EXHIBIT 1

OAAC Adapt Projects

January 2025

Oakland Alameda Adaptation Committee (OAAC):

A coalition of shoreline communities, agencies and stakeholders working to coordinate the Oakland Alameda sub-region flood and adaptation projects to protect and restore water quality, habitat, equity, transportation and community resilience.

OAAC Adapt: Project Partners

Agency Partners

CITY OF Oakland

ALAMEDA

East Bay Regional Park District

Alameda County Flood Control & Water Conservation District

Caltrans

California Water Boards San Francisco Bay - R2

Port of Oakland
Seaport. Airport. Everyone's Port.

Community Partners

SOGOREA TE' LAND TRUST
LED BY URBAN INDIGENOUS WOMEN

CASA
Community Action for a Sustainable Alameda

SFEI Aquatic Science Center
San Francisco Estuary Institute & the Aquatic Science Center

REAP Climate Center

Greenbelt Alliance

Ninth Root

Hood Planning Group

Consultants

cmg Landscape Architecture

ESA

moffatt & nichol

Schaaf & Wheeler
Consulting Civil Engineers

NHA | Advisors
Financial & Policy Strategies. Delivered.

Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering

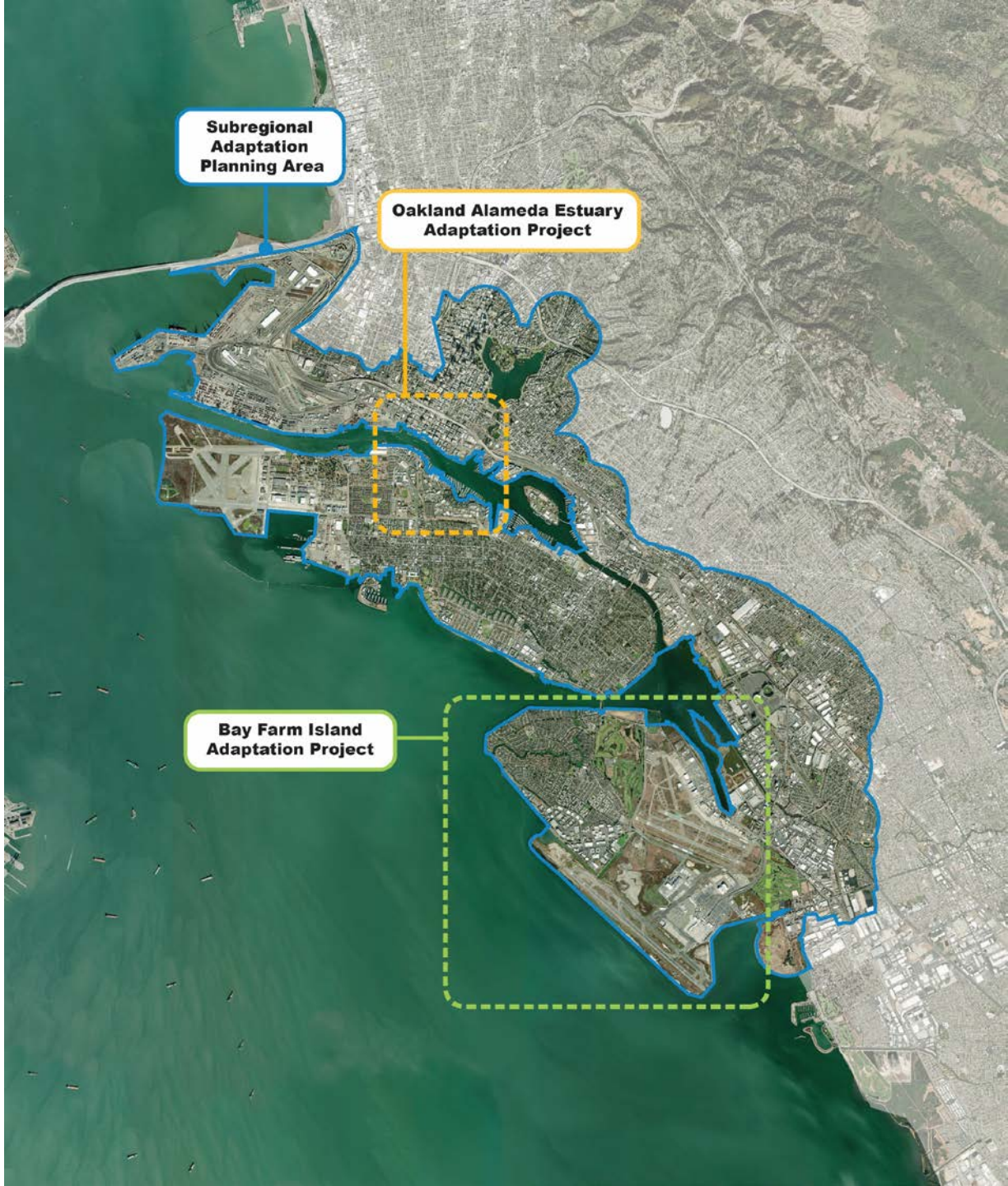
pathways
CLIMATE INSTITUTE

OAAC ADAPT Projects

- The **Subregional Adaptation Plan** is a long-term plan that details preliminary strategies and pathways for shoreline communities to take as the climate and shorelines change over time

- The **Oakland Alameda Estuary Project** is a near-term sea level rise adaptation design concept to address increased coastal, stormwater, and groundwater flooding for up to two feet of sea level rise over the coming decades

- The **Bay Farm Island Adaptation Project** is a near-term sea level rise adaptation design project to address compound flooding and up to two feet of sea level rise and long-term planning coordination.



Sea Level Rise Project Criteria

Near Term

2060 - 2080
35 to 50-year adaptation project lifespan

2' of sea level rise

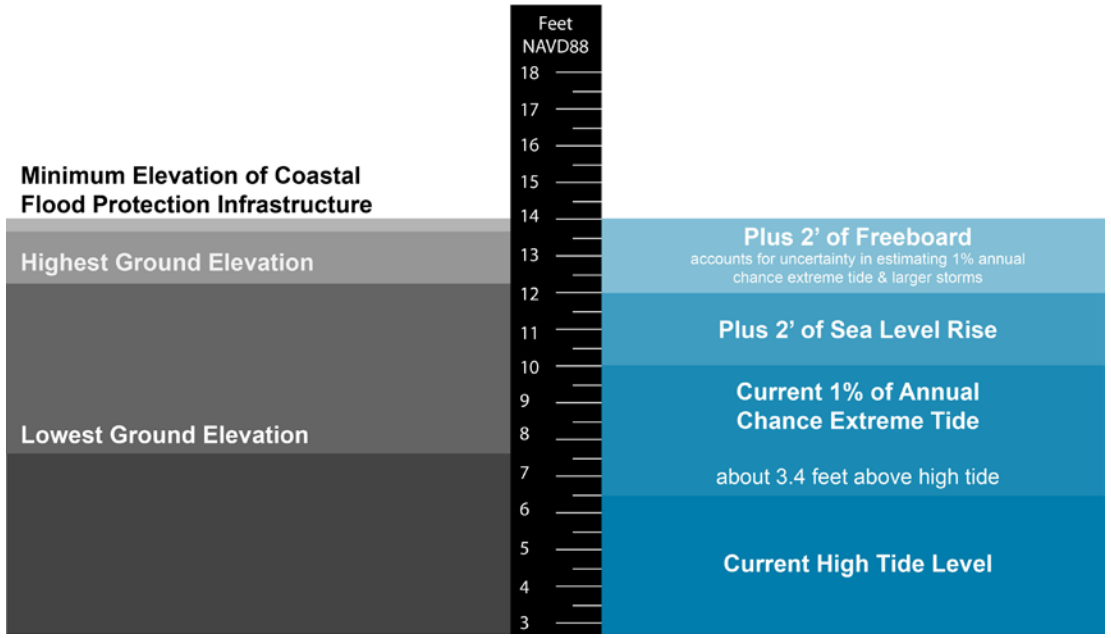
Protect to elevation +14’

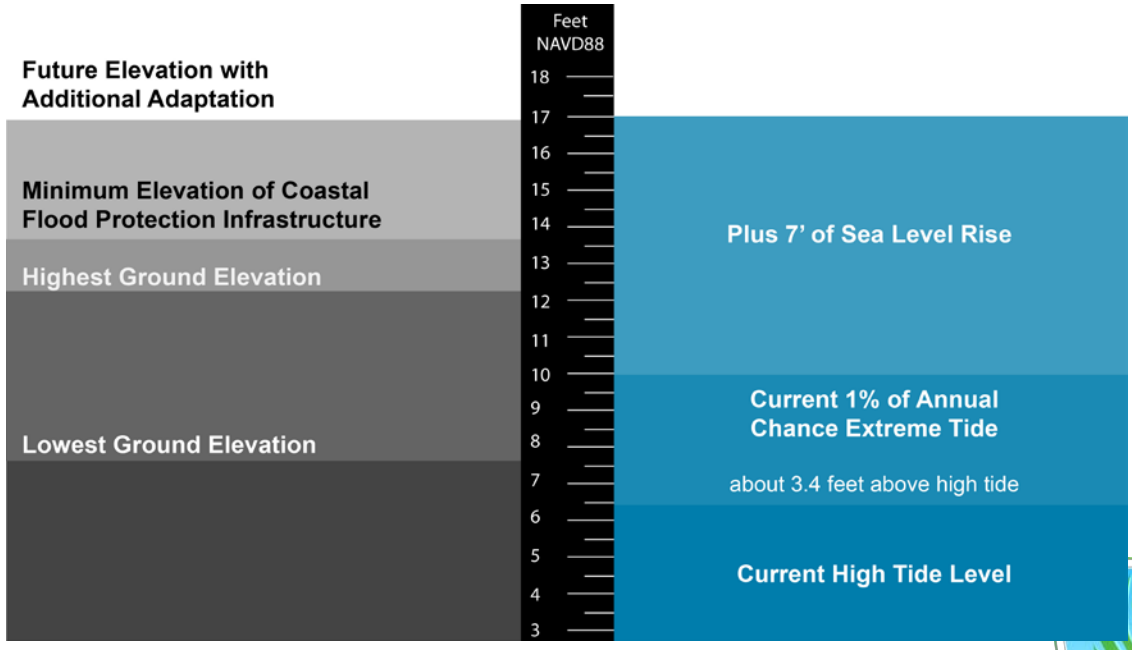
Long Term

2100+
Build upon near term projects

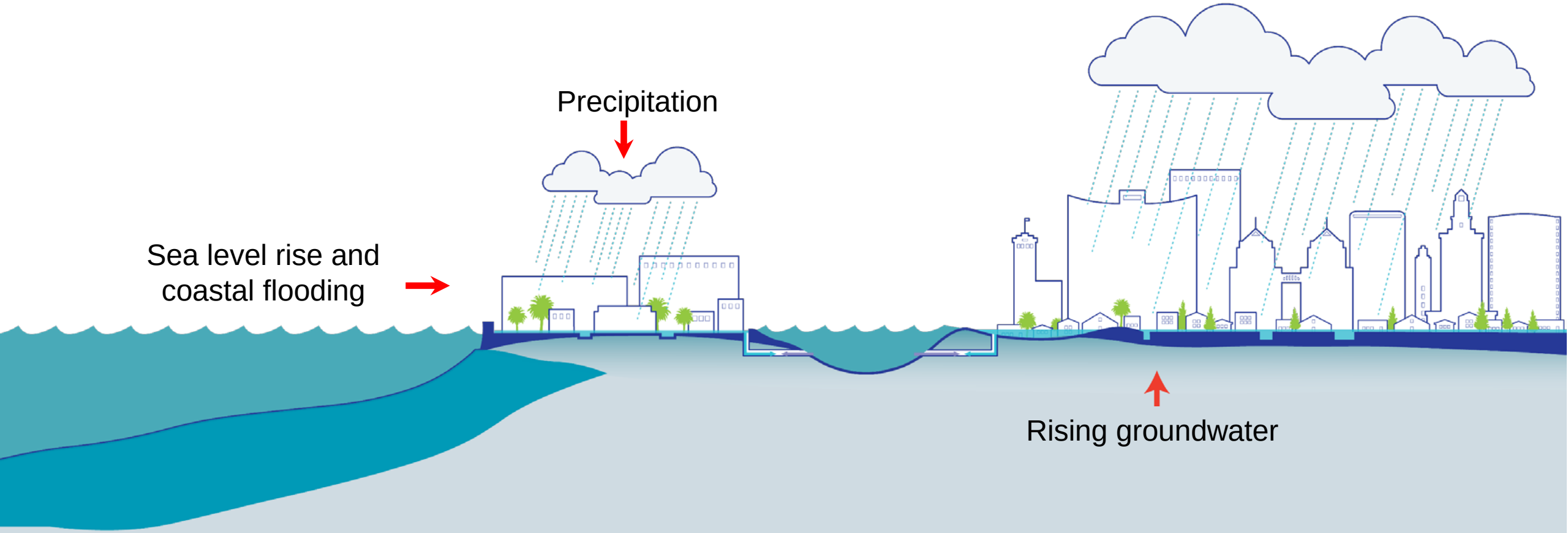
3.5 - 7' of sea level rise

Protect to elevation +17’





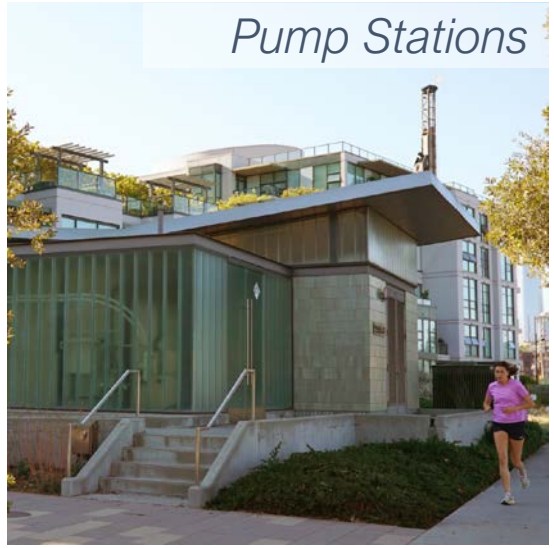
Combined Adaptation:



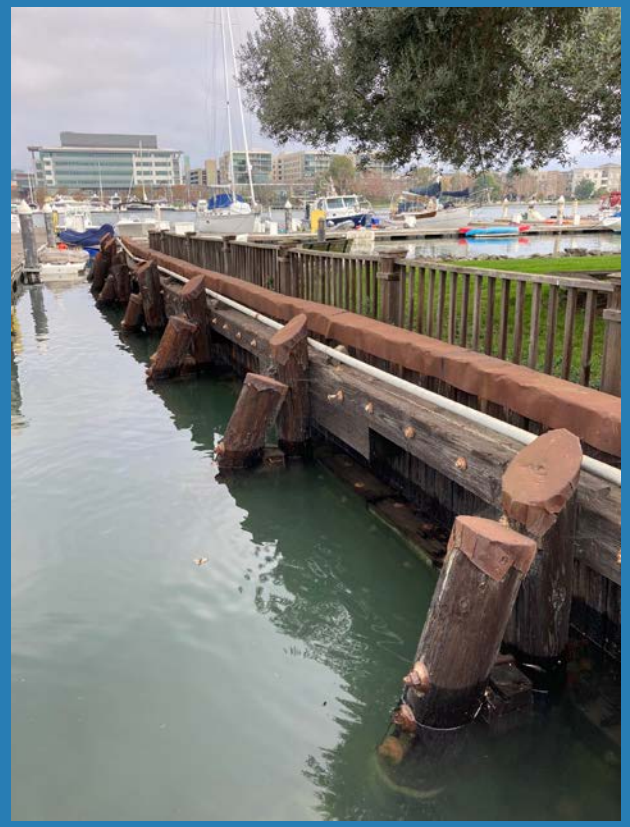
Shoreline = seawalls, levees and redevelopment at higher elevations

Inland = green and grey detention basins

Potential Adaptation Measures



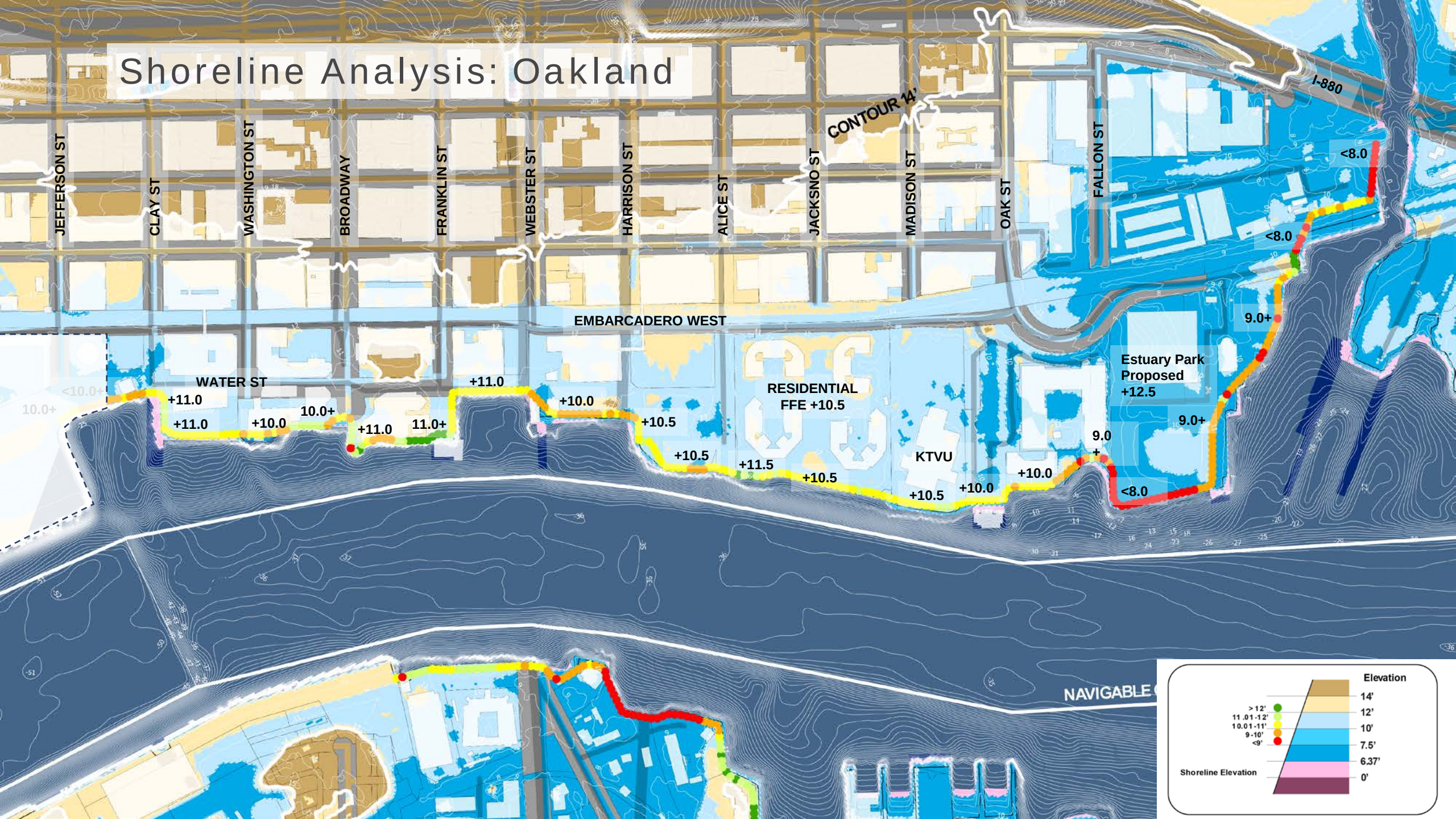
Oakland-Alameda Estuary Near-Term Adaptation Project



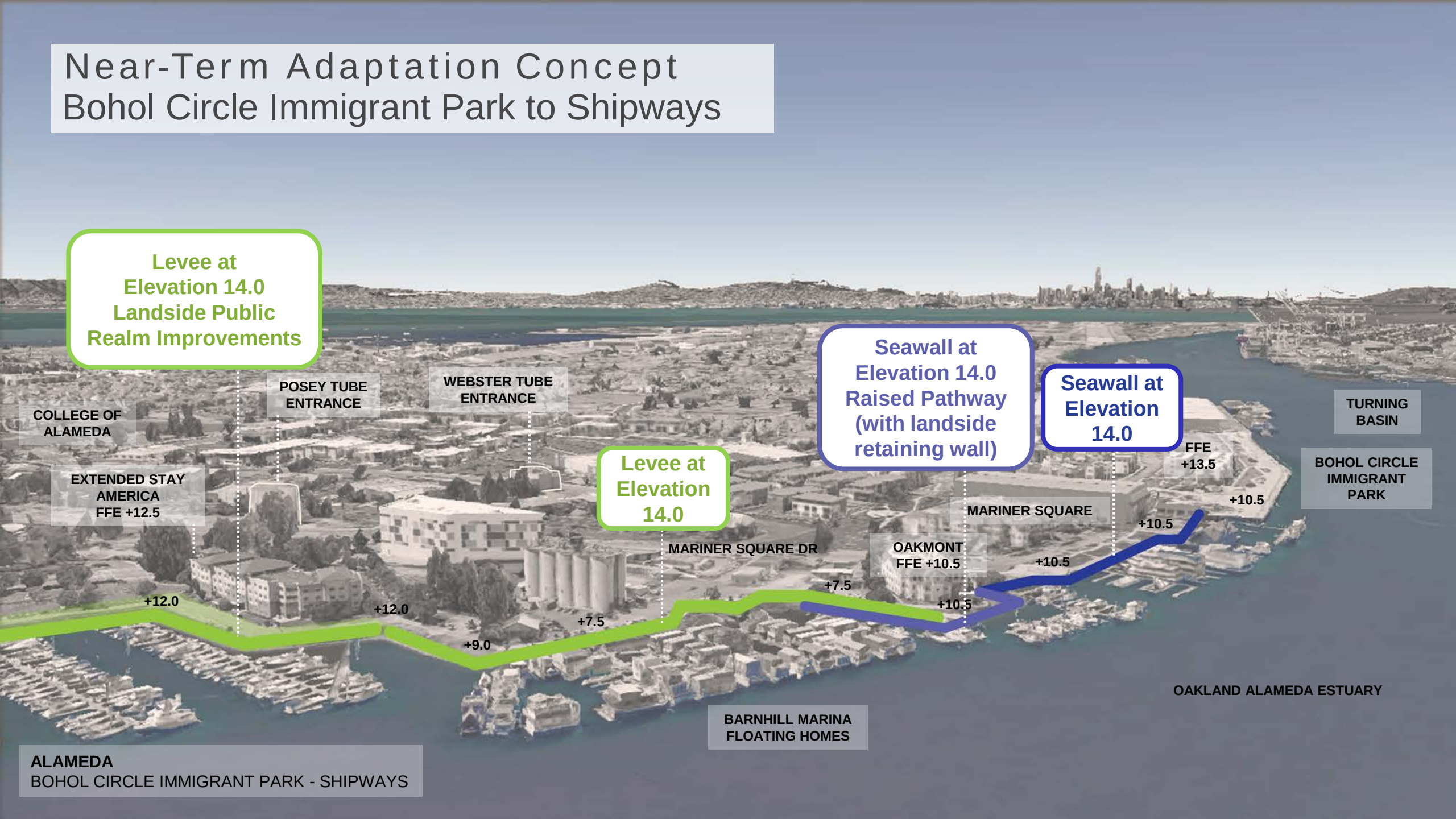

Project Area:
Oakland-Alameda Estuary
Jack London Square
Bohol Circle
I-880
Oakmont
The Landing
Barnhill Marina
Lake Merritt Channel
Estuary Park
Marina Village
Shoreline Park
OAKLAND ALAMEDA ESTUARY

Shoreline Analysis: Alameda

Shoreline Analysis: Oakland

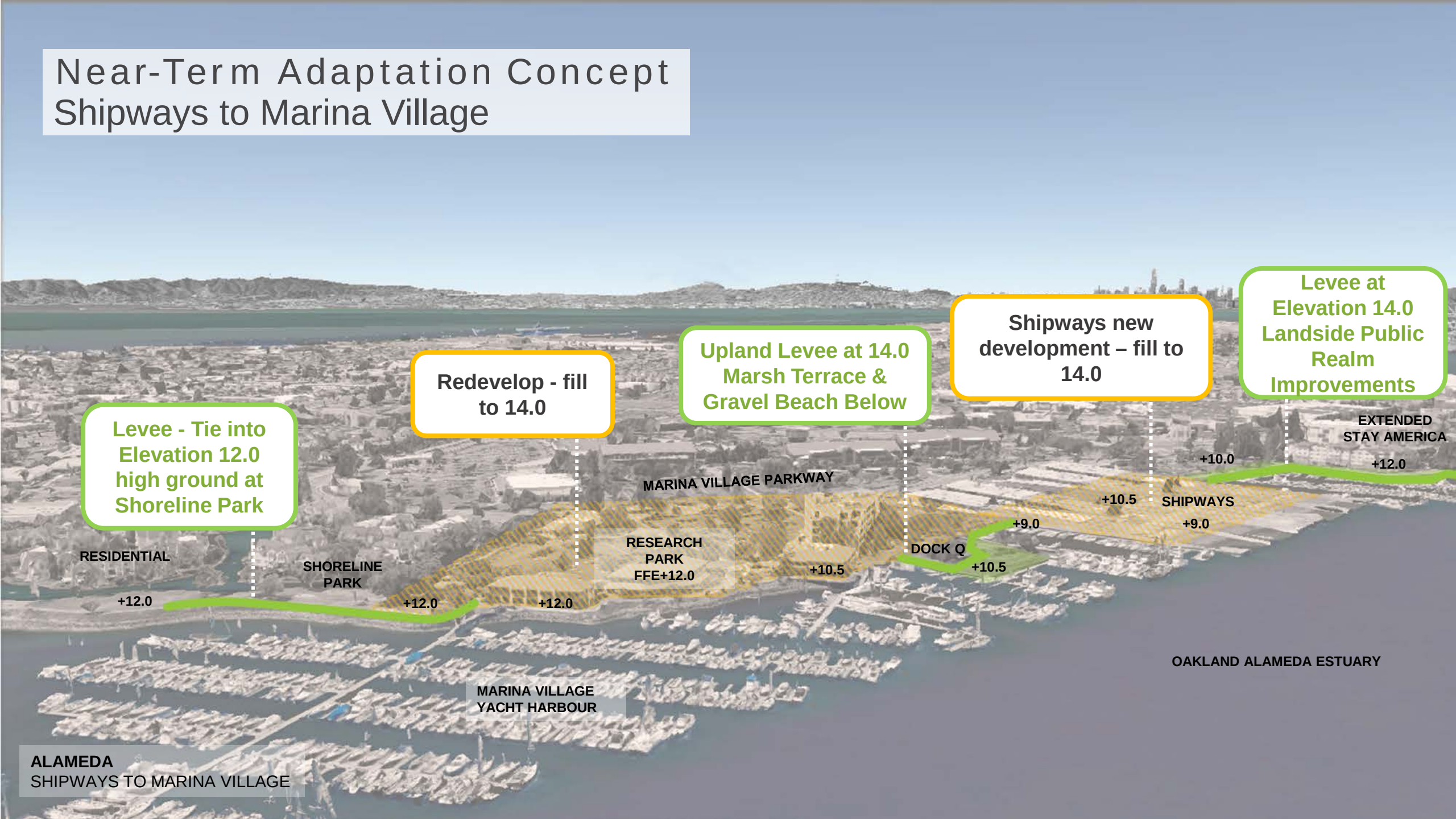


Near-Term Adaptation Concept
Bohol Circle Immigrant Park to Shipways



ALAMEDA
BOHOL CIRCLE IMMIGRANT PARK - SHIPWAYS

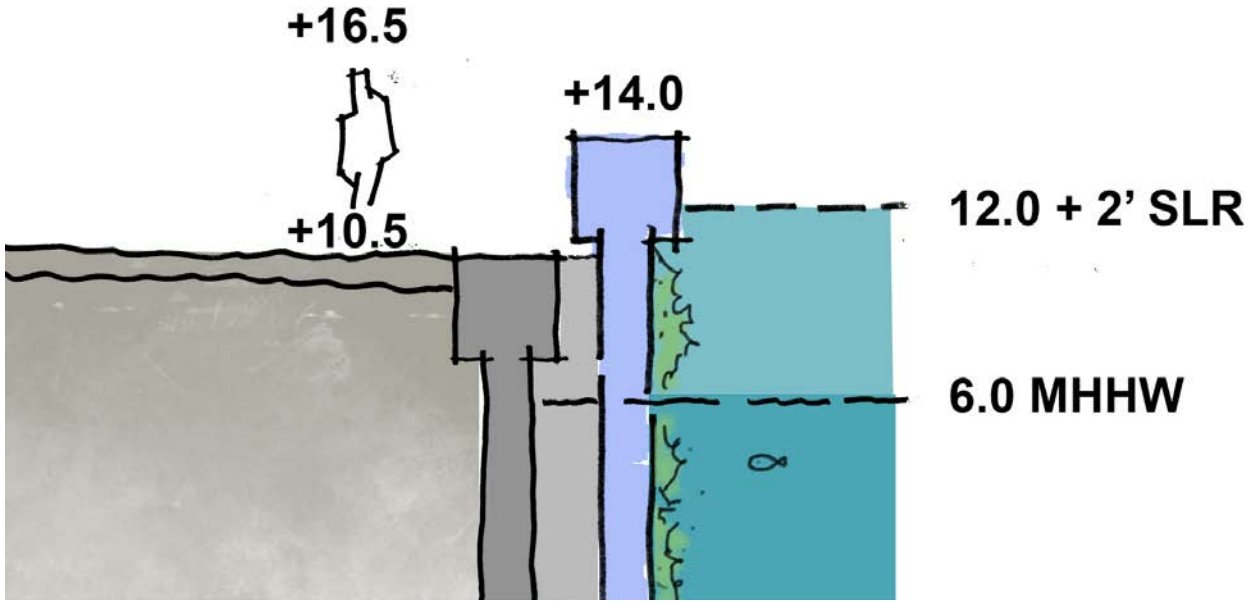
Near-Term Adaptation Concept
Shipways to Marina Village



ALAMEDA
SHIPWAYS TO MARINA VILLAGE

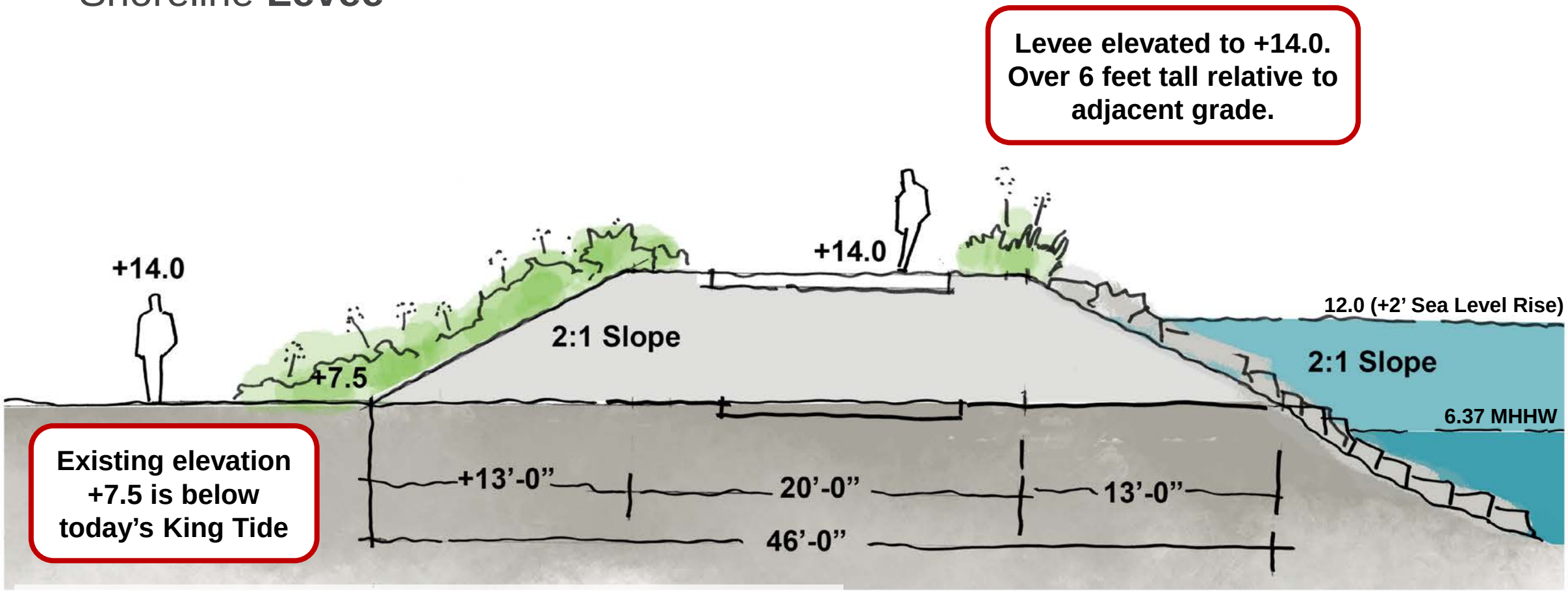
Alameda Shoreline – Near Term Adaptation
Elevated **Seawall**

Build new Seawall water side of existing wall. Environmental permits and agency coordination required.



Section 1 – Typical condition at
Cardinal Point and Mariner Square Drive

Alameda Shoreline – Near Term Adaptation
Shoreline **Levee**

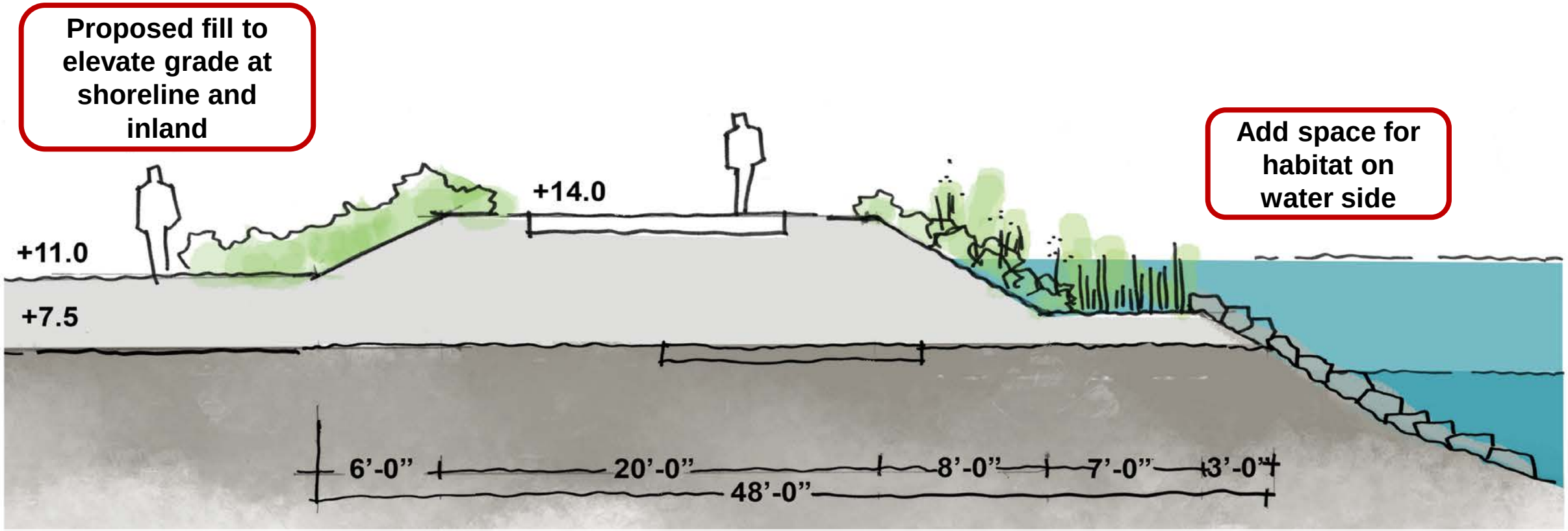


Section 2 – Typical condition at Barnhill Marina

Alameda Shoreline – Near Term Adaptation

View of shoreline protection and improvements near hotel

Alameda Shoreline – Near Term Adaptation
Raised Grade at Shoreline and Inland



Section 4 – Typical condition at Marina Village

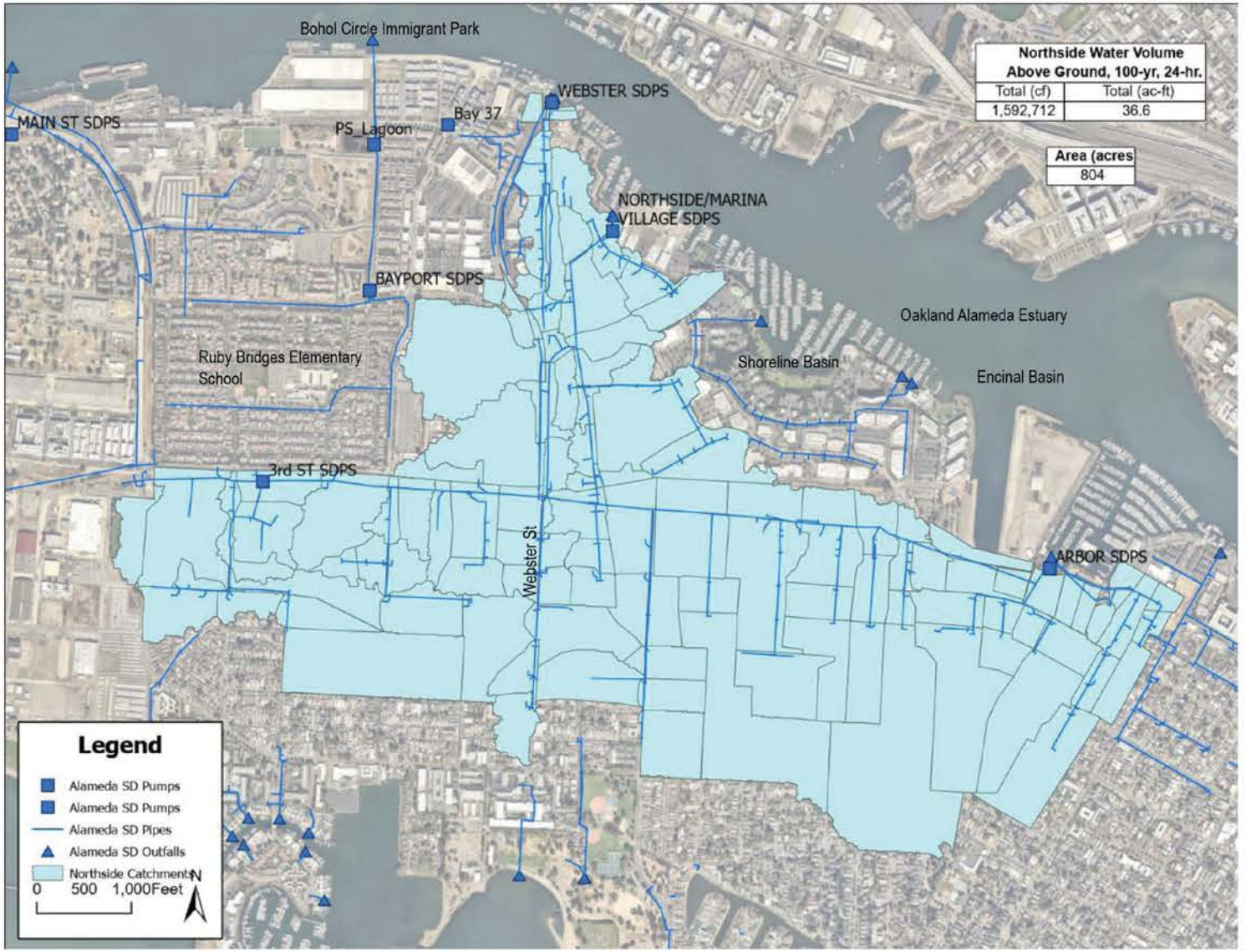
Inland Flooding Analysis
Stormwater Modeling: Northside of Alameda

- System is designed for 10-year storm
- Volume of water that does not fit in storm drain system after 100 yr, 24-hr storm: 36.6 acre-feet
- Analysis includes stormwater detention for today's volume with added capacity for future increases

Estimated Future Precipitation % Increase With Climate Change

		10-yr	100-yr
2050	3-hr	21.6%	25.8%
	24-hr	17.9%	22.1%
2060	3-hr	27.8%	32.7%
	24-hr	22.2%	26.8%
2070	3-hr	33.7%	39.3%
	24-hr	25.9%	31.2%
2080	3-hr	40.7%	47.1%
	24-hr	30.7%	36.6%
2090	3-hr	49.6%	56.9%
	24-hr	37.1%	43.7%
2100	3-hr	59.0%	67.2%
	24-hr	43.6%	51.0%

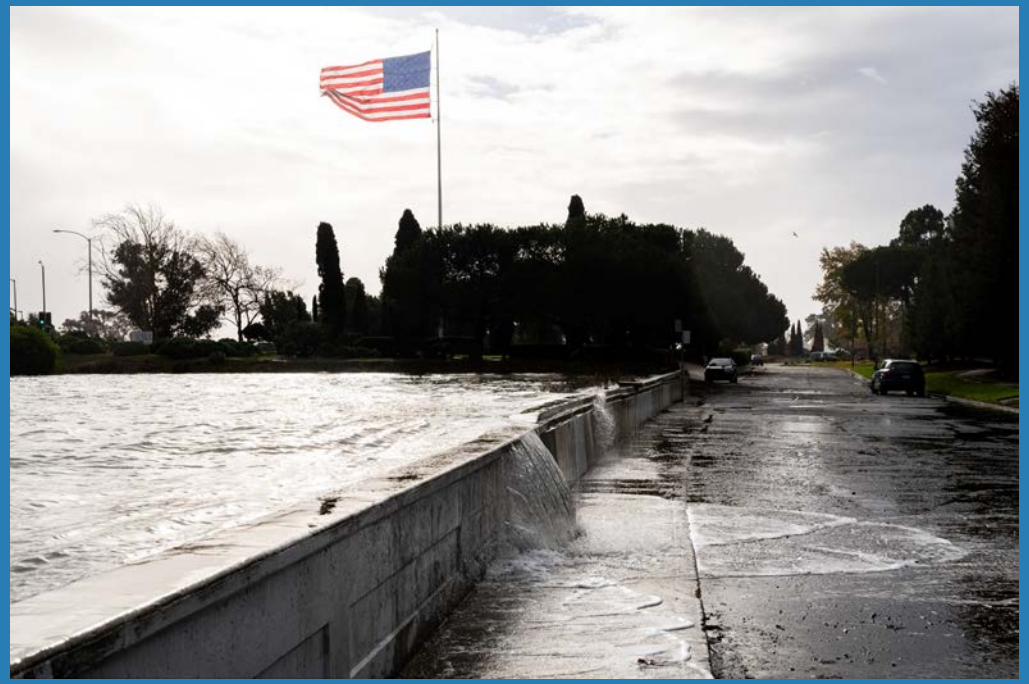
San Francisco Bay Area Domain SSP5-8.5



Inland Flooding Detention Basin Locations

- Basins store more water
- Storm drains pump water to bay at low tides within 72 hours
- Most polluted street runoff heads to storm drain system

Bay Farm Island Adaptation Project



BFI Project: Current Flood Conditions

BFI Project: Near-Term Project Area

NORTHERN SHORELINE | LAGOON OUTFALL | VETERANS COURT

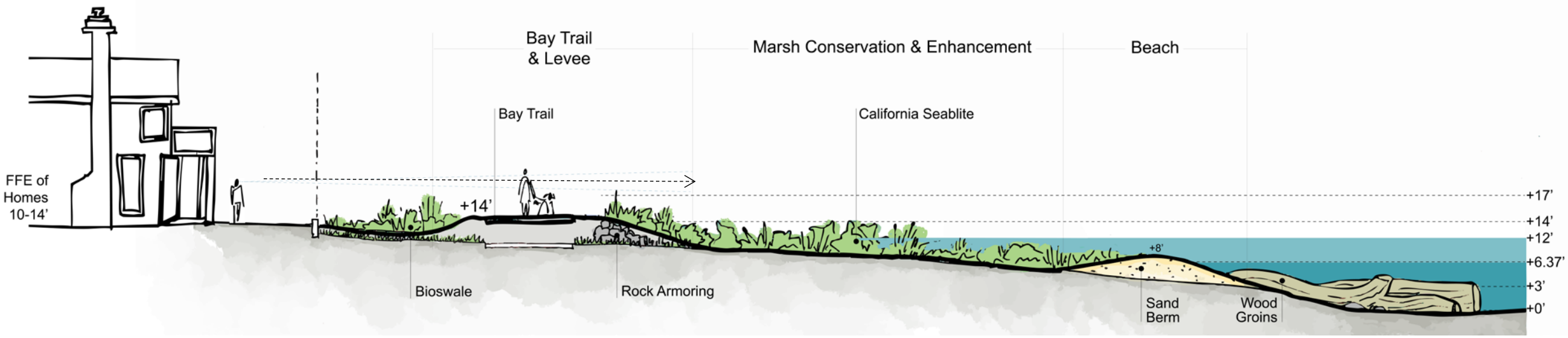
BFI Project: Preferred Near-Term Alternative

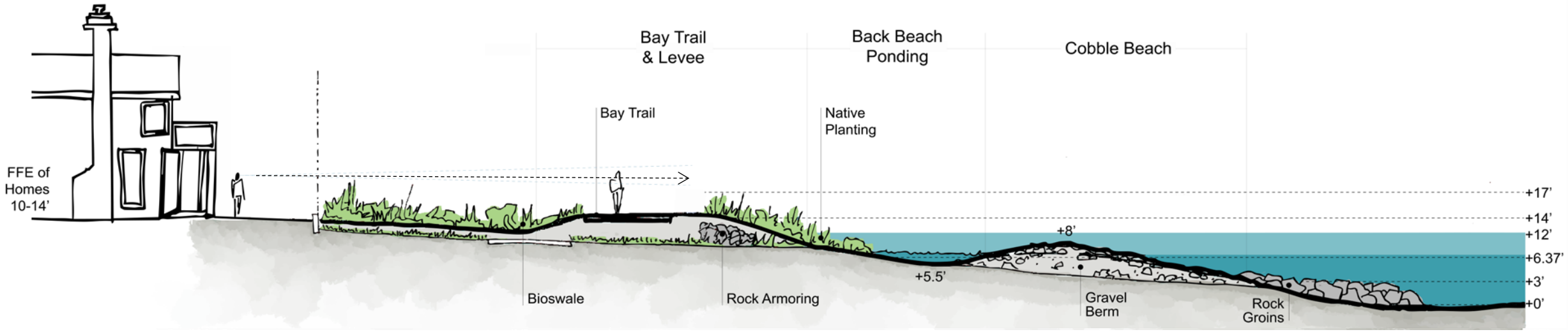
- Nature-based Solutions
- Levee: Lagoon to Veterans Court
- Lagoon: New tide gate, pump station & gravity pipe
- Marsh expansion

Nature-Based Solutions

Levee & Floodwall & Nature-Based Solutions

BFI Project: Levee / Bay Trail / Marsh Expansion

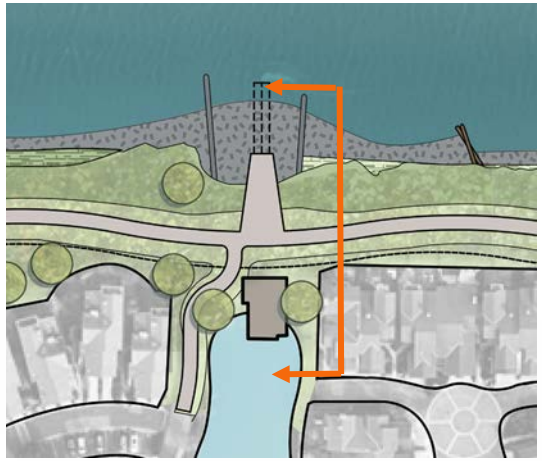


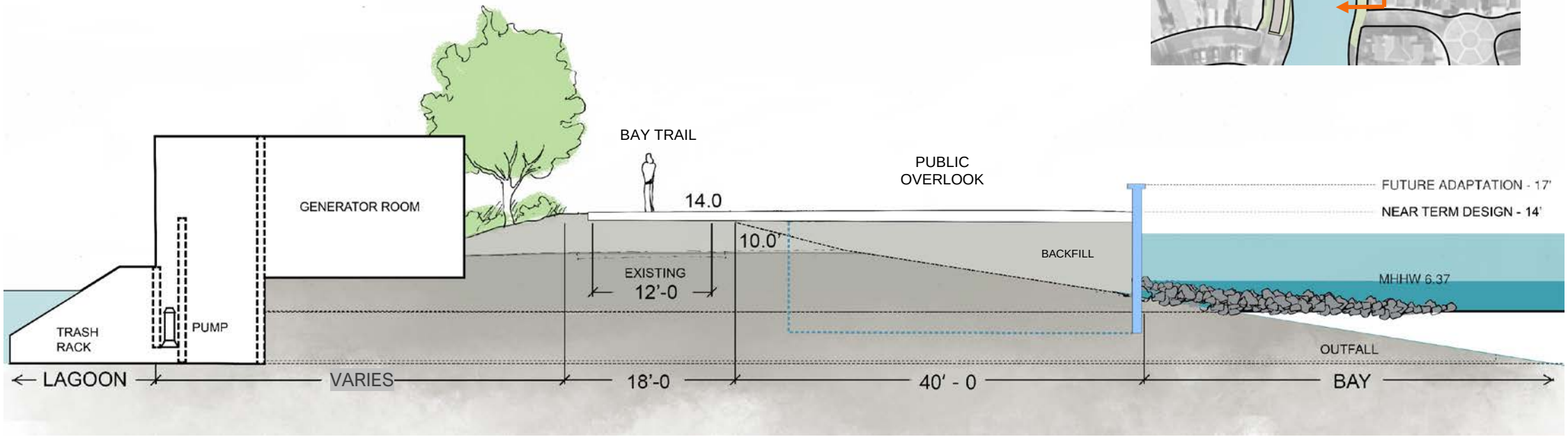


BFI Project: Levee, Bay Trail & Nature-Based Solutions

Perspective View of Typical Bay Trail condition

BFI: Pump Station & Tide Gate Replacement





- Interior drainage to comply with FEMA 65.10
- Maintain existing lagoon circulation & stormwater management goals
- Clarify Operations & Maintenance responsibilities
- Obtain right-of-way or easements for gravity pipe

BFI Project: Veterans Court Adaptation

- Expands marsh to enhance habitat
- Shortens road to Veterans Park
- Maintains 20-25 parking spaces, including ADA spaces.
- Does not include wooden bicycle/pedestrian bridge – analysis for replacement in near term

FEMA BRIC Grant: Near-term Project (Phase 1)

BRIC federal $50M (90%)

Non-federal $5.5M (10%)

Total $55.5M

Recommended for further review by FEMA

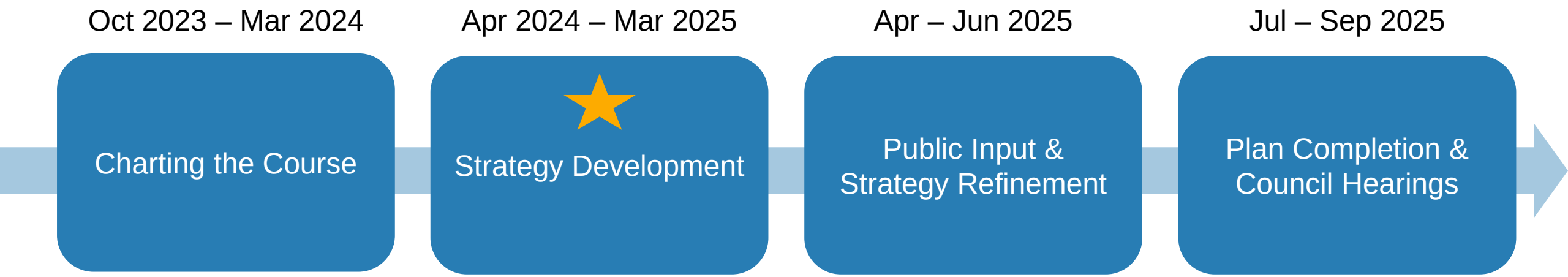
Start: 2025?

Construction: 2030

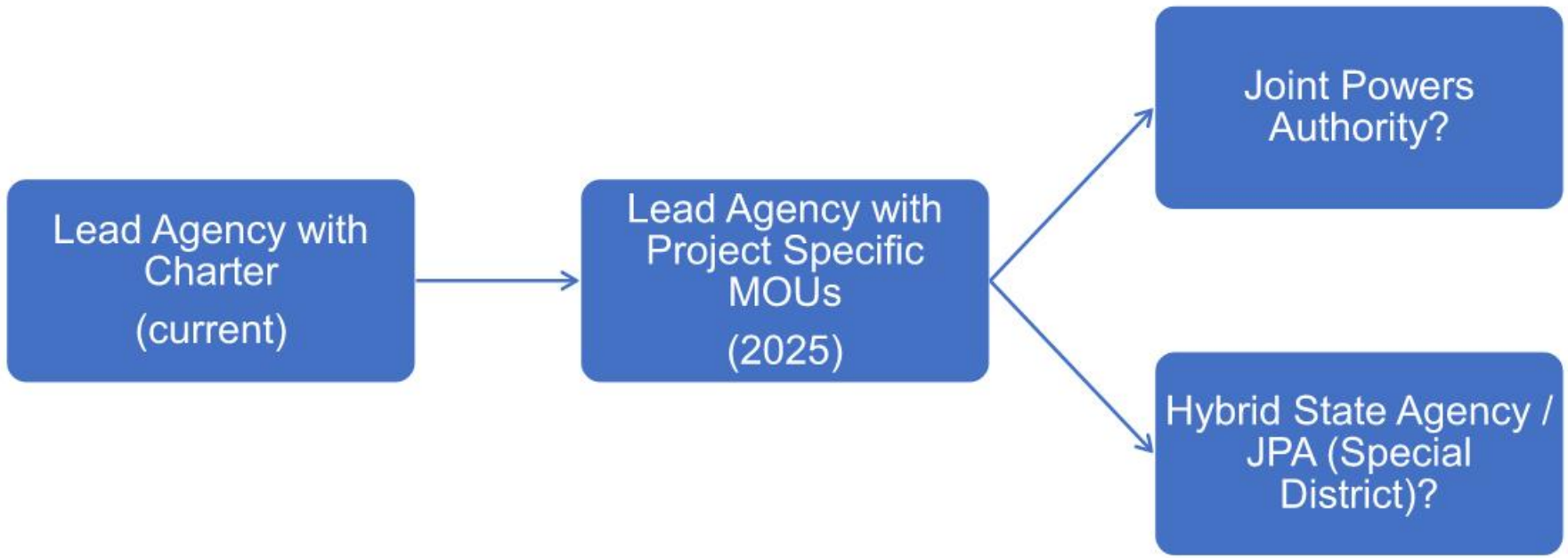
Subregional Adaptation Planning

January 2025

Subregional Adaptation Plan Process



Governance: Recommended Evolution



Governance: Project-specific MOUs

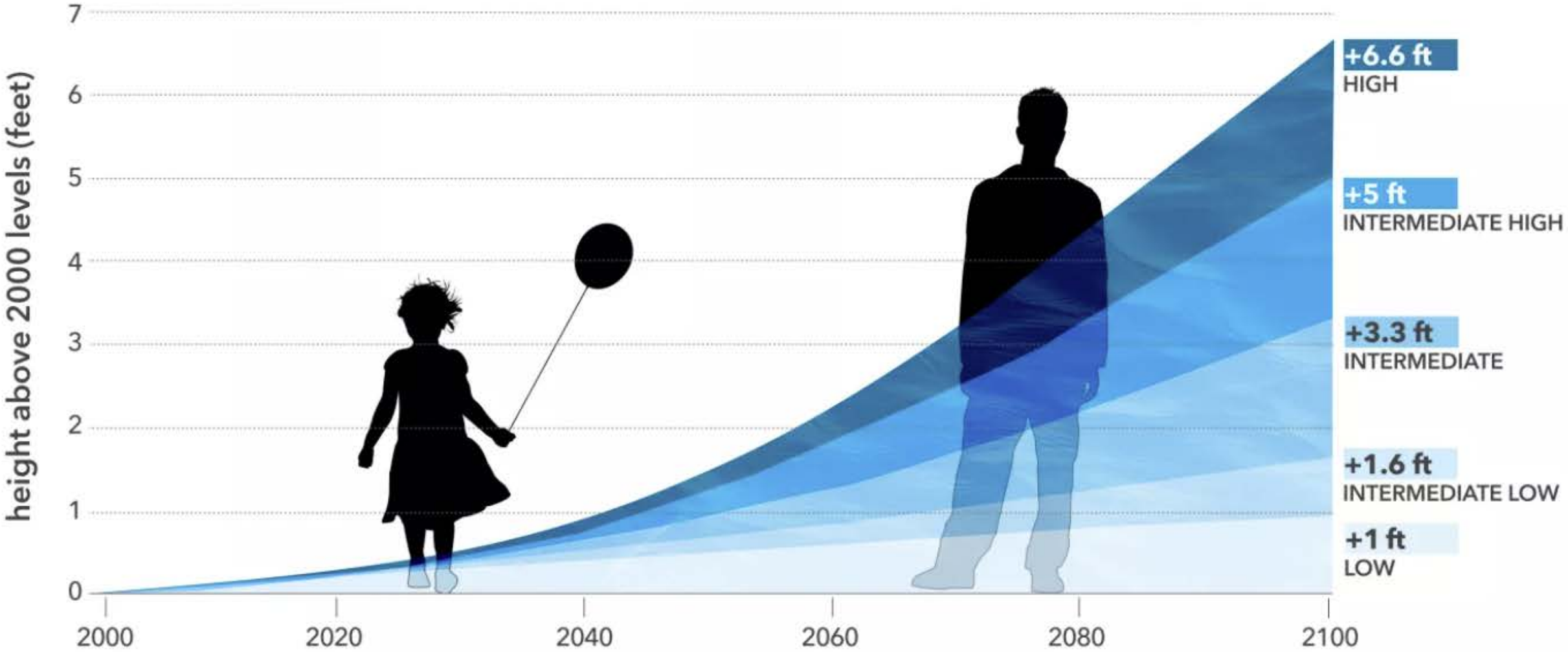
Project	Funding source	MOU partners	Other potential partners
Bay Farm Island/Doolittle Project	BRIC	• City of Alameda • City of Oakland • Port of Oakland	• Caltrans • EBRPD • Community Partners
Estuary Project	WRDA	• City of Alameda • City of Oakland • Port of Oakland	• Caltrans • Community Partners

OAAC Adapt Projects

January 2025

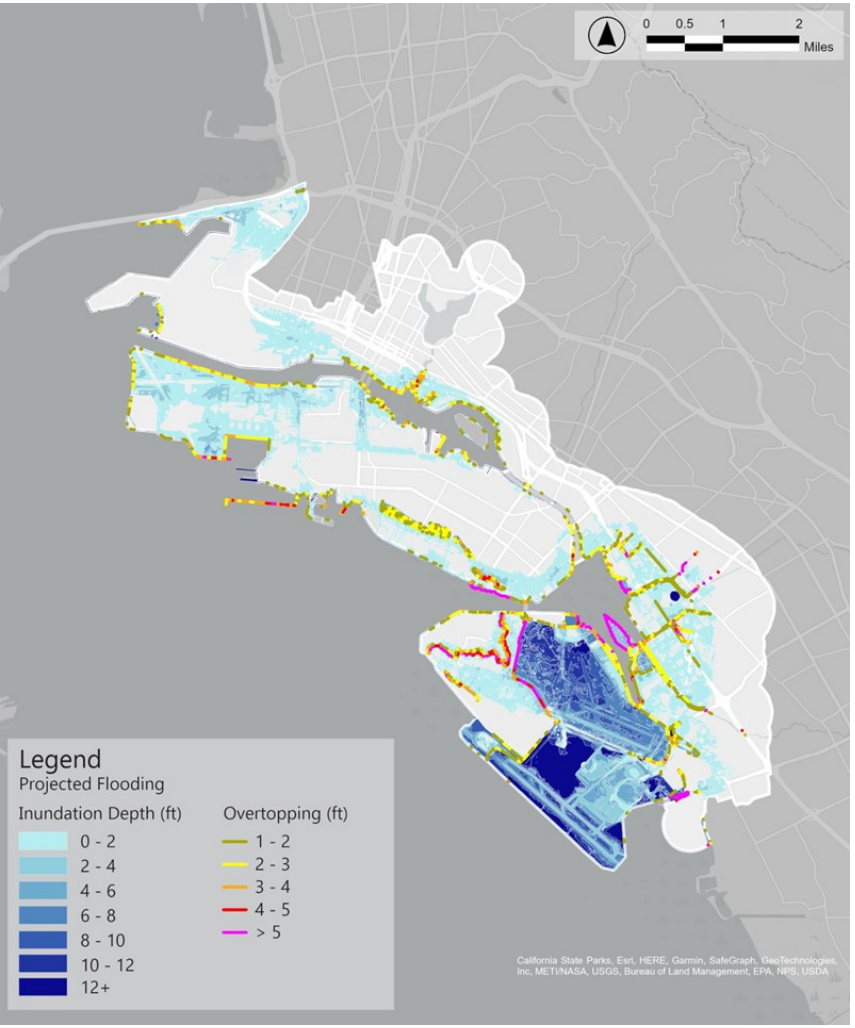
Learn more:
www.alamedaca.gov/OaklandAlamedaAdaptationCommittee

Projected Global Sea Level Rise to the Year 2100

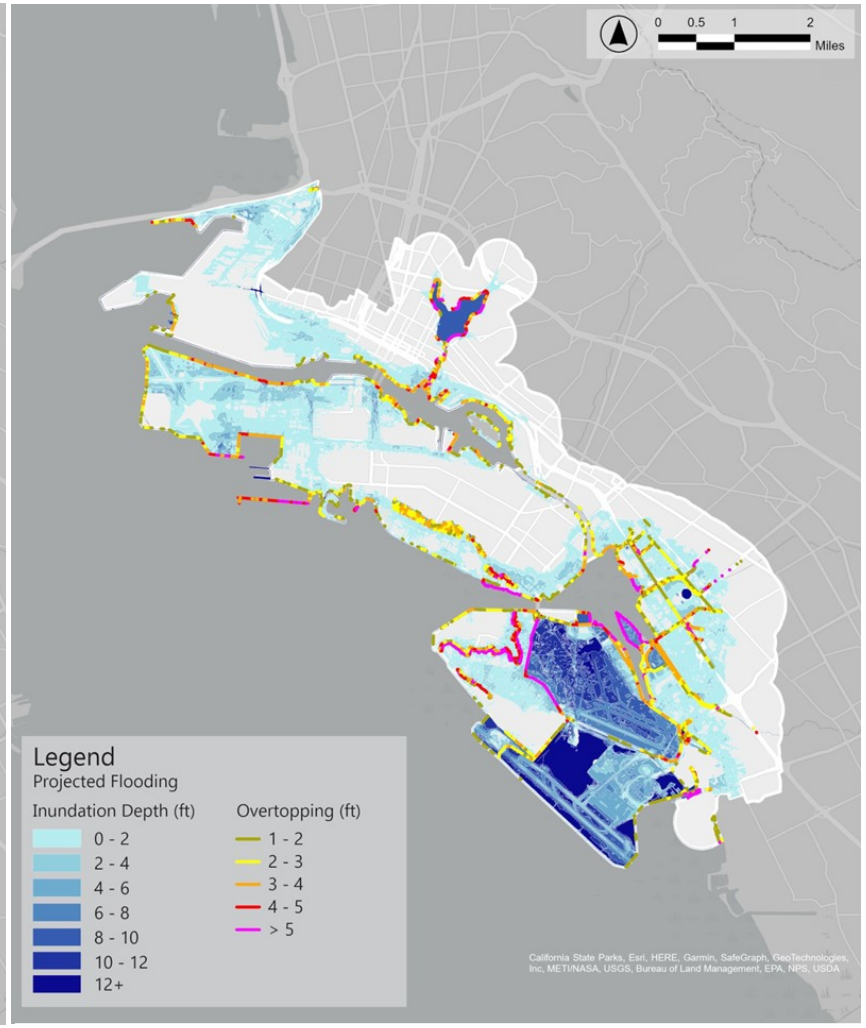


Source: climate.gov

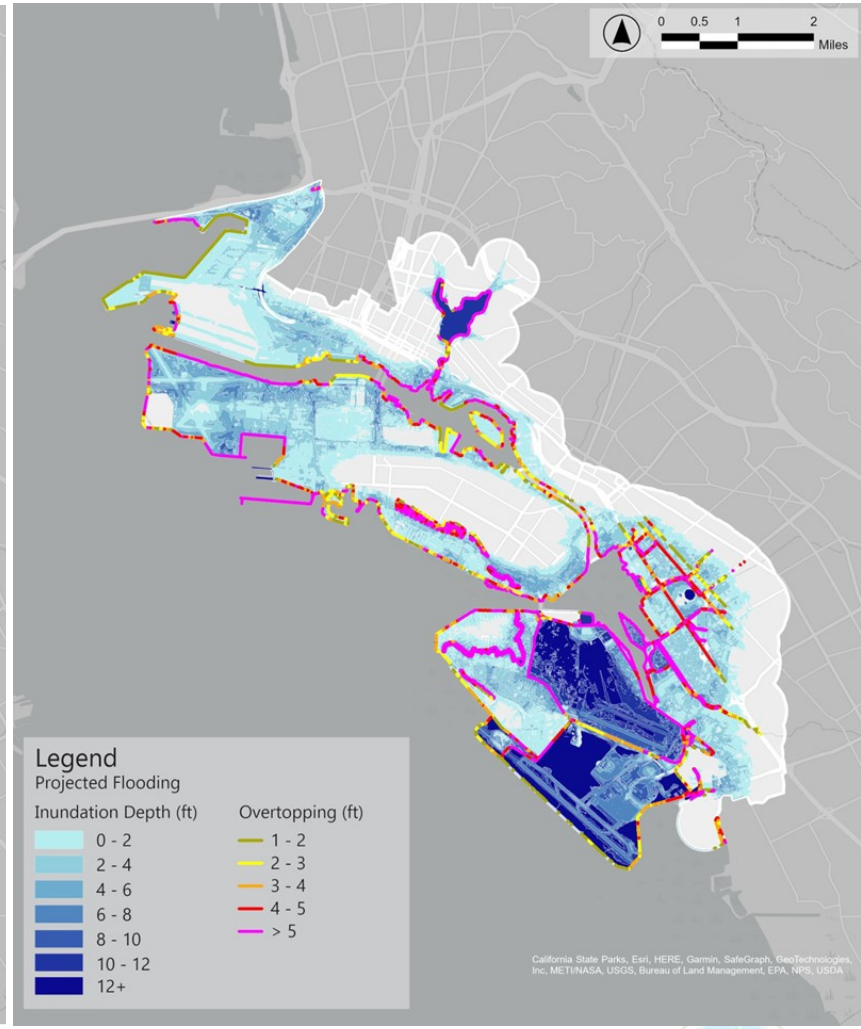
Coastal Flooding



2 ft of sea level rise +
100-year event

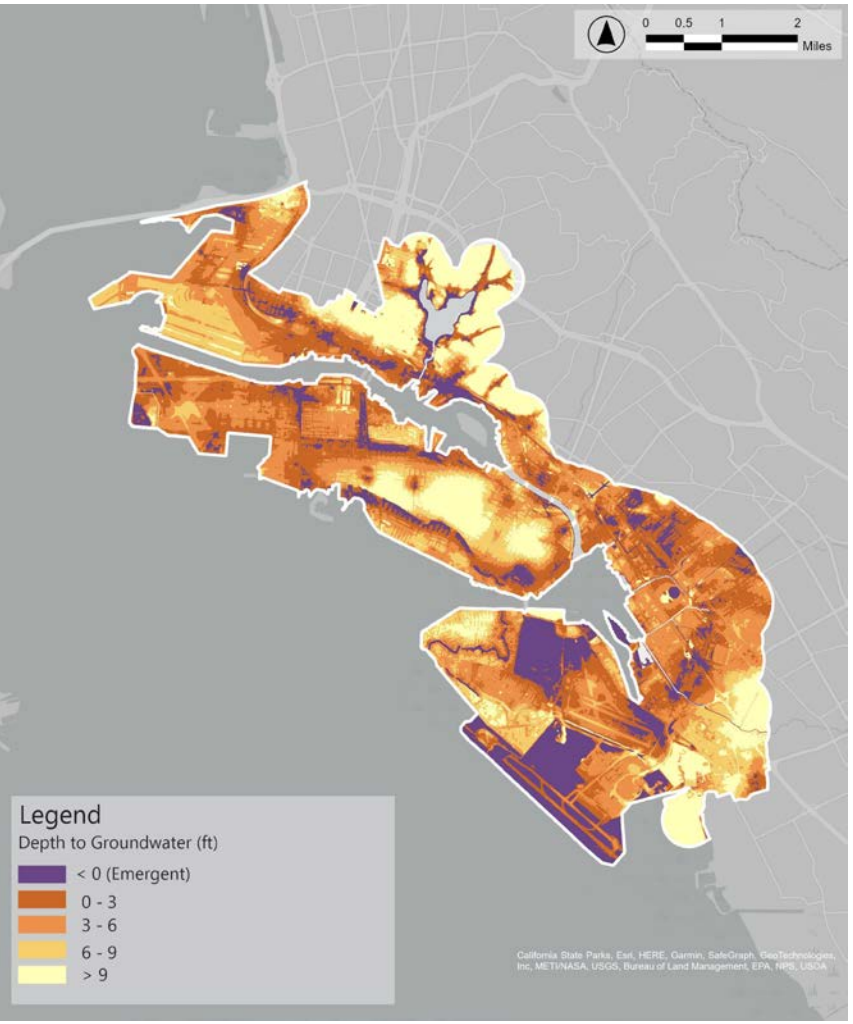


3 ft of sea level rise +
100-year event

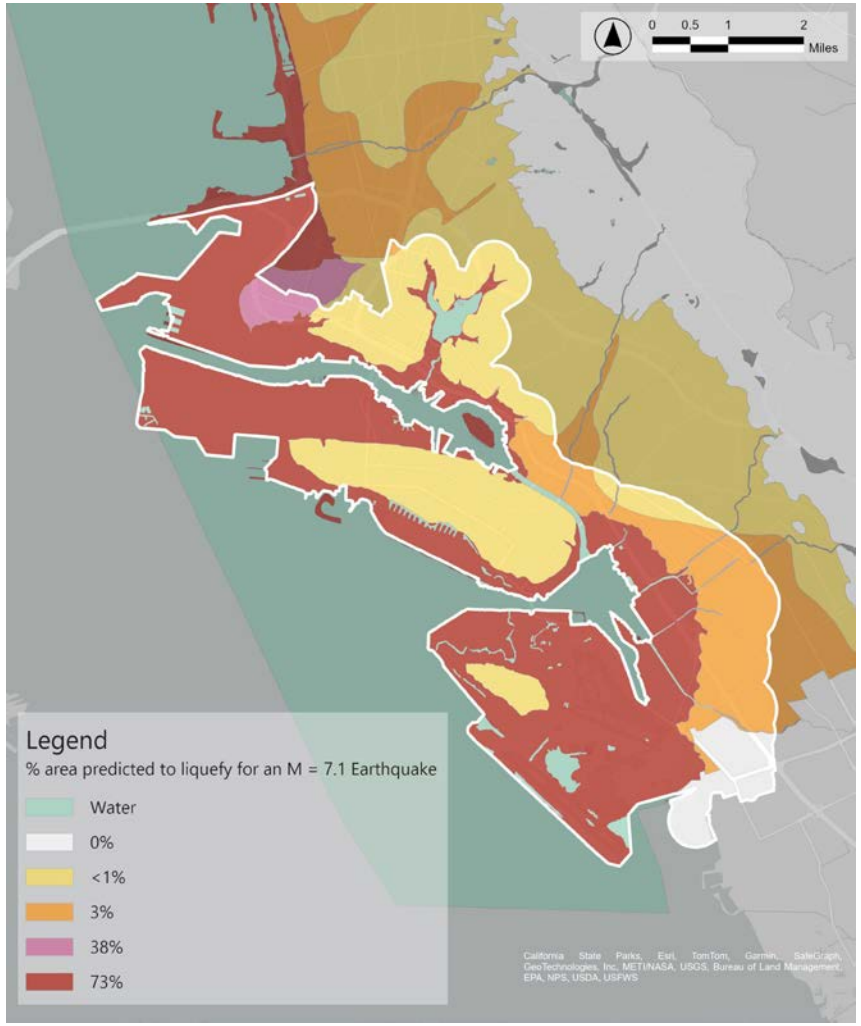


5½ ft of sea level rise +
100-year event

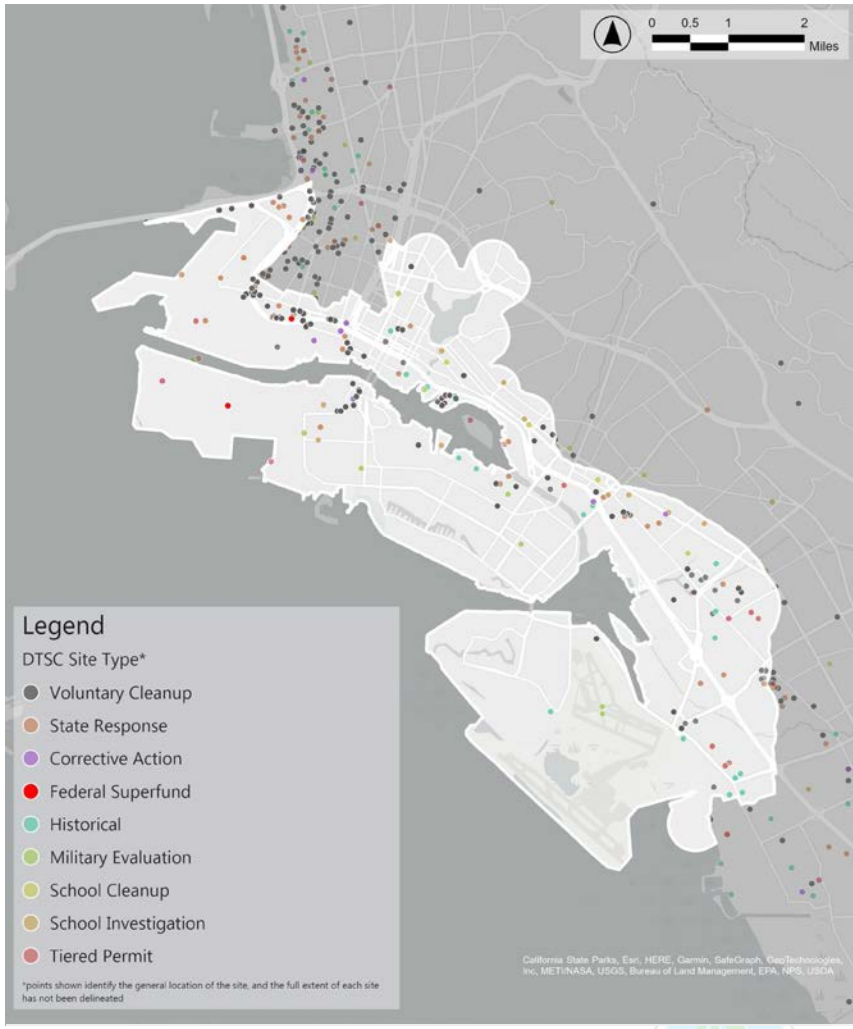
Rising Groundwater, Liquefaction, Contamination



Depth to Groundwater with 3 ft of Sea Level Rise



Liquefaction



Potentially Contaminated Sites (DTSC)

Alameda Concept Plan – Mariner Square to Shipways

**Finished Floor Elevation

Conceptual Stormwater Detention Basin Locations – City of Alameda Land

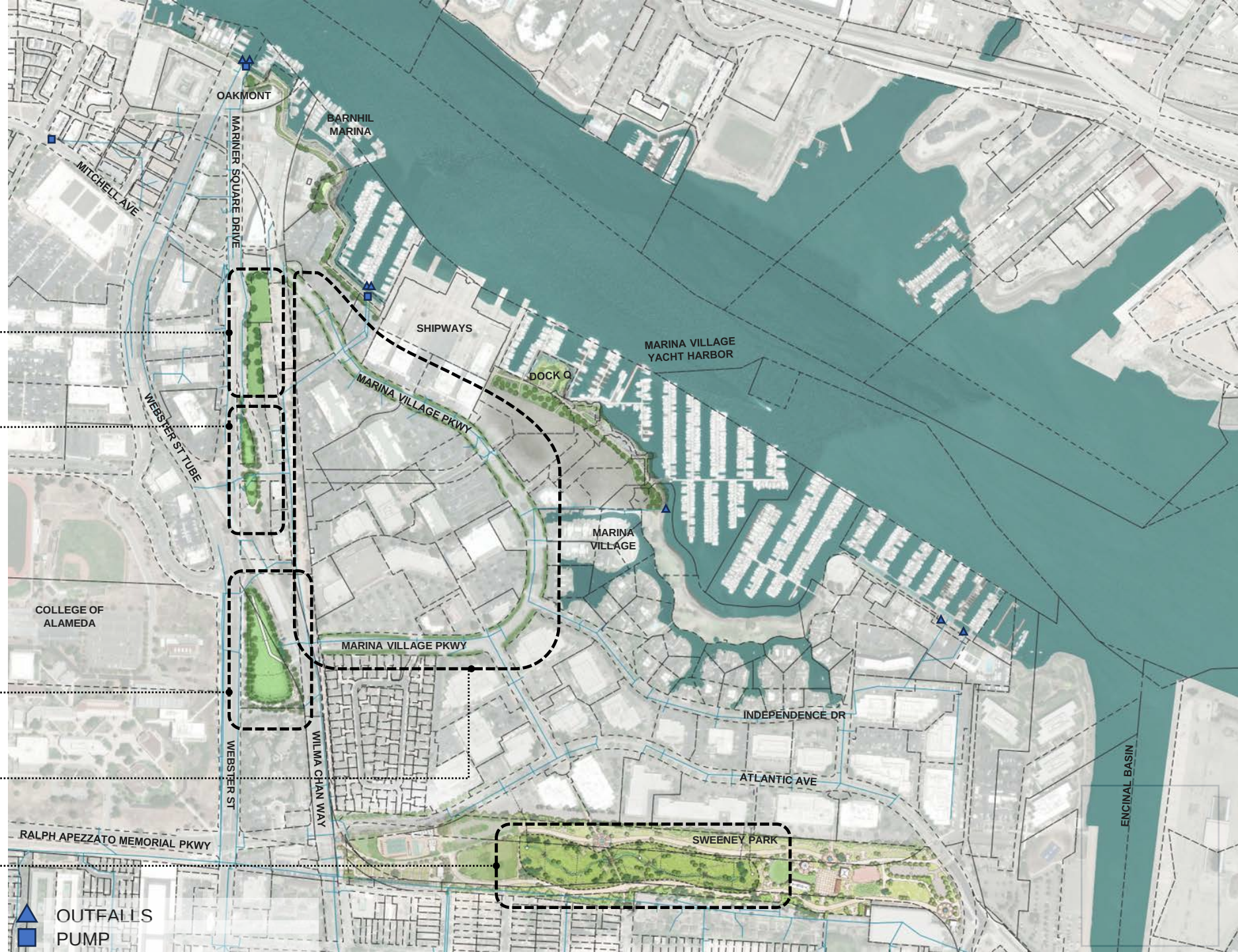
ALAMEDA #1
2 acre-ft

ALAMEDA #2 & #3
2 acre-ft

NEPTUNE PARK
8 acre-ft

MARINA VILLAGE PARKWAY RIGHT-OF-WAY
5 acre-ft

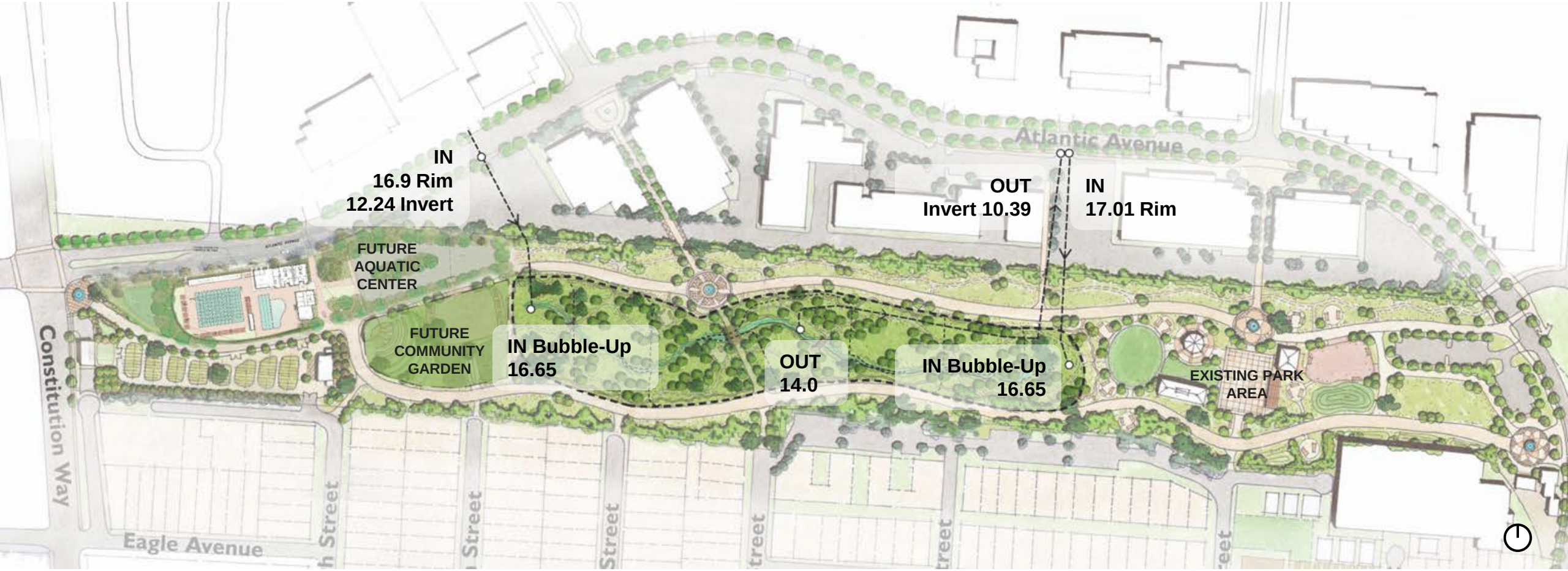
JEAN SWEENEY PARK
18 acre-ft



Alameda Inland Flooding – Detention Basin Concept Plans
Neptune Park

Alameda Inland Flooding – Detention Basin Concept Plans Alameda #2 & #3

Jean Sweeney Park



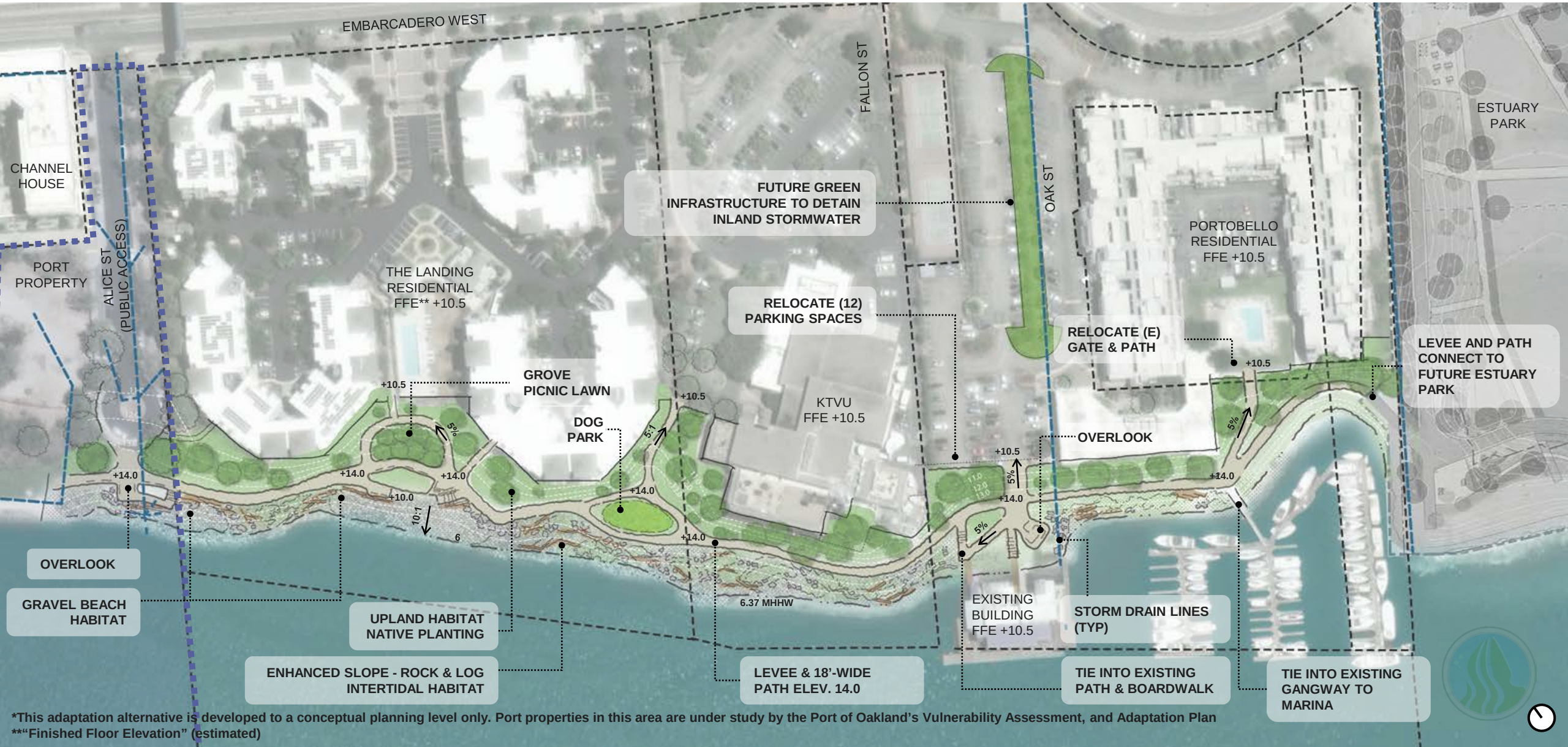
- Fruit Tree Orchard
- Existing Oak Trees
- Park Structure
- 1 Mile Trail & Bike Loop
- Fountain
- Water & Dry Creek
- Foot Bridge
- Plaza or Special Paving
- Natural Landscape
- Lawn Area
- Existing Vegetation
- Community Garden

Oakland Concept Plan

*This adaptation alternative is developed to a conceptual planning level only. Port properties in this area are under study by the Port of Oakland's Vulnerability Assessment, and Adaptation Plan

**"Finished Floor Elevation" (estimated)

Oakland Concept Plan – Alice St to Estuary Park



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**"Finished Floor Elevation" (estimated)

Oakland Shoreline – Alice St to Estuary Park

Oakland Shoreline Design – Estuary Park

Oakland Estuary Park – Living Shoreline Concept

CITY OF OAKLAND

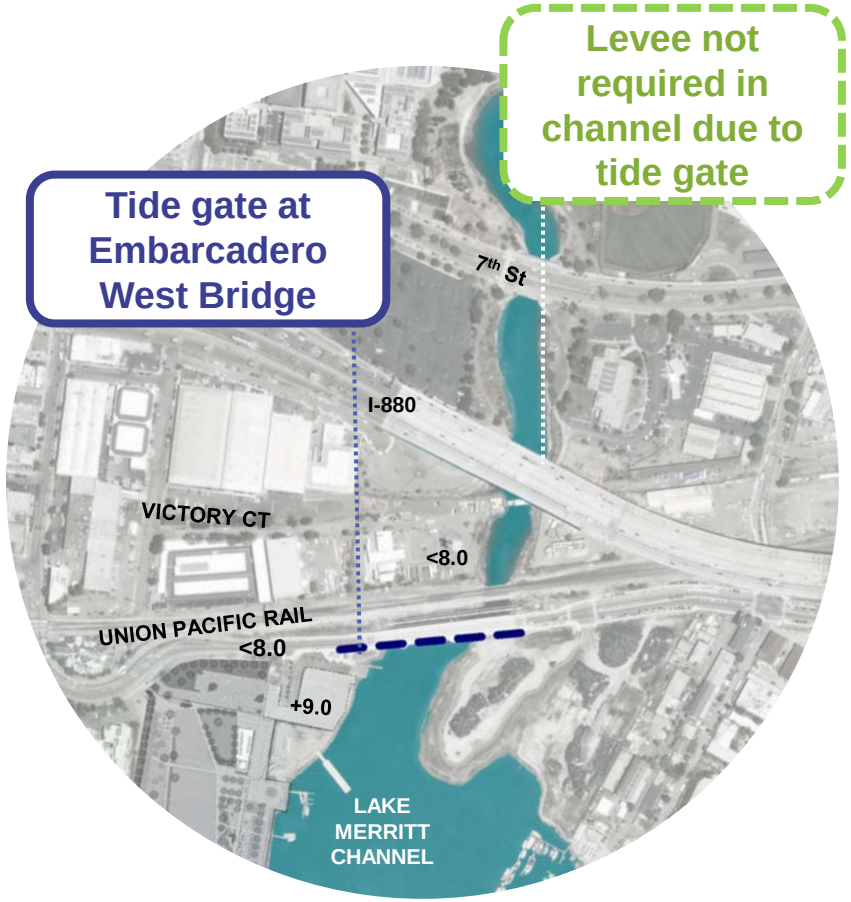
WRT

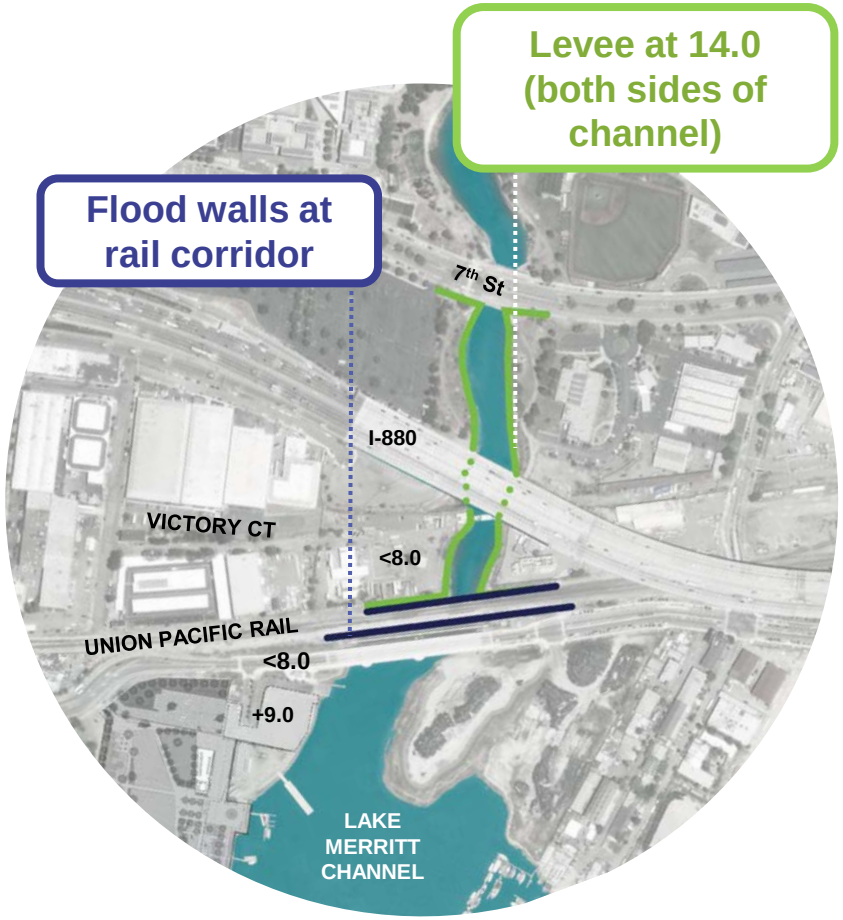
ESA

Oakland Concept
Alternative to Tide gate at Lake Merritt Channel: Flood Walls at Union Pacific Rail Bridge

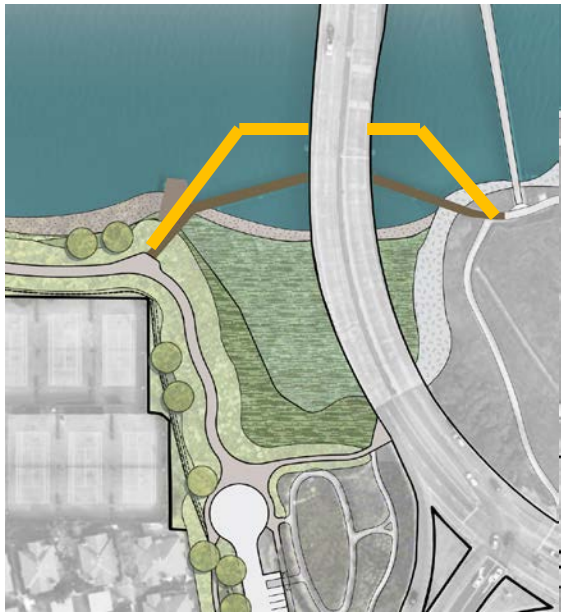

Embarcadero Bridge


Rail Crossing at Lake Merritt Channel





BFI Project: Bay Trail Bridge Adaptation Alternatives (Phase 2)



Alternative 1
Bridge Relocation Outboard

Alternative 2
Underpass Crossing

Alternative 3
Bridge Over Land

Alternative 4
At Grade Crossing

Immediate Term Shoreline Protection

Temporary Soft Armor Option – Large (1 cubic yard) Sandbags in lieu of armor rock

- Temporary soft armor to be replaced with permanent armor rock.
- Sandbags conform to existing ground – minimal site preparation required.
- Sandbags can be removed entirely or cut open to allow sand to remain.