Alameda's Infrastructure & Facility Needs: Shoreline Flood Protection, Sea Level and Groundwater Rise, and Disaster Mitigation

Alameda City Council Workshop December 2, 2025



## **City Council Strategic Priorities**

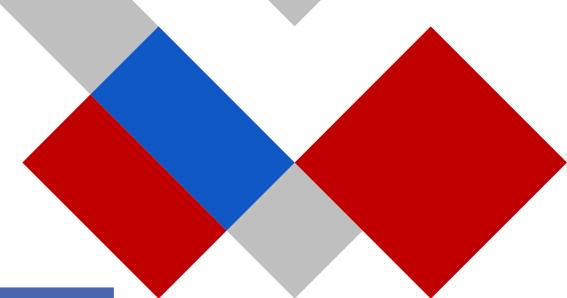


To achieve the City's vision, the City Council adopted 5 Strategic Priorities:

- Invest in Transportation, Infrastructure, Economic Opportunities, and Historic Resources
- Build Resilience to Climate Change and Water Level Rise
- Enhance Community Safety and Services
- House All Alamedans and End Homelessness
- Practice Fiscally Responsible, Equitable, and Inclusive Governance



### **Purpose of Work Session**



01

Present infrastructure and facility needs to address climate change impacts

02

Discuss City Council and community priorities 03

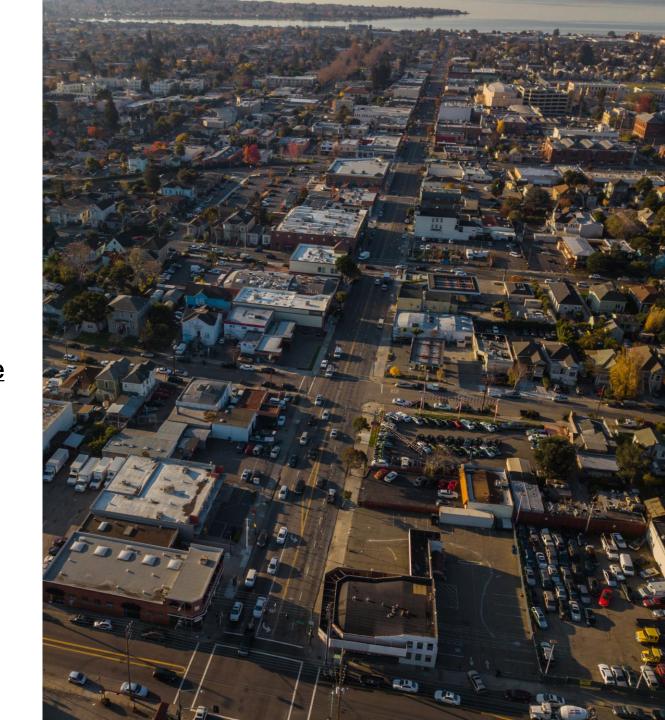
Feedback on options for greater local control regarding programs and funding



# Hundreds of Millions in Infrastructure Needs

The City has a significant backlog of <u>maintenance</u> needs and facility <u>upgrades</u> to meet current standards. We want to hear your input.

- Streets, Traffic Safety: Sept 2
- City Facilities, Public Safety: Oct 7
- Libraries, Recreation and Parks: Nov 4
- Flood Protection, Sea Level and Ground Water Rise, Disaster Mitigation: Dec 2



## **Stronger Together Campaign**



January-April 2026



## **Examples of Community Outreach**



Come shear your thoughts and learn about shoreline resilience! 💨 🕙

Join us on Saturday, September 27, for Alameda's first-ever Adaptation Fair focused on sea level rise. This open house event is your chance to learn about local climate risks, explore solutions, and share ideas for protecting our communities and natural spaces.

Drop in anytime -- there is no formal presentation, just good conversation and engaging family-friendly activities! You'll find:

- -- Hands-on exhibits and interactive maps
- --Opportunities to give feedback on shoreline adaptation designs
- -- Creative stations for sharing your vision for the future
- --Sheep and other science education at the REAP Climate Center!

More info: http://bit.ly/oaacfair





We hear from a lot of Alamedans who are concerned about sea level rise. We are too, and we want you to know that the City is working on finding solutions. Last month 150 people participated in a Community Planning Fair to learn, share input, and co-design near-term priorities for climate adaptation. If you weren't able to attend, take this quick survey to learn more and share your input on this important work: https://www.oaacadapt.org/workshops





Let's work together to protect what we love! The Alameda Sea Level Rise Planning Fair on September 27 is your opportunity to share ideas, concerns, and hopes for the future of Alameda'swaterfront. This free, open-house style event features hands-on exhibits, feedback opportunities on shoreline adaptation designs, and creative stations to share your visions. Stay for lunch and enjoy delicious bites from the AsianBurger food truck.

Whether you're a little curious or deeply involved, your voice is essential.

RSVP here: http://www.oaacadapt.org/.../alameda-sea-level-rise...









1909 - South Shore



1939 - Neptune Beach







#### **History of Our** Shoreline



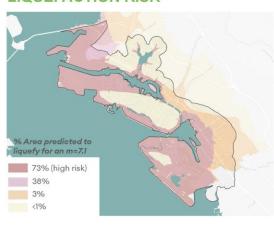




#### **HISTORICAL BAYLANDS**

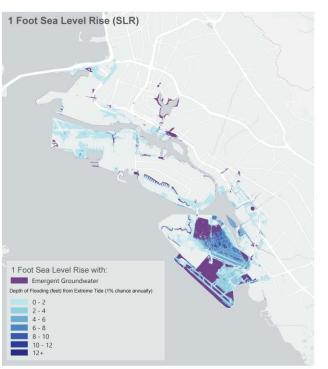


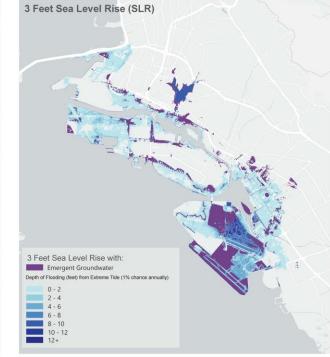
#### LIQUEFACTION RISK

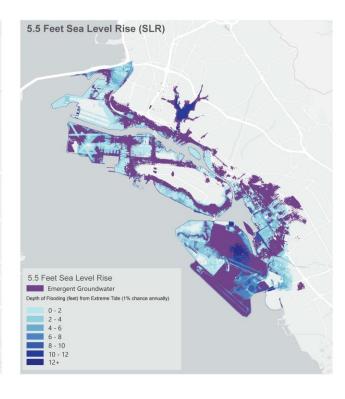


#### **Alameda's Risks**

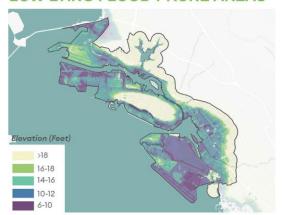
#### **COASTAL FLOODING AND EMERGENT GROUNDWATER**







#### **LOW-LYING FLOOD-PRONE AREAS**





# Coastal Challenges King Tide Storms December 2024















**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.

Photo credit: Maurice Ramirez



#### **OAAC Adapt: Project Partners**

#### **Agency Partners**















#### **Community Partners**















#### **Consultants**

















### **Alameda Leadership Recognition**



**2025 Leadership and Innovation Award** 

Cross-Agency
Collaboration in Climate
Adaptation

#### **California Coastal Accelerator**

Driving Coastal Leadership and Resilience Project Implementation Across California



Leadership Development

 Unlocking Resources

Statewide Learning & Policy Advocacy













#### **Preserve South Shore Beaches**







Maintain Recreational Opportunities





Maintain Public Shoreline Access





Protect Shoreline Residential Neighborhoods





**Protect Historic Buildings and Cultural Districts** 





**Preserve Maritime Uses** 



Preserve Habitat





What are we missing? What other places on Alameda need protection and preservation as we adapt?

Let us know!

#### **Our Priorities**

- Preserve South Shore Beach
- Maintain Recreational Opportunities
- Maintain Public Shoreline Access
- Protect Shoreline Residential Neighborhoods
- Protect Historic Buildings and Cultural Districts
- Preserve Maritime Uses
- Preserve Habitat



## Natural and Nature-Based Features



#### **Recreational Amenities**





Shoreline trails

Coarse beaches

#### Flood Protection





Levee with beach access



Levee with tidal marsh



Elevated, hardened shorelines

#### **Stormwater Management**



Updated pump stations and infrastructure



Stormwater gardens for detention

#### Waterfront Public Open Space



Beaches and water access



Seating and views

#### **Economic Diversity and Opportunity**





What are we missing? What other types of transformation would you like to see?

Let us know!

#### **Adaptation Brings Opportunity for Positive Change**

- Natural and Nature-Based Features
- Recreational Amenities
- Flood Protection
- Stormwater Management
- Waterfront Public Open Space
- Economic Diversity and **Opportunity**



Mixed-use development

Maritime industry

New housing types

### **OAAC Adapt Projects**

Focus on Immediate and Near-Term Flood Risk



#### **Alameda Shoreline Adaptation Projects + Planning**

Project Area (Est. Total Project Cost / Secured to Date)	2023	2024	2025	2026	2027
Shoreline Plan	Phase 1 - NFWF + SFEP grants Existing Conditions, Vulnerability Assessment, Initial Concepts, Outreach			Phase 2 - SB1 grant BCDC approved RSAP: Strategies & Pathways, Land Use & Policy Plan, Funding & Implementation Plan, Project List, Outreach	
Bay Farm Island	<b>30% Design</b> – Federal Earmark (FEMA); applied for BRIC grant – program canceled			<b>60% Design</b> – Prop 4	
Estuary	<b>10% Design</b> – Caltrans grant		Applied for EEM grant – not awarded (stormwater detention)	Seek funding for 30% Shoreline Design, Interim Measures and Stormwater Detention	
South Shore			Geomorphology & Ecology Study – funding identified		
			Applied for DBW grant (sand placement)	Sand Placement – apply for Beneficial Reuse Designation? CA DBW grant for design?	
			Applied for Measure AA (design concept)  Design Concept – Measure AA?		: – Measure AA?
Alameda Point Northern Shoreline		WRDA Authorization	Applied for WRDA Appropriations (30% design)		30% Design – WRDA?

Legend

Completed

In Progress

Not Yet Started/Funded





#### Summary of Adaptation Infrastructure Costs

Project Area	Est. Total Project Cost	Current or Pending Funding
Bay Farm Island	\$75M	\$5.4M
Estuary	\$120M	\$810,000
South Shore	\$75M	\$240,000
Alameda Point Northern Shoreline	\$20M	\$20M
Total	\$290M	\$26.56M

- Alameda/OAAC has been very successful attracting grant funding to date
- Significant competition
- Funding environment uncertain
- Local sources important to augment grants
- There will be additional costs/project needs



## **BCDC** Regional Shoreline Adaptation Plan



Element A: Planning Process

Element B: Existing Conditions

Element C: Vulnerability Assessment

Element D: Adaptation Strategies and Pathways

Element E: Land Use and Policy Plan

Element F: Funding and Implementation Plan

**Element G: Project List** 

Approaching completion

Need to fill gaps based on December 2024 RSAP Guidelines

Substantial progress

Need more engagement with leadership, partners, and community members - to complete strategy development

Early stages

Need to build off governance and strategy discussions to date

MAY 2024

Community Workshops

<u>Focus</u>: Existing

Conditions and

Vulnerability

AUGUST 2024

Community Workshops

<u>Focus</u>: Near-term
projects (Bay Farm

Island and Estuary

Project)

SEPTEMBER 2025

Adaptation Planning
Fair
Focus: Draft Strategies

<u>Focus</u>: Draft Strategies by Reach, emphasis on near-term adaptation SPRING/SUMMER 2026

Community Outreach and Focus Groups

Focus: Varies by Stakeholder **SPRING/SUMMER 2027** 

Community Workshops

<u>Focus</u>: Draft Shoreline

Adaptation Plan

FALL 2027

Adaptation Planning Fair

<u>Focus</u>: Release of Final Shoreline Adaptation Plan



Alameda City
Council Meetings

Dec 2025

2026

#### **Community Engagement**











## **Alameda Sea Level Rise Planning Fair**

REAP Climate Center September 27, 2025



#### **What's Next**

#### View Workshop Boards

• <u>www.alamedaca.gov/Shoreline</u> <u>AdaptationPlan</u>

#### Take new adaptation survey

• forms.oaacadapt.org

#### King Tide Walk

- Saturday, Dec 6th, 11-1pm
- Crab Cove Visitor Center
- Drop-in: No registration required.
- Rain or shine



www.alamedaca.gov/OaklandAlamedaAdaptationCommittee

## Adaptation Project Summary and Estimated Costs

These four major planning and construction projects represent a current investment of \$295 million to protect essential City assets.

Adaptation Project	Estimated Cost	Current or Pending Funding
Bay Farm Island	\$75 million	\$5.4 million
Estuary	\$120 million	\$810,000
South Shore	\$75 million	\$240,000
Alameda Point	\$20 million	\$20 million
TOTAL	\$290 million	\$26.5 million



# Hundreds of Millions in Infrastructure Needs

- Streets, Traffic Safety:\$275 million
- City Facilities, Public Safety:
   \$300 million
- Libraries, Recreation and Parks:
   \$250 million
- Flood Protection, Sea Level and Ground Water Rise, Disaster Mitigation:
   \$290 million















## Council Discussion

- What are your priorities?
- What needs are missing?
- What projects are missing?
- Other input?



### Join the Conversation

#### **Attend A Workshop:**

- September 2: Streets, Traffic Safety
- October 7: City Facilities, Public Safety
- November 4: Libraries, Recreation and Parks
- December 2: Flood Protection, Sea Level and Ground Water Rise, Disaster Preparedness

Visit our website to read more and share your feedback:

www.alamedaca.gov/strongertogether

