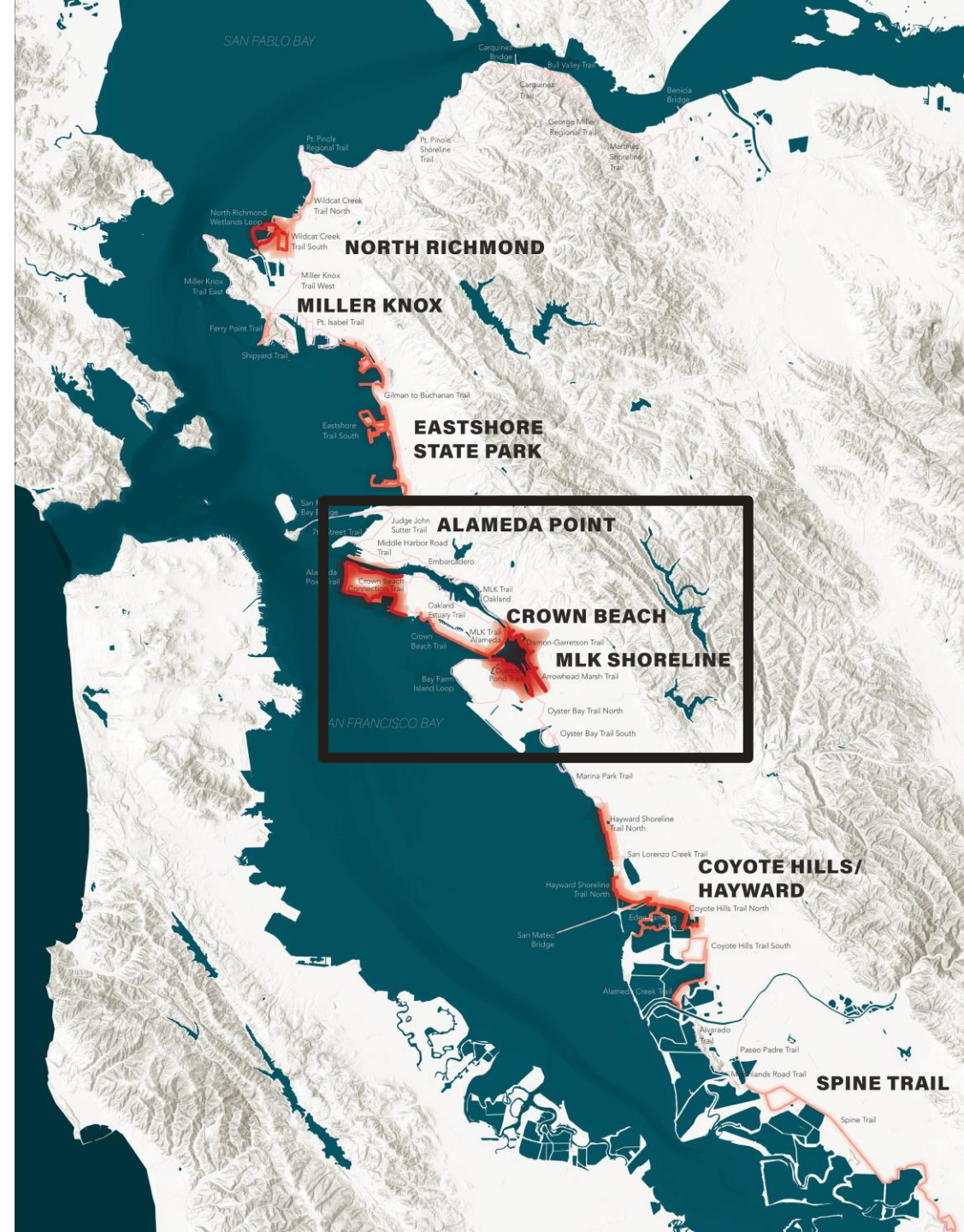
- » MLK Shoreline
- » Alameda Point
- » Coyote Hills/Hayward

### SECOND PRIORITY SITES

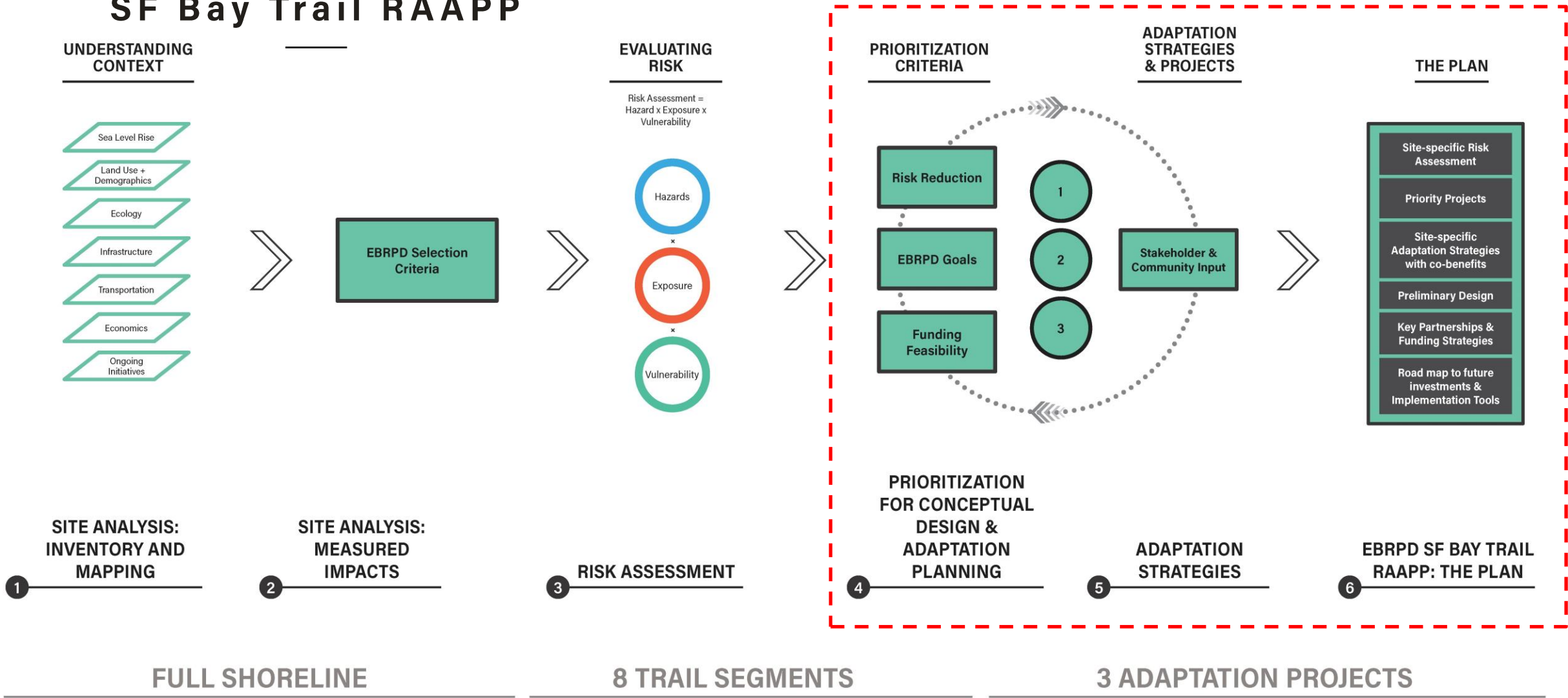
- » North Richmond
- » Eastshore McLaughlin State Park
- » Spine Trail

### THIRD PRIORITY SITES

- » Crown Beach
- » Miller Knox

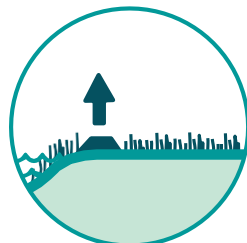


# SF Bay Trail RAAPP





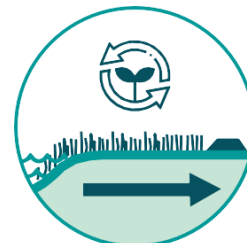
### Adaptation Measures



Hold the Line



Buffer with Public Open Space

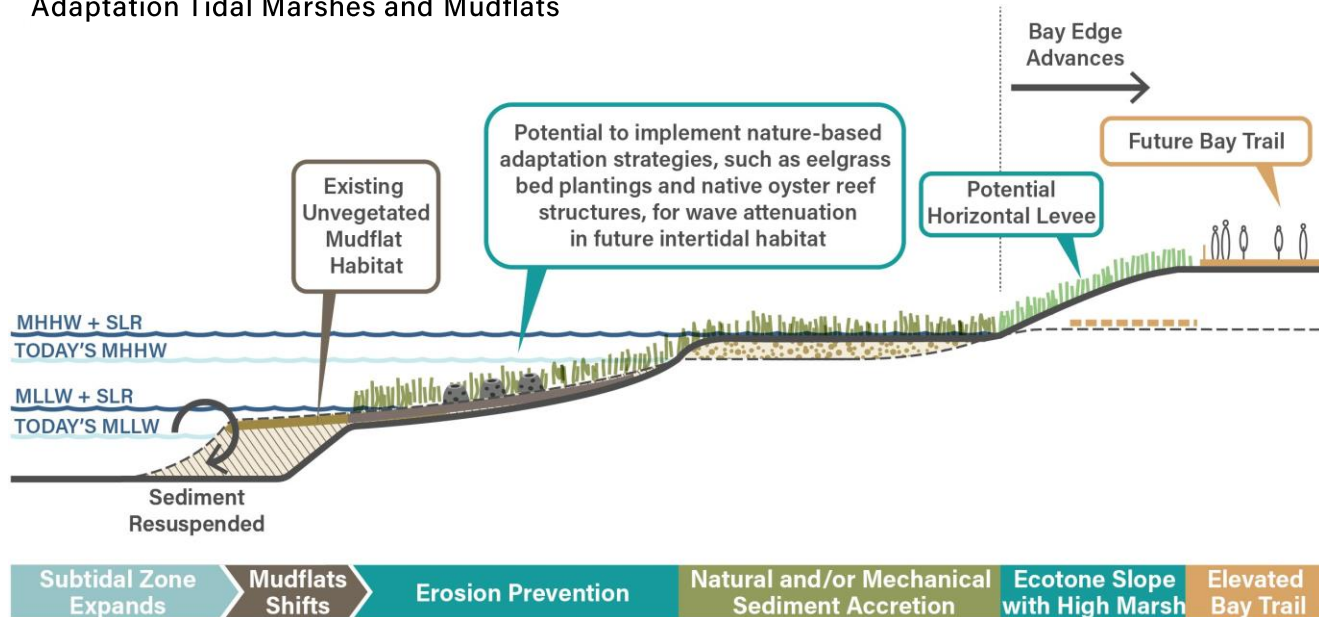


Maximize Habitat and Realignment



Hybrid Approach

### Adaptation Tidal Marshes and Mudflats



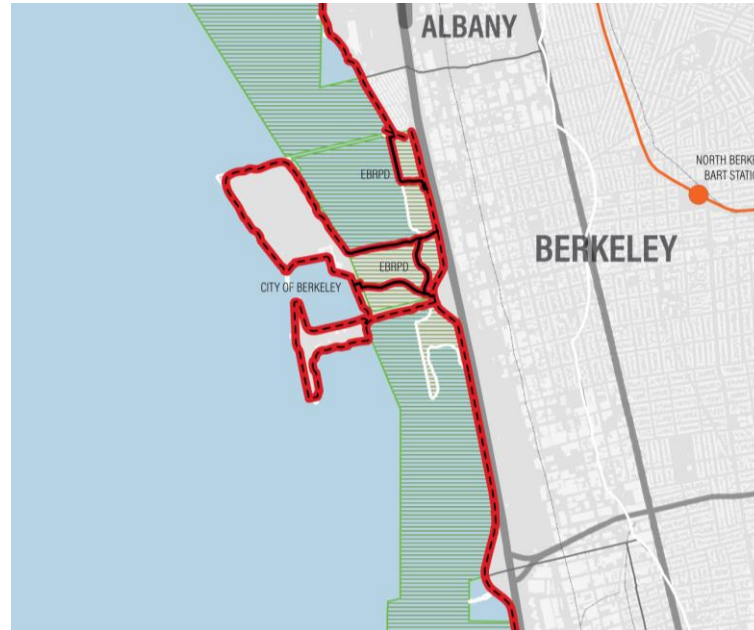
- Subtidal Zone Expands
- Mudflats Shifts
- Erosion Prevention
- Natural and/or Mechanical Sediment Accretion
- Ecotone Slope with High Marsh
- Elevated Bay Trail

# SF Bay Trail RAAPP

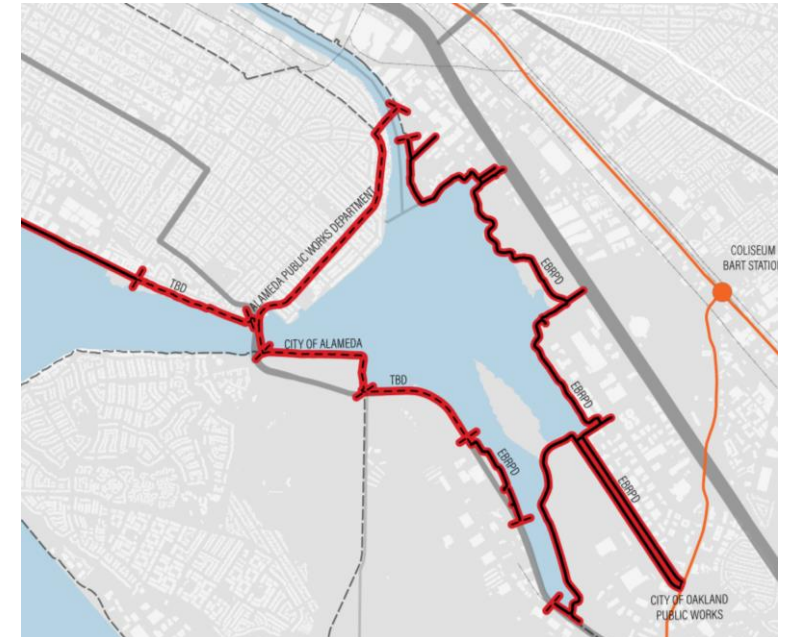
## 3 FOCUS AREAS



**Alameda Point**



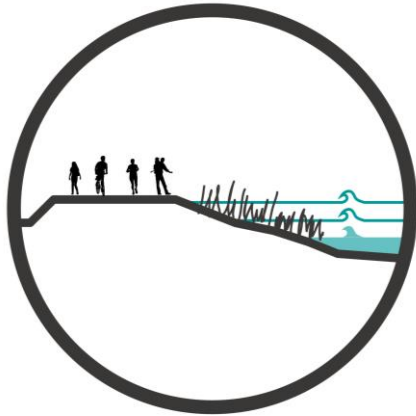
**Eastshore State Park**



**MLK Shoreline**

# SF Bay Trail RAAPP

## CONCEPT DESIGN FOR THE PRIORITY SITES



### ALAMEDA POINT

- City of Alameda Public Works
- San Francisco Public Works
- Navy

### LEGEND

---	SF BAY TRAIL	■	BUILDINGS
—	SEGMENT OPERATOR: EBRPD	●	BART STATION
- - -	SEGMENT OPERATOR: OTHER	—	BART LINE
■	PRIORITIZED SEGMENTS	—	FREEWAY
■	EBRPD OWNERSHIP	—	INTERSTATE
■	OLU BOUNDARY	—	RAILROAD

### SEA LEVEL RISE

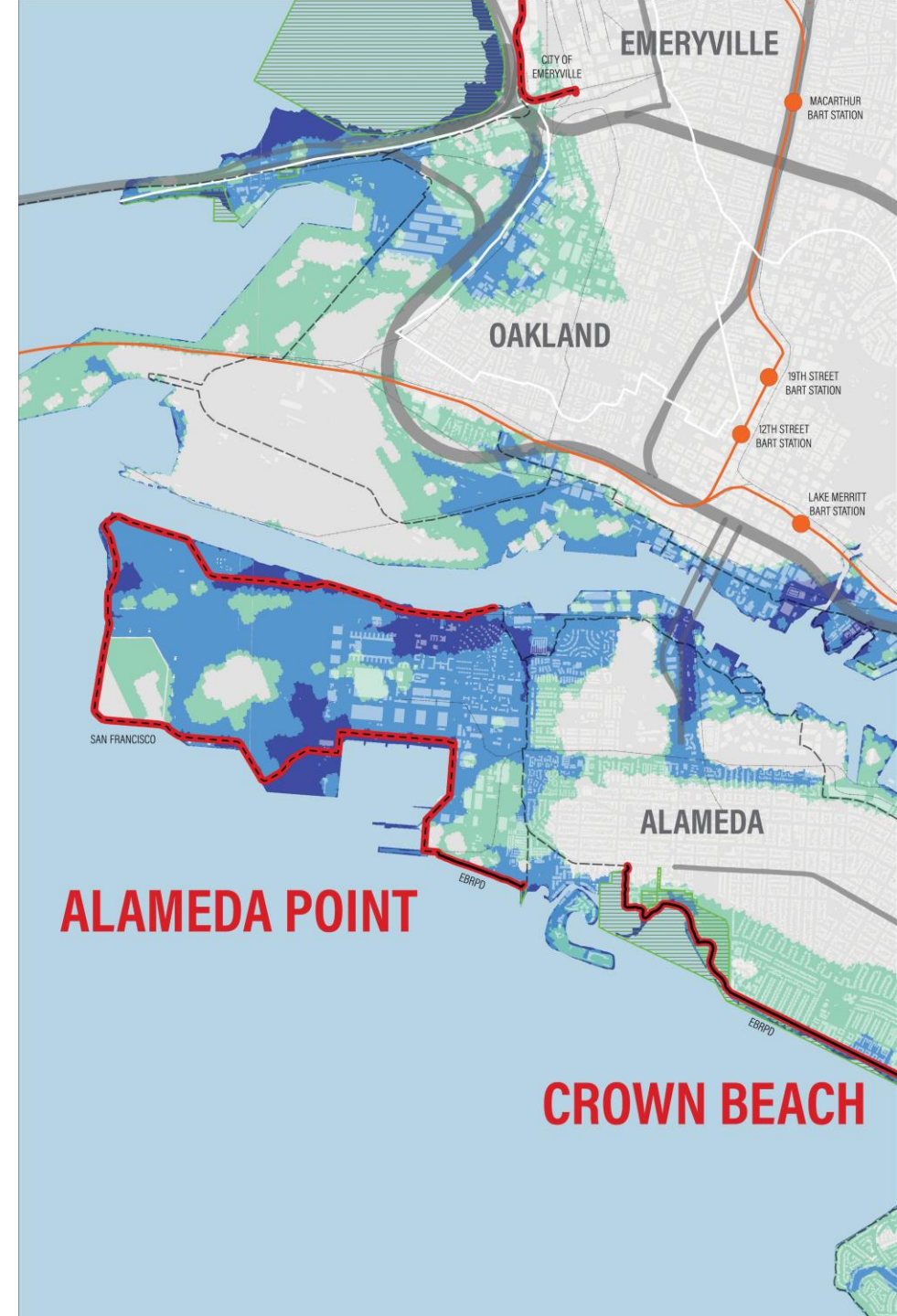
Tidal Inundation (+3' Sea Level Rise)



Tidal Inundation (+6' Sea Level Rise)



Storm Inundation (+6' Sea Level Rise)



# ALAMEDA POINT: Historical Baylands





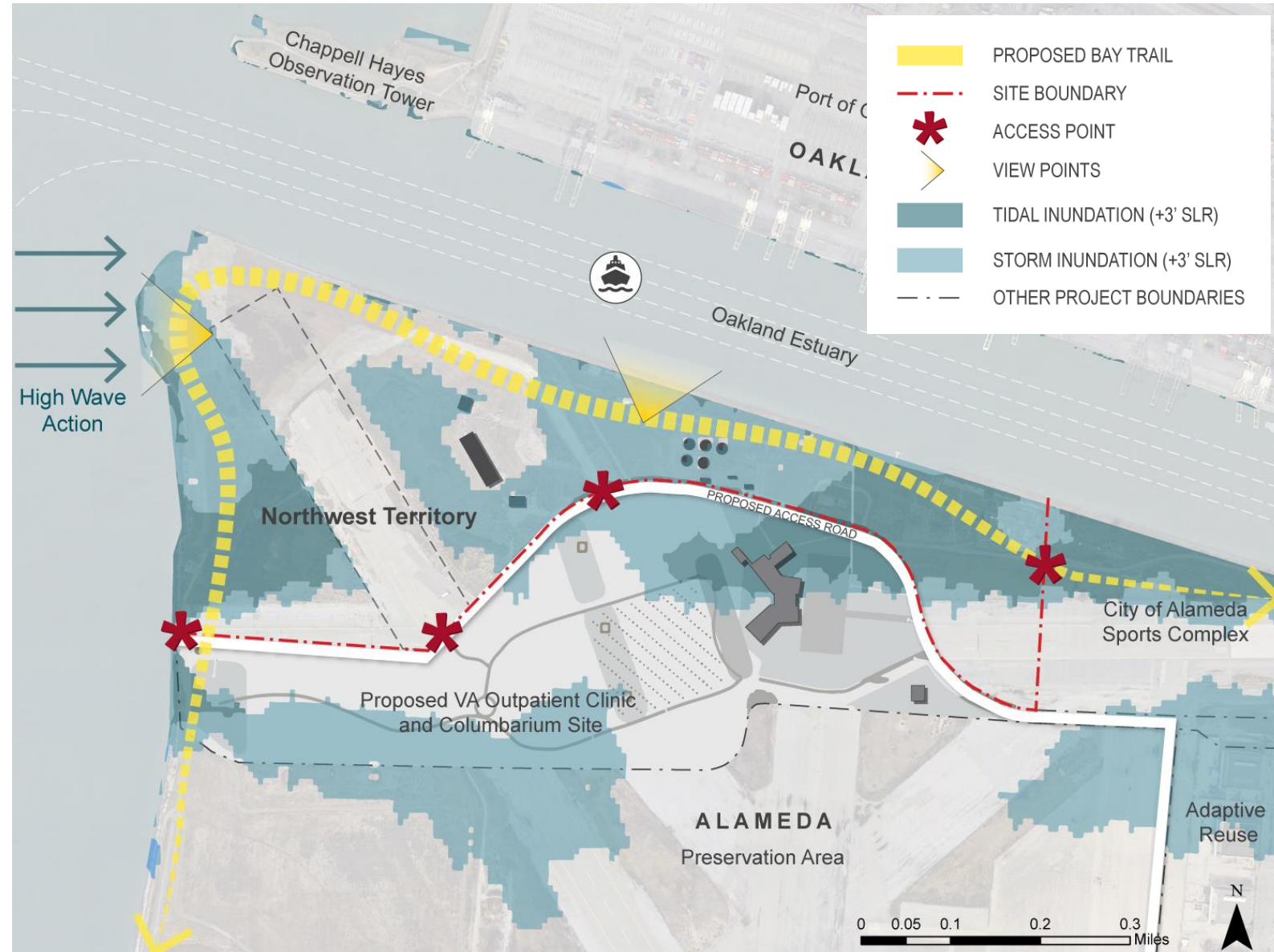
# ALAMEDA POINT: 3 FT SLR

## Key Issues:

- Planning Horizons:  
Flooding starts at mid-century and continues extensively at end of century

## Key Considerations:

- Views across the Bay
- Marsh/Habitat creation
- High wave action
- SLR inundation



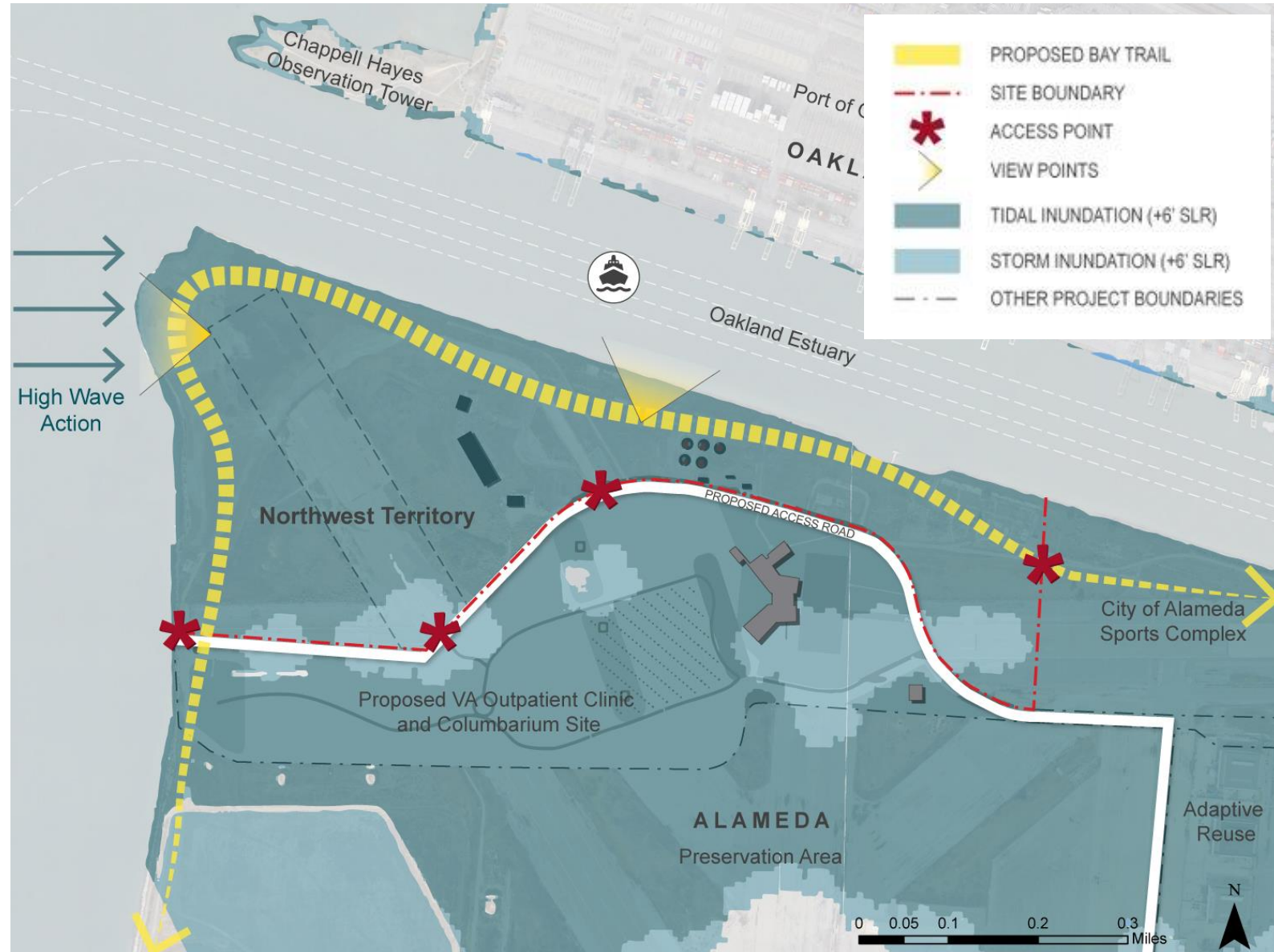
# ALAMEDA POINT: 6 FT SLR

## Key Issues:

- Planning Horizons:  
Flooding starts at mid-century and continues extensively at end of century

## Key Considerations:

- Views across the Bay
- Marsh/Habitat creation
- High wave action
- SLR inundation



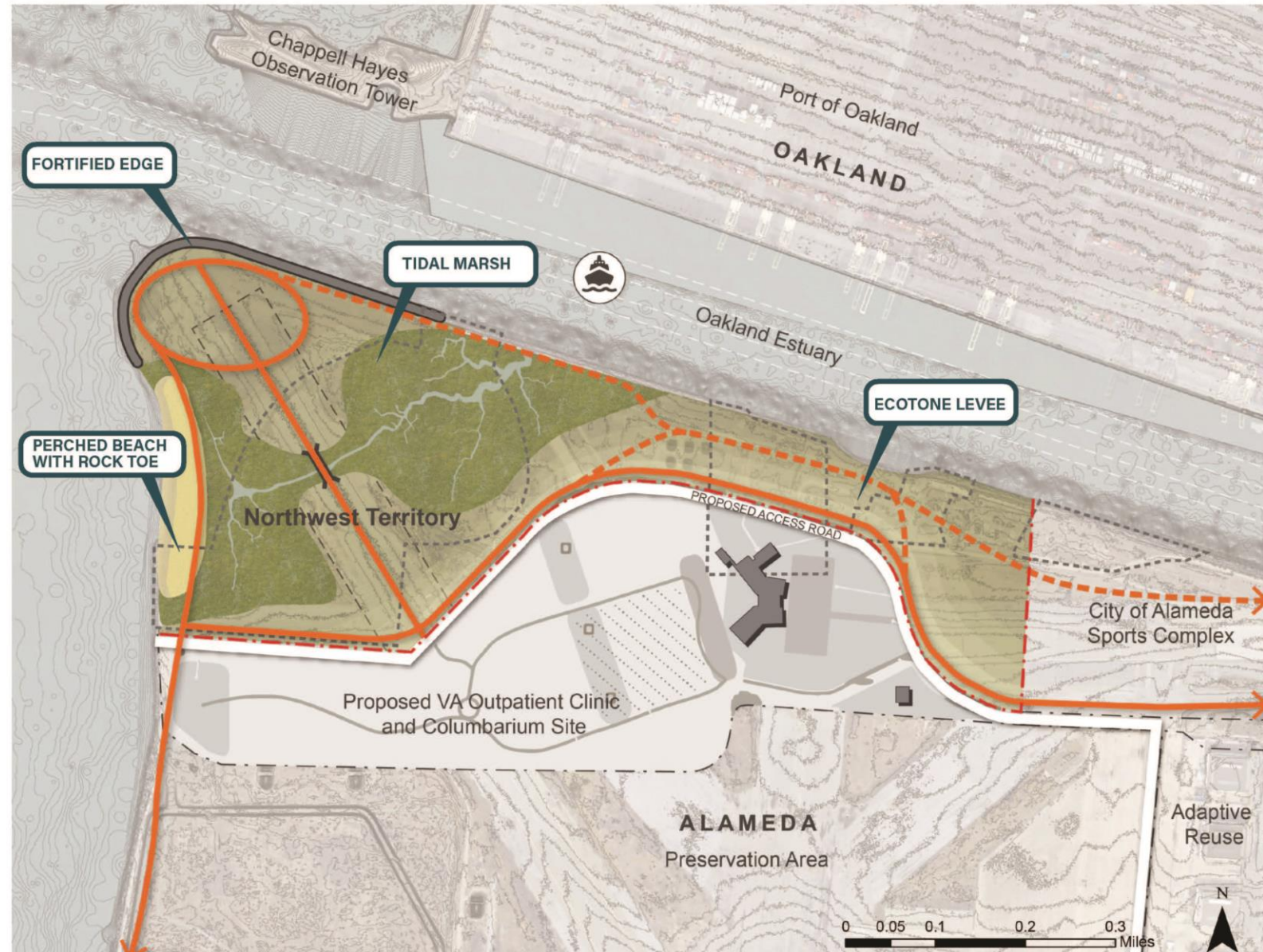
# ALAMEDA POINT: OPTION 1

## Key Issues:

- Planning Horizons:  
Flooding starts at mid-century and continues extensively at end of century

## Key Considerations:

- Views across the Bay
- Marsh/Habitat creation
- High wave action
- SLR inundation



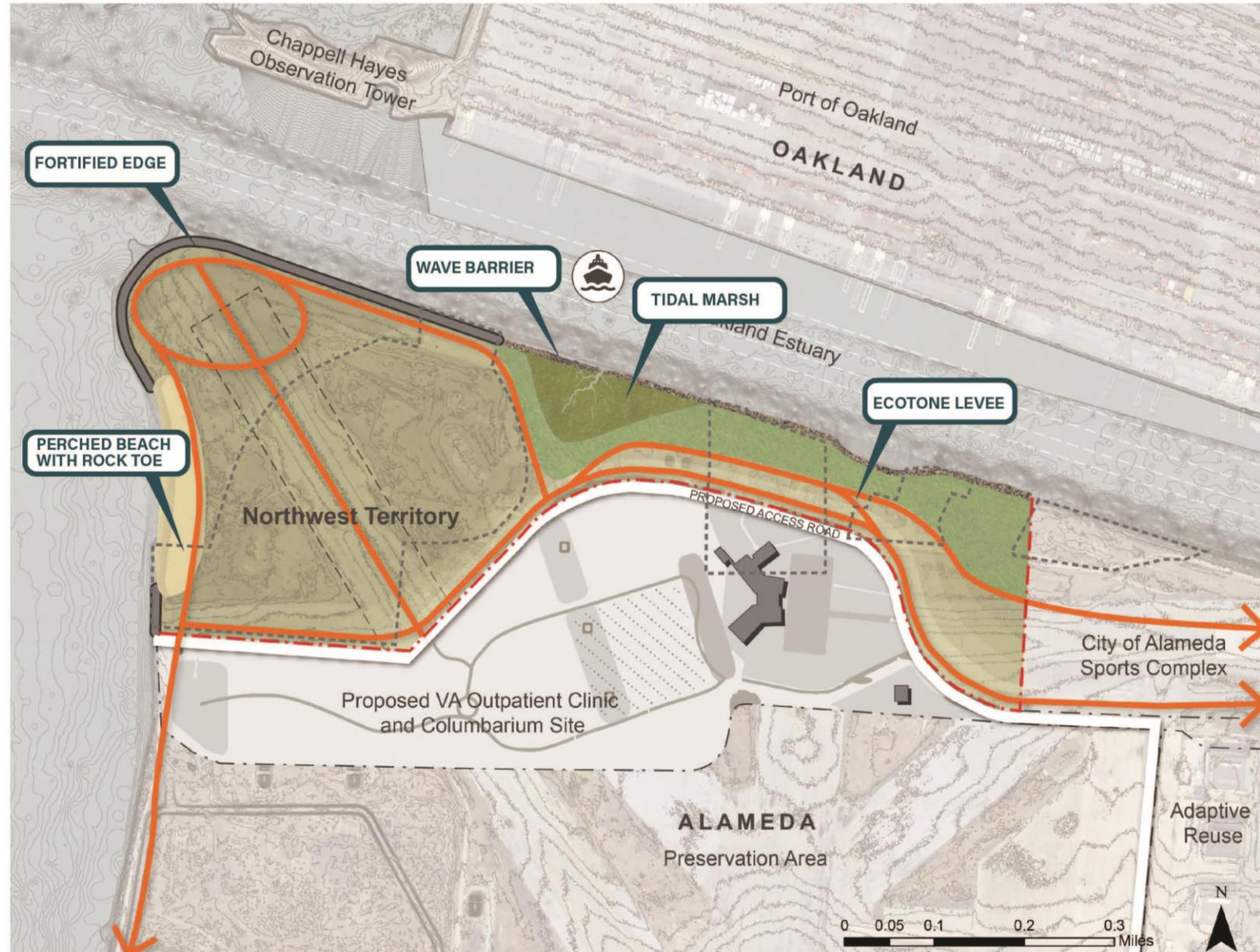
# ALAMEDA POINT: OPTION 2

## Key Issues:

- Planning Horizons:  
Flooding starts at mid-century and continues extensively at end of century

## Key Considerations:

- Views across the Bay
- Marsh/Habitat creation
- High wave action
- SLR inundation



# ALAMEDA POINT: ADAPTATION VISION



FIGURE 4-15: ALAMEDA POINT CONCEPT PLAN OPTION 1 RENDERING

# Opening Alameda Point

## Providing public access along a forgotten shoreline

Alameda Point is one of the priority areas identified in the recently completed San Francisco Bay Trail Risk Assessment and Adaptation Prioritization Plan (RAAPP) which reimagines restoration and public access along the East Bay shoreline. Future parks and open spaces along the Alameda Point shoreline will provide public access and a broad range of community benefits which the East Bay Regional Park District will seek to continue developing through a community engagement process. For many years, the community vision has been to open the full shoreline around Alameda Point to provide seasonal Bay Trail access that complements the habitat restoration goals on the island. The seasonal trail at Alameda Point creates opportunities for visitors, including veterans, residents, and visitors, to access multiple health benefits and educational resources across the site.

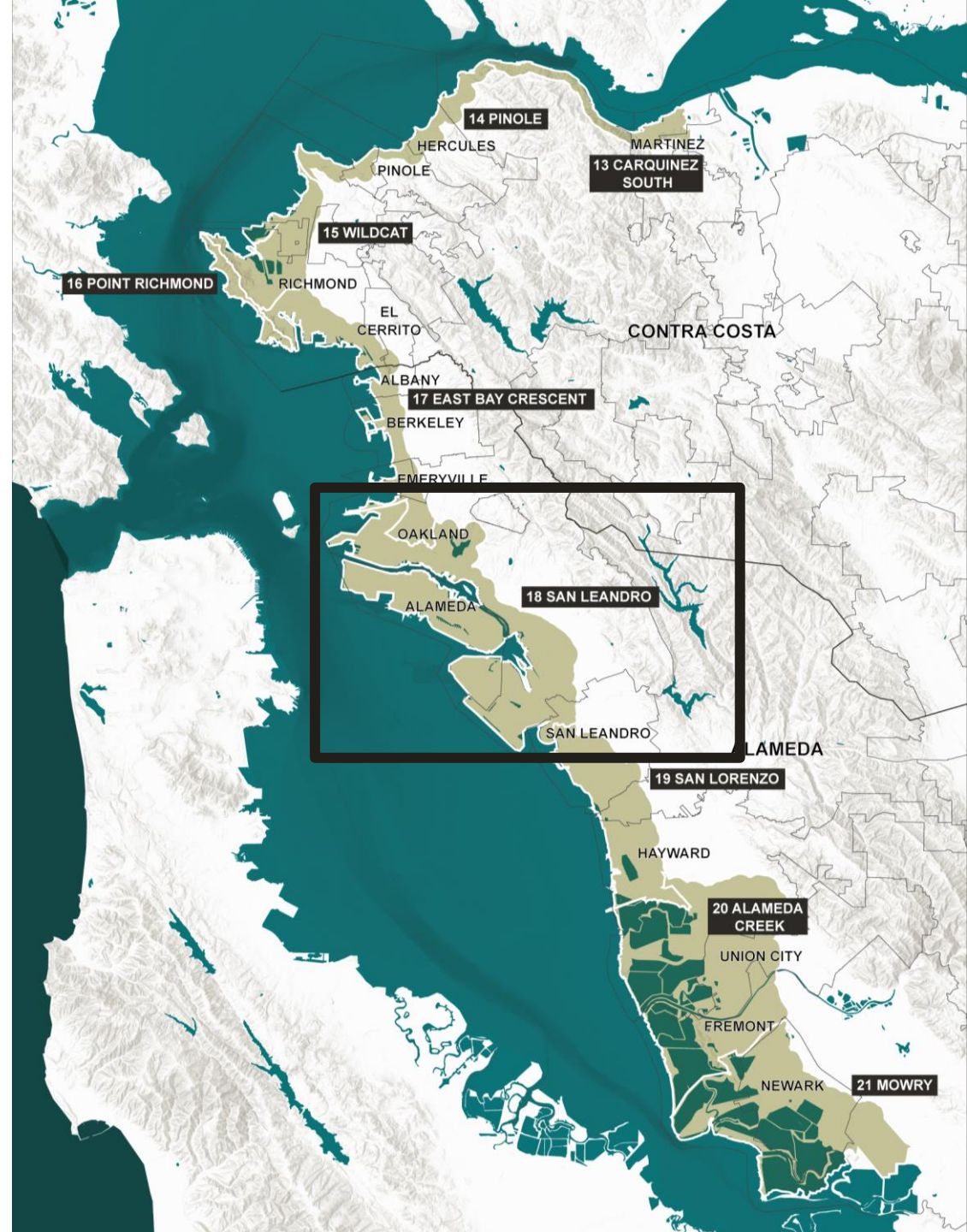


# SF Bay Trail RAAPP

## Approach to Partnerships

Coordinated strategies to maximize:

- Flood Risk Reduction
- Habitat Benefits
- Community Access
- Adaptive Management
- Funding and Permitting



**04**

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**OAKLAND ALAMEDA  
WORKING GROUP**



# **San Leandro Bay Oakland-Alameda Estuary Adaptation Working Group**

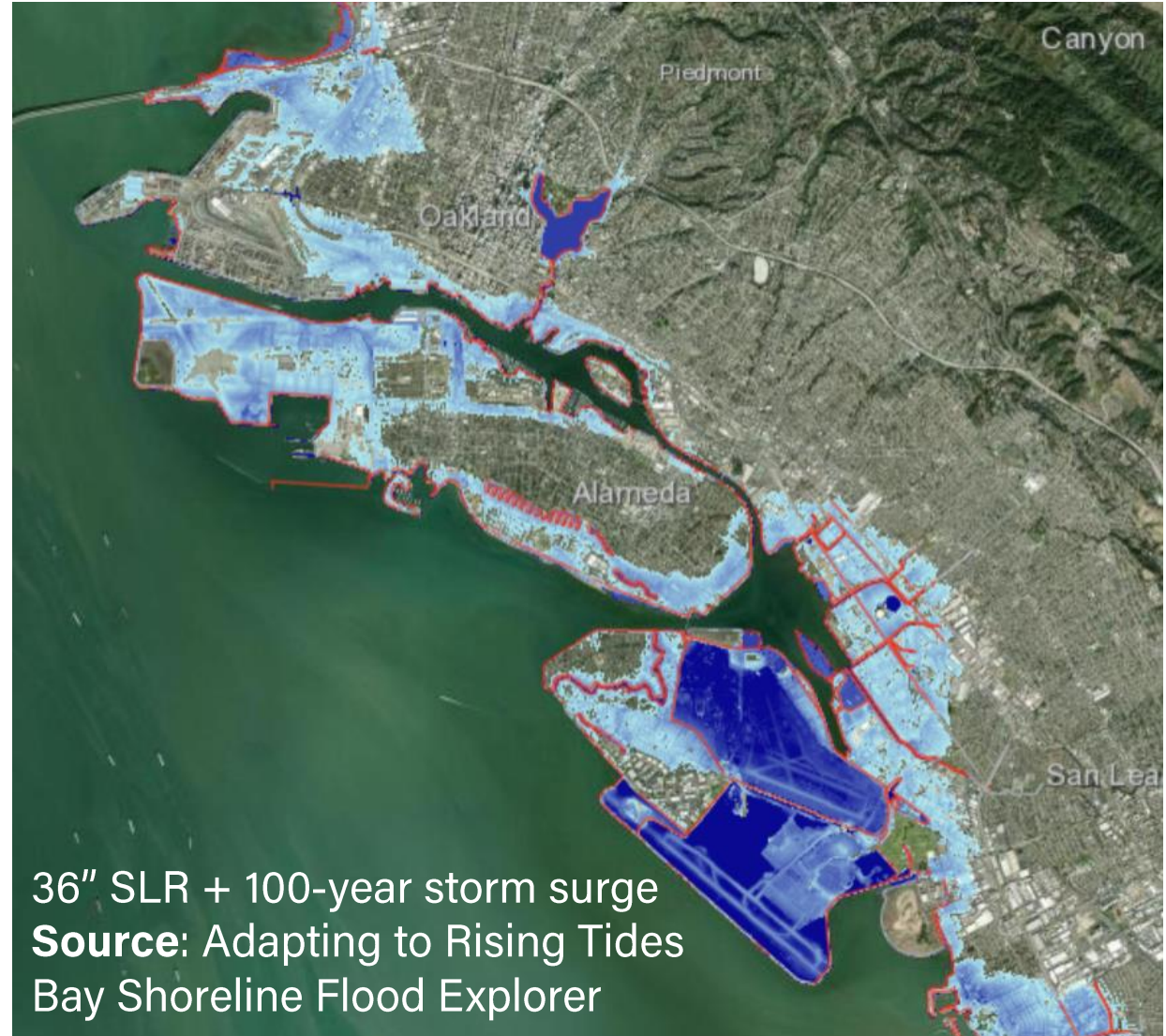


**San Leandro Bay  
Oakland-Alameda Estuary  
Adaptation Working Group**

# BACKGROUND: SEA LEVEL RISE

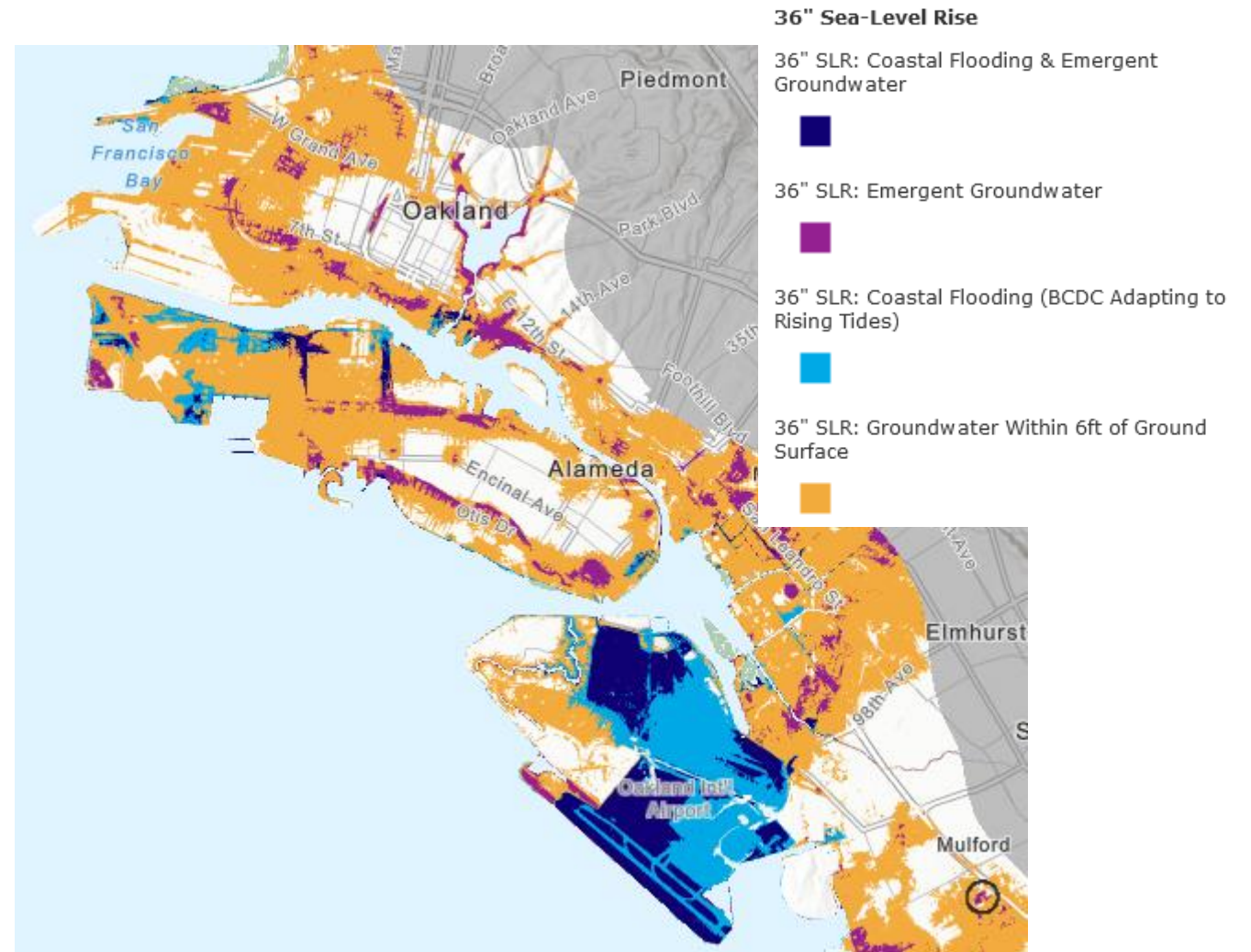
2/3 of California's sea level rise impacts will be felt in the Bay Area

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



# BACKGROUND: GROUNDWATER RISE

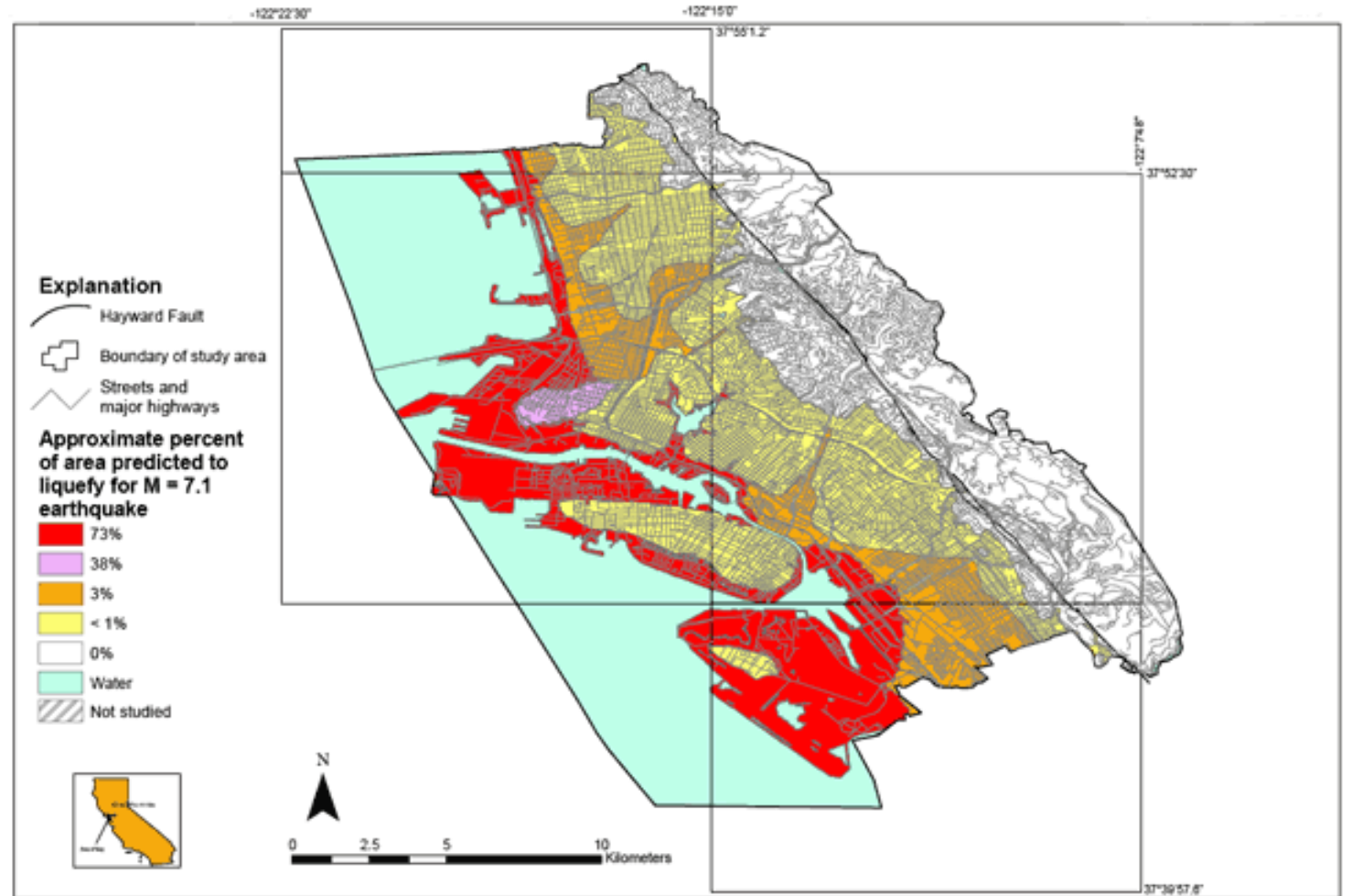
- Infiltration & corrosion of underground infrastructure
- Damage to roads and structures
- Flooding from multiple sources including emergent groundwater
- Contaminated sites
- Increased liquefaction risk



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

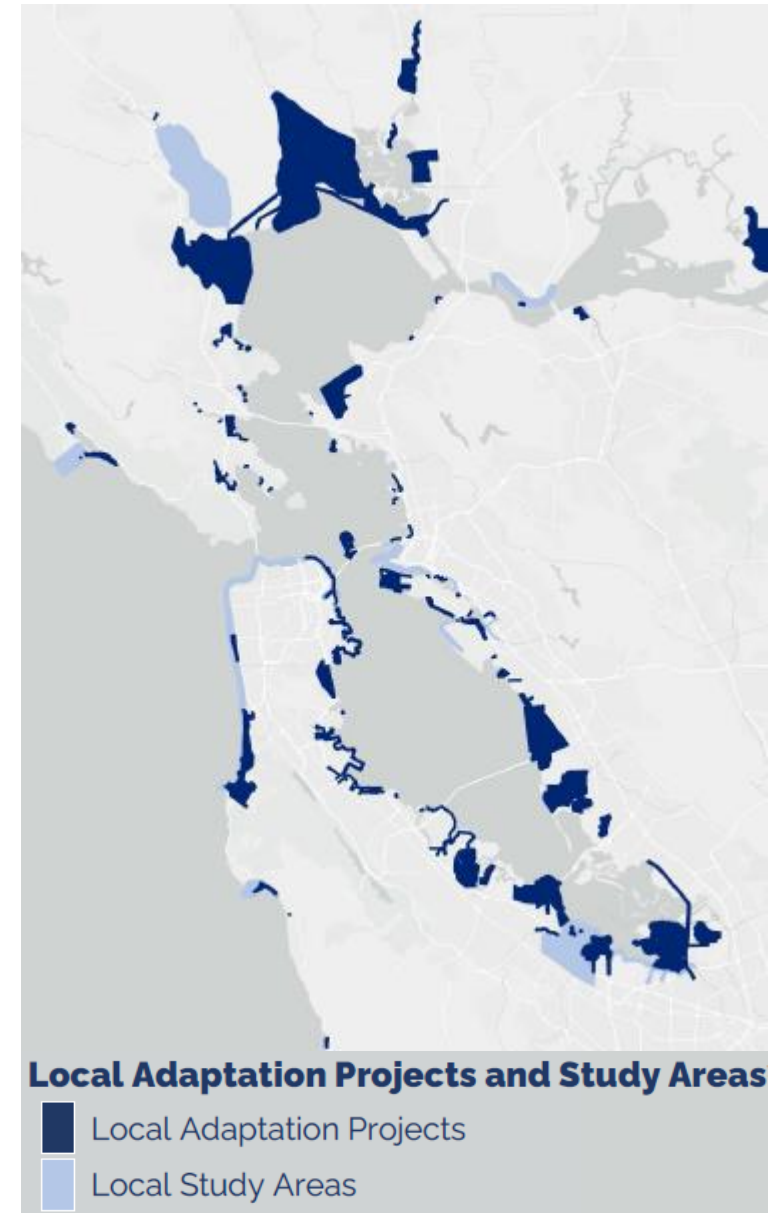


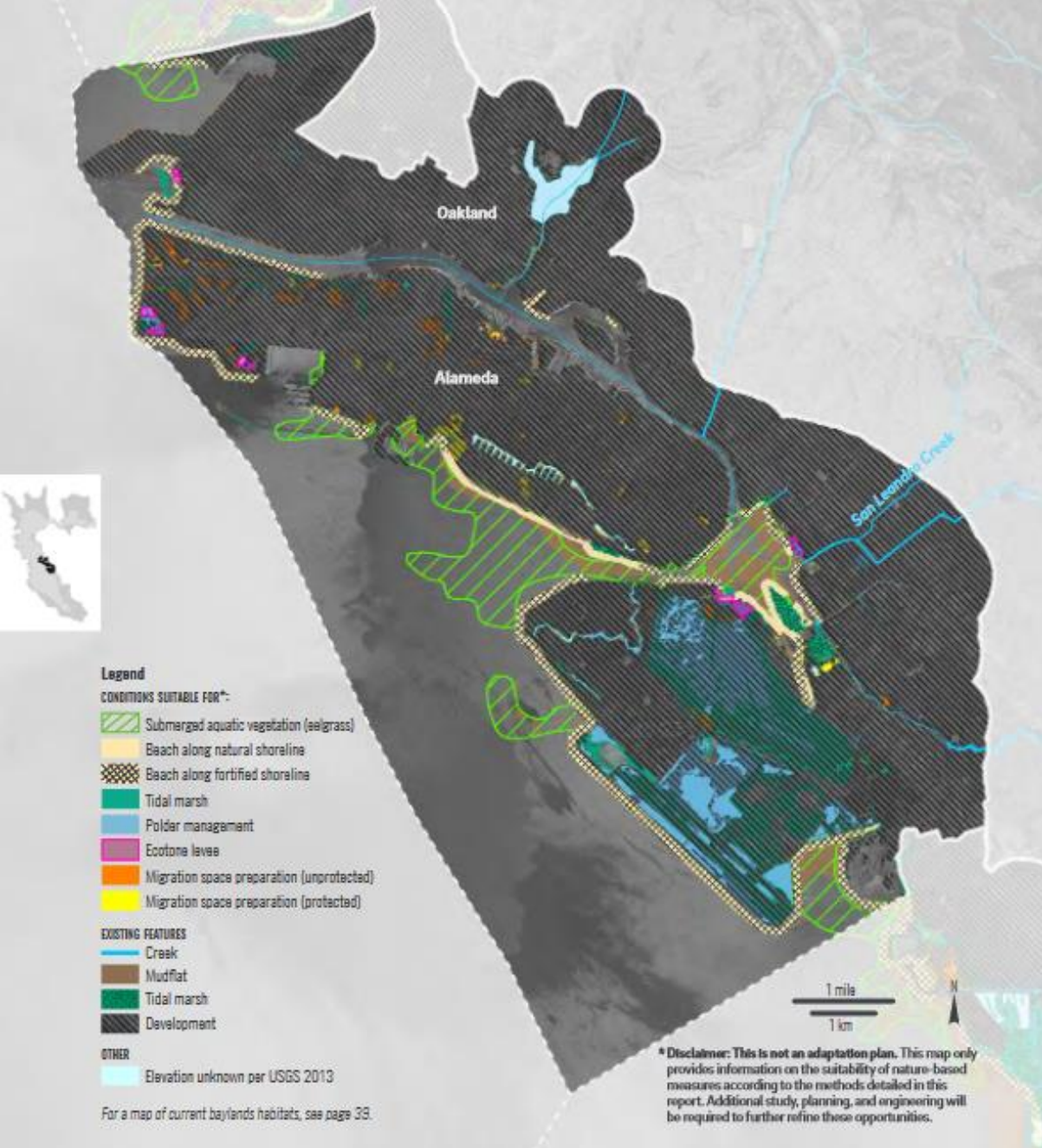
Shaking Hazard Map for Northwestern Alameda County  
Source: USGS [Open-file Report 02-296](#)

# 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





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

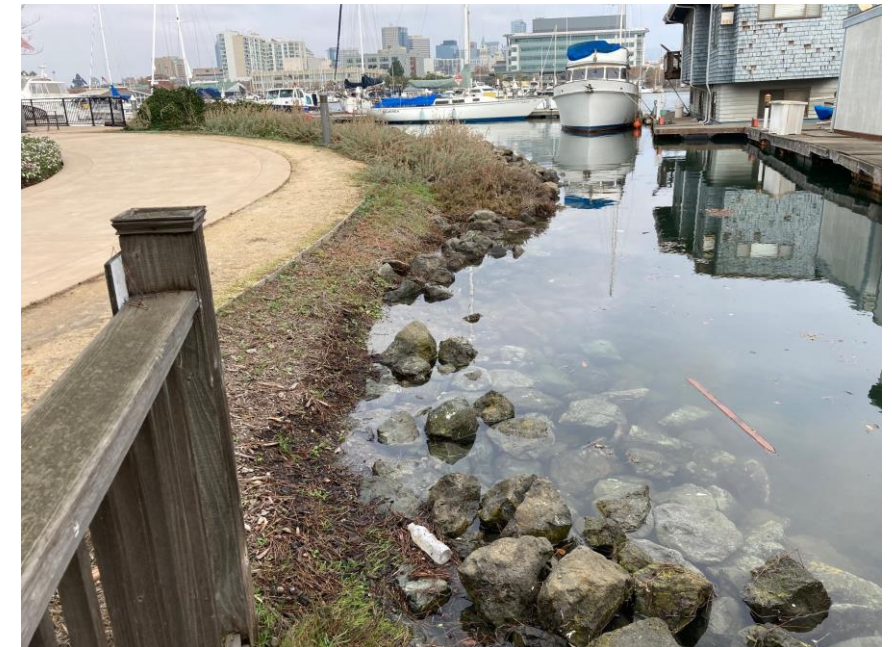


**San Leandro Bay  
Oakland-Alameda Estuary  
Adaptation Working Group**

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

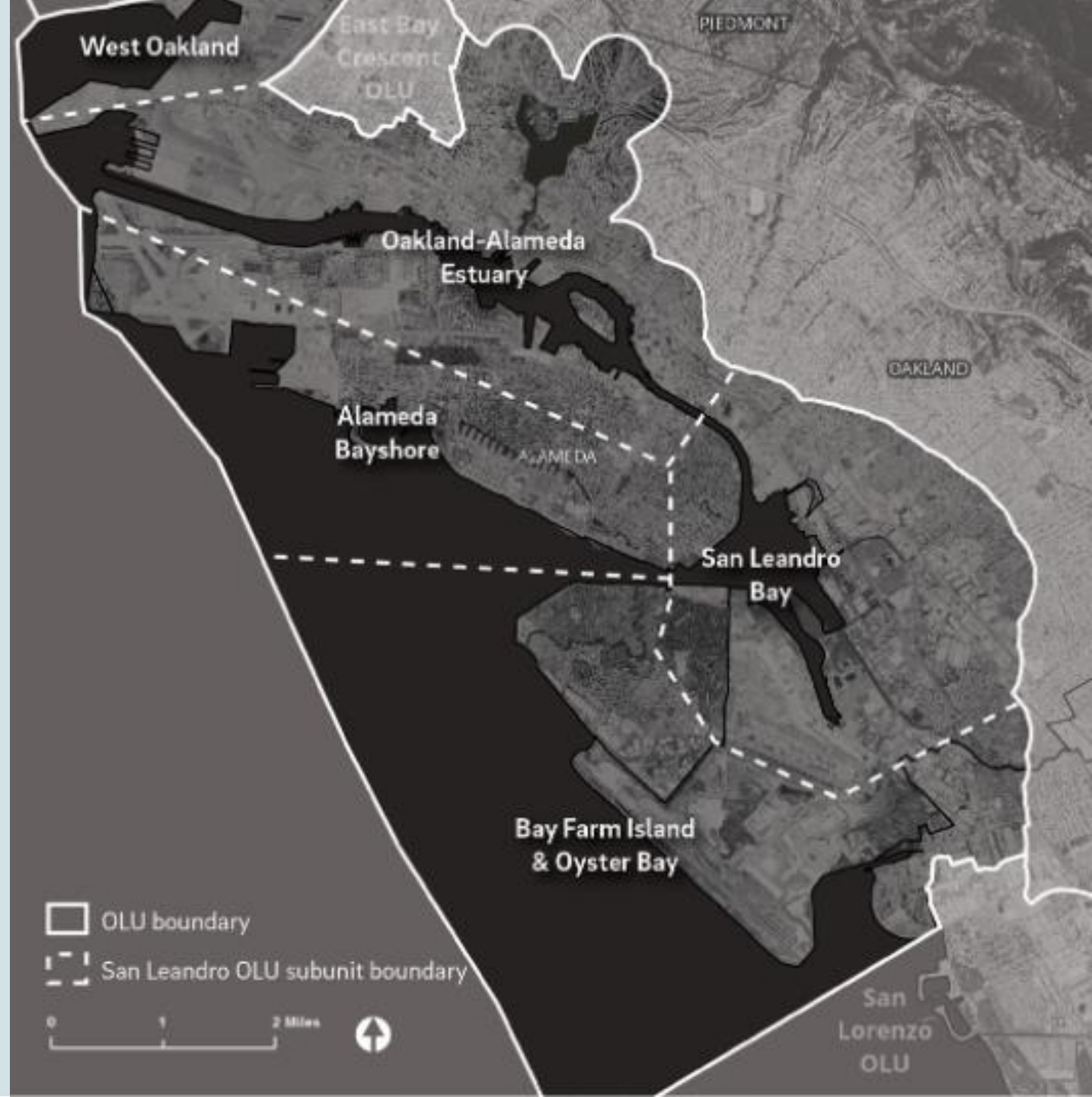
# WORKING GROUP: OBJECTIVES

- **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



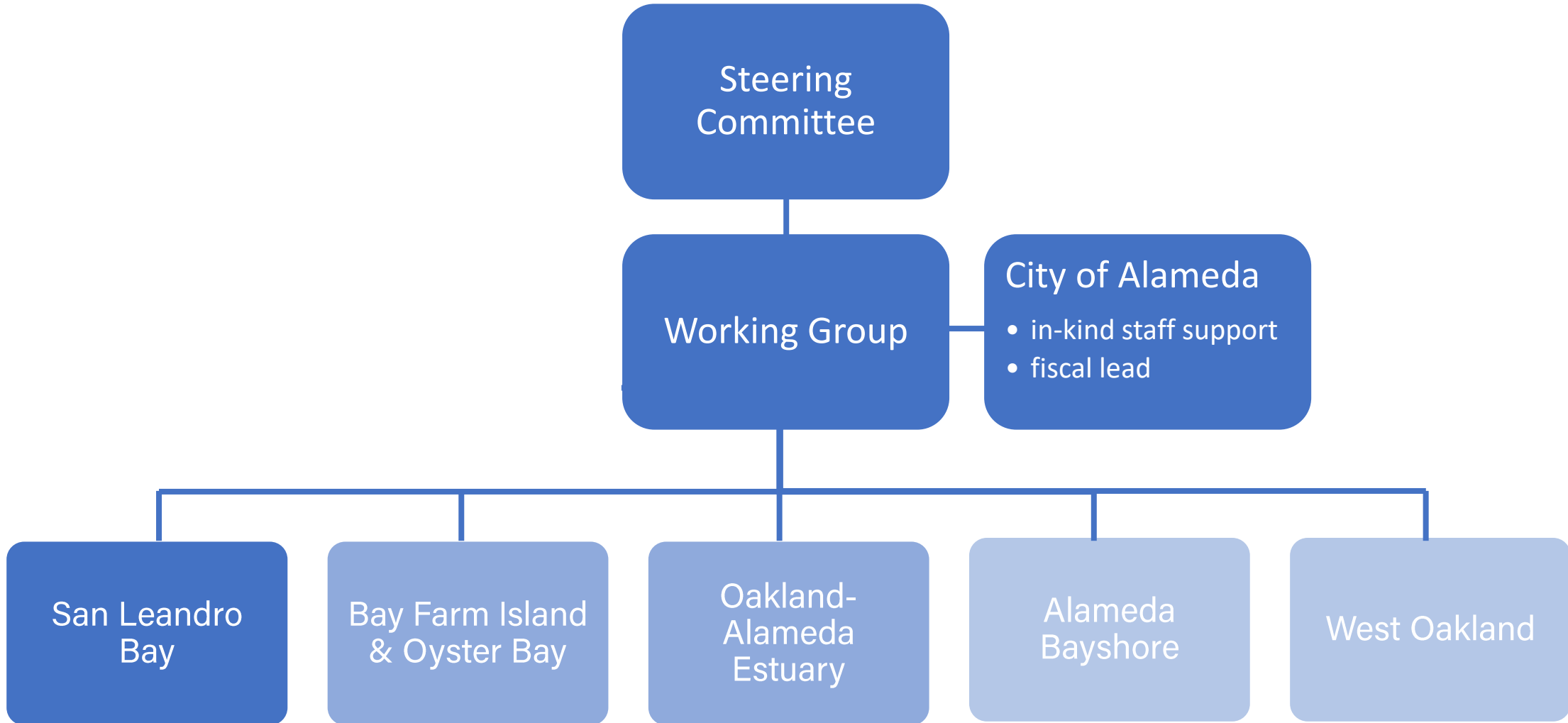
# WORKING GROUP: FOCUS AREAS

- **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

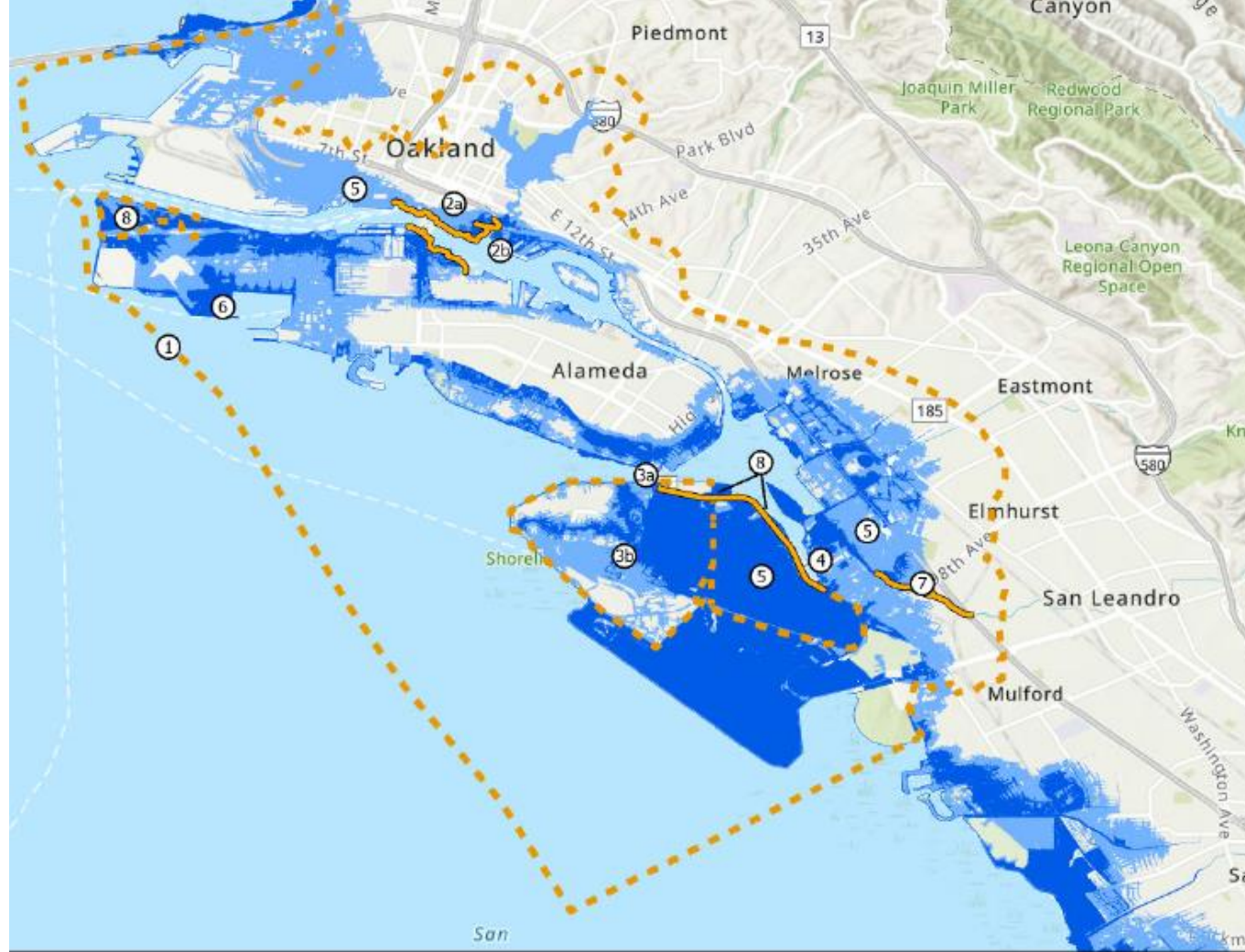
- Caltrans
- City of Alameda
- City of Oakland
- Community Action for a Sustainable Alameda
- East Bay Regional Park District
- Greenbelt Alliance
- Hood Planner/East Oakland Neighborhood Initiative
- Port of Oakland/Oakland International Airport
- San Francisco Bay Regional Water Quality Control Board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



# WORKING GROUP: ACTIVITIES TO DATE

- **Met** quarterly since 2021 (with 27-47 participants)
- **Formed** steering committee and San Leandro Bay group
- **Adopted** charter and objectives
- **Participated** in fieldtrips: MLK Jr. park and airport
- **Created** logo by Alameda High School students





## Sea Level Rise Adaptation Projects

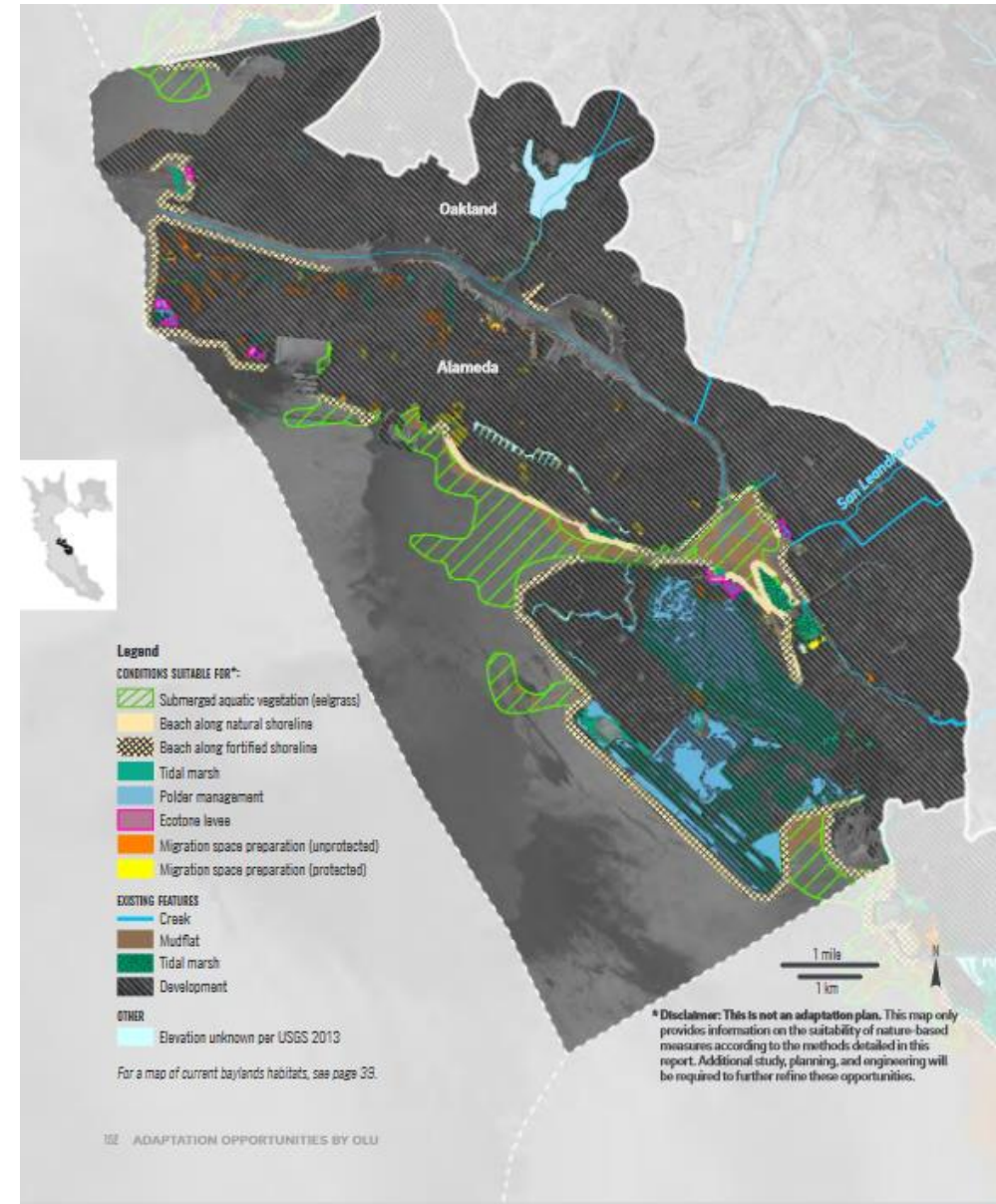
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>① Sub-regional Long-term Adaptation Plan</li> <li>②a Oakland-Alameda Estuary Adaptation Project</li> <li>②b Estuary Park Renovation and Expansion Project</li> <li>③a Bay Farm Island Adaptation Project (short-term)</li> <li>③b Bay Farm Island Adaptation Project (long-term)</li> </ul> | <ul style="list-style-type: none"> <li>④ Caltrans Doolittle Drive/SR-61 Sea Level Rise Adaptation</li> <li>⑤ Port of Oakland Vulnerability Assessment and Plan</li> <li>⑥ De-Pave Park Master Plan</li> <li>⑦ San Leandro Creek Trail Restoration Project</li> <li>⑧ East Bay Regional Park District SF Bay Trail Gap Closure</li> </ul> |
|--|--|

# WORKING GROUP: FUNDED PROJECTS (2023-2025)

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

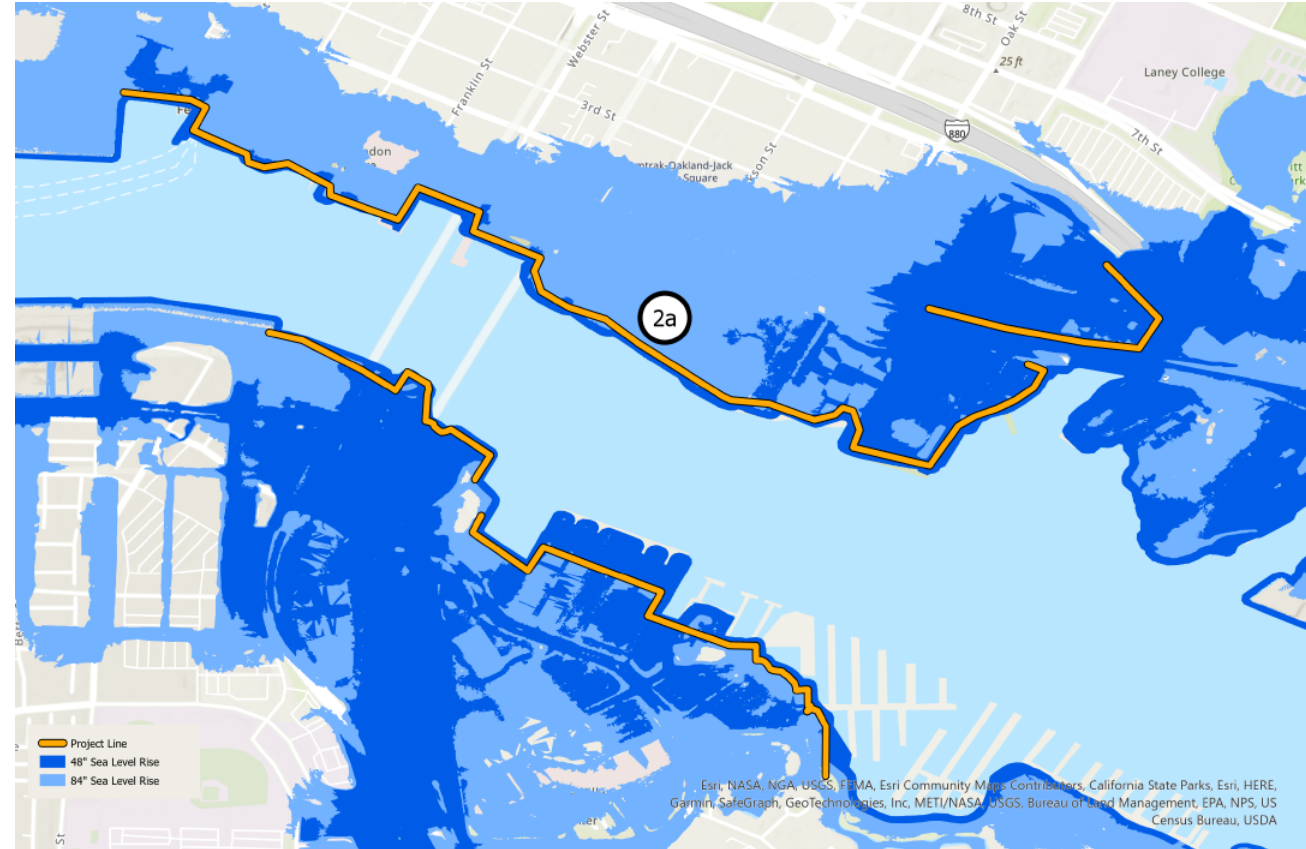
# LONG-TERM ADAPTATION PLAN

- **Purpose:** Identify actions needed over time as the shoreline changes to protect communities
- **Tasks:**
  - Agency coordination
    - Sub-regional agencies
    - BCDC's Regional Shoreline Adaptation Plan
  - Governance structure analysis and community engagement
  - Draft and final long-term plan
- **Budget:** \$840,000 (\$300,000 SFEP & \$540,000 NFWF)



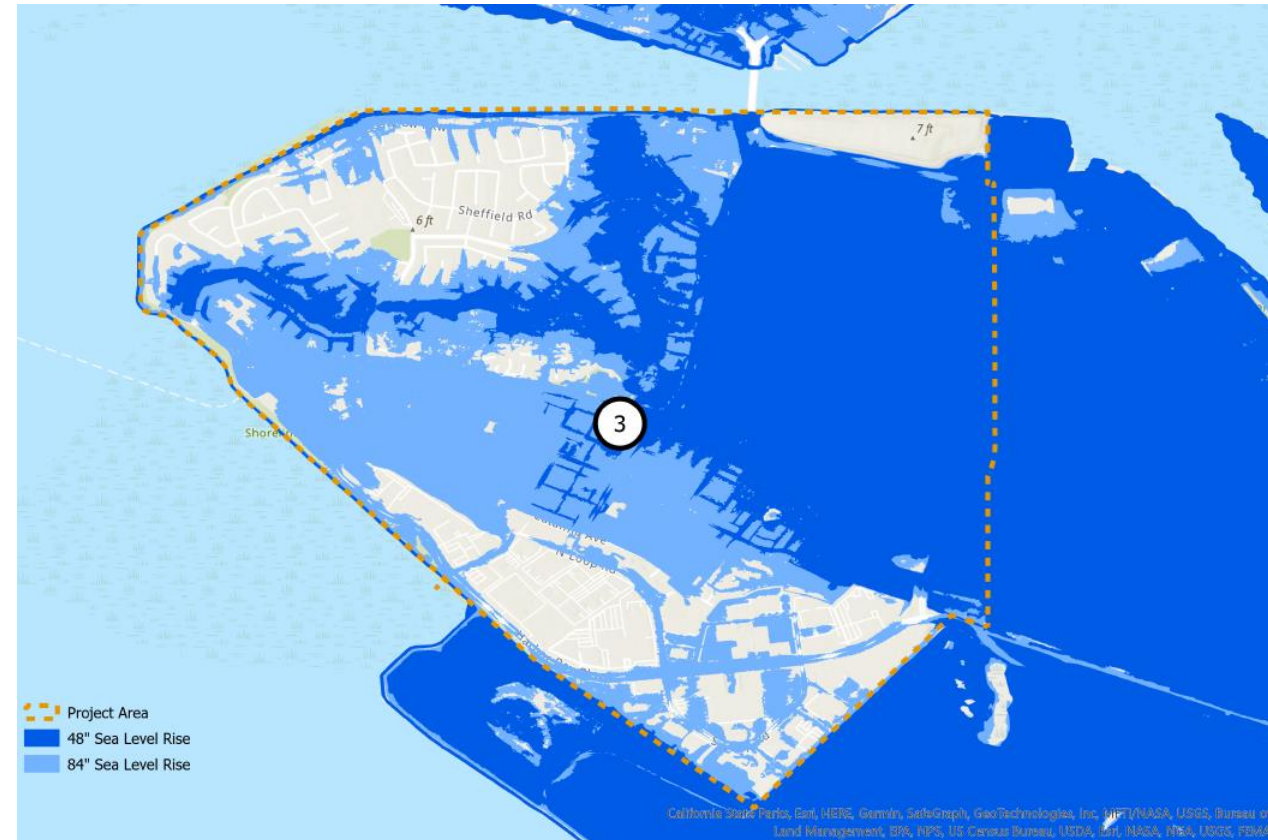
# OAKLAND-ALAMEDA ESTUARY ADAPTATION PROJECT

- **Purpose:** Develop adaptation design concept to protect downtown Oakland/Jack London Square and Alameda's northern shoreline/Posey-Webster Tubes
- **Tasks:**
  - Structural/nature-based alternatives
  - Public outreach
  - Draft and final concept (10% design) with cost estimates
- **Budget:** \$500,000 (\$425,000 Caltrans & \$75,000 Alameda)



# BAY FARM ISLAND ADAPTATION PROJECT

- **Purpose:** Develop long-term plan for entire Bay Farm Island and designs for short-term fixes at northern waterfront low spots.
- **Tasks:**
  - Feasibility alternatives and design
  - Public outreach
  - Northern waterfront design
  - Coordinate with permitting agencies
  - Draft and final long-term concept
- **Budget:** \$2 million (\$1.5 million FEMA & \$530,000 Alameda)





# COMMUNITY PARTNERS

- **Role:** Lead community engagement process for three funded adaptation projects
- **Budget:** \$323,000
- **Selected** by Steering Committee:
  - Greenbelt Alliance (with REAP Climate Center, Hood Planning Group, Ninth Root, Sogorea Té Land Trust)
  - Community Action for a Sustainable Alameda (CASA)



**LEARN MORE: [WWW.ALAMEDACA.GOV/ADAPTATIONWORKINGGROUP](http://WWW.ALAMEDACA.GOV/ADAPTATIONWORKINGGROUP)**



**San Leandro Bay  
Oakland-Alameda Estuary  
Adaptation Working Group**



# **05**

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## **QUESTIONS + DISCUSSIONS**

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**THANK YOU!**