

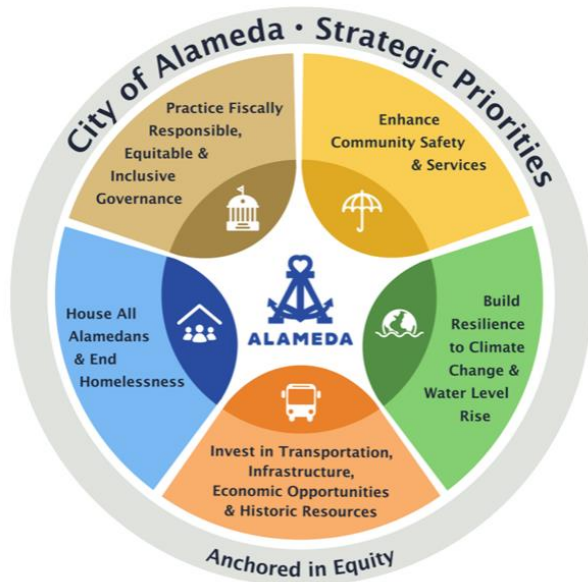
Alameda's Infrastructure & Facility Needs: *Shoreline Flood Protection, Sea Level and Groundwater Rise, and Disaster Mitigation*

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

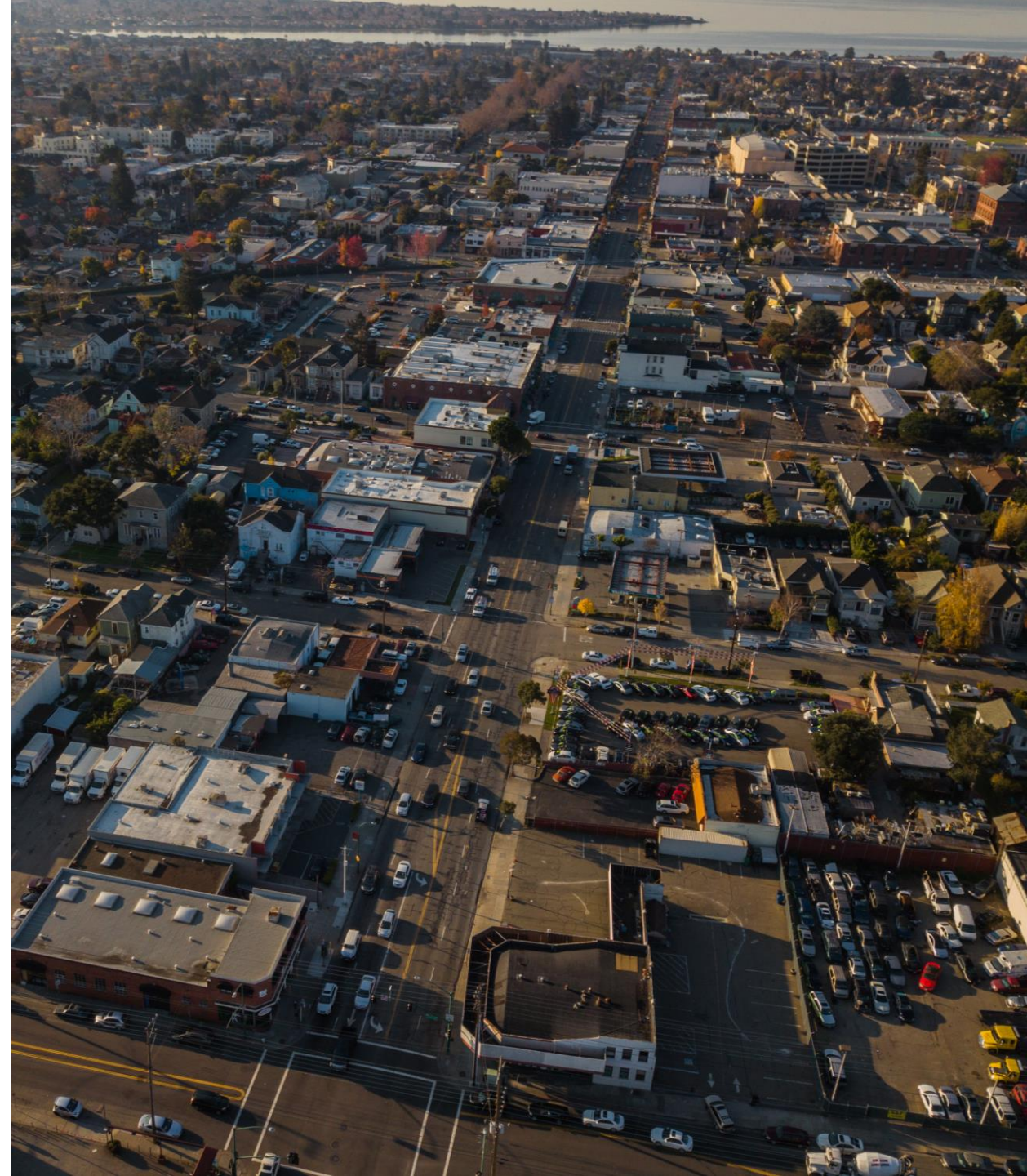
Feedback on options for greater local control regarding programs and funding



Hundreds of Millions in Infrastructure Needs

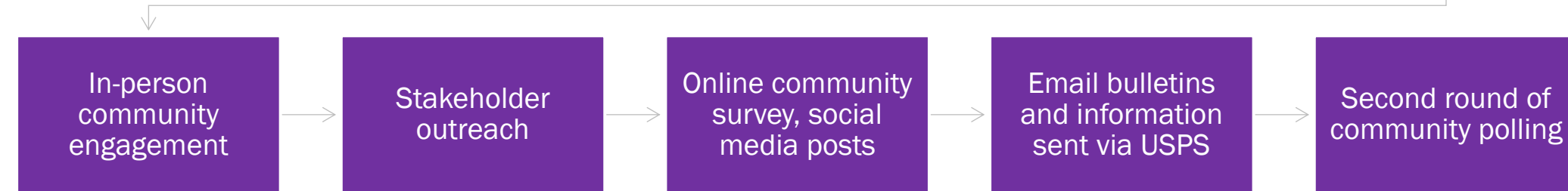
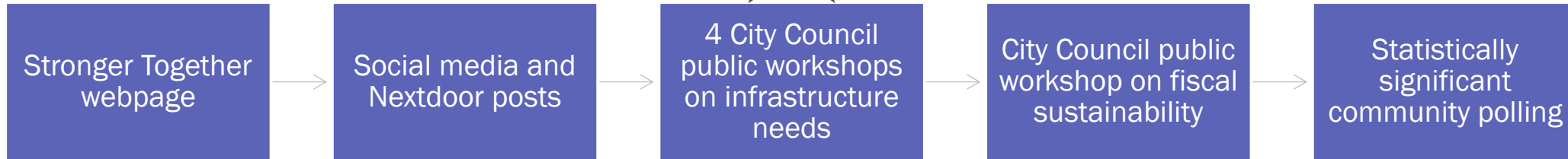
The City has a significant backlog of maintenance needs and facility upgrades to meet current standards. We want to hear your input.

- ~~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

August-December 2025



January-April 2026



Examples of Community Outreach

City of Alameda - Local Government
September 17 · 🌐

Come share 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>



City of Alameda - Local Government
November 4 at 1:37 PM · 🌐

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>



City of Alameda - Local Government
September 23 · 🌐

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's waterfront. 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



1942 - Bay Farm Island Dyke Construction



1942 - Ships at Shipways

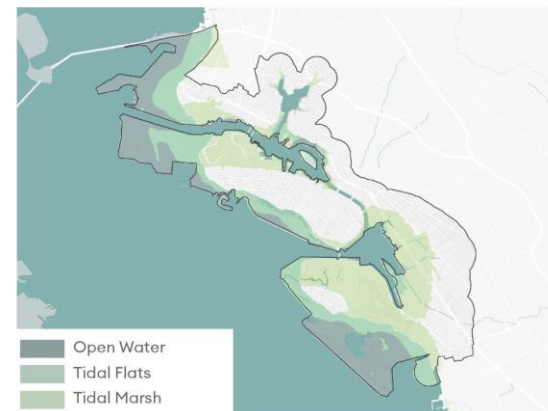


1966 - Naval Air Station

History of Our Shoreline

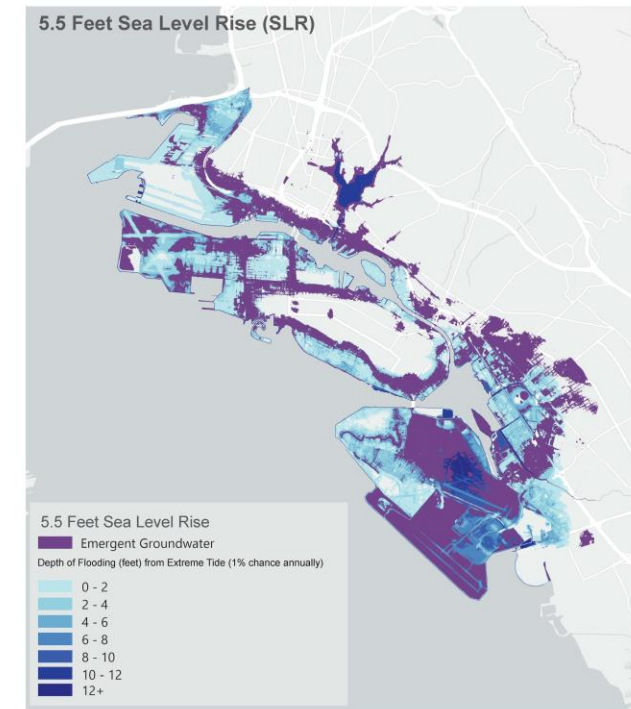
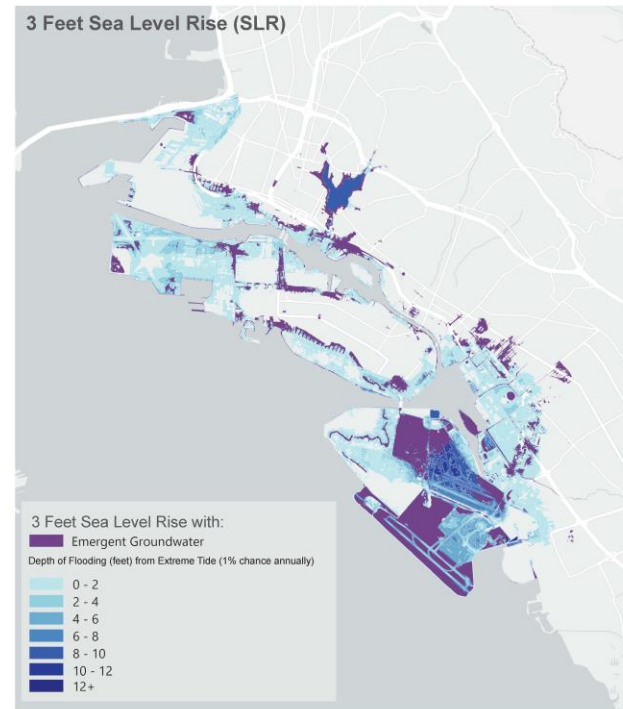
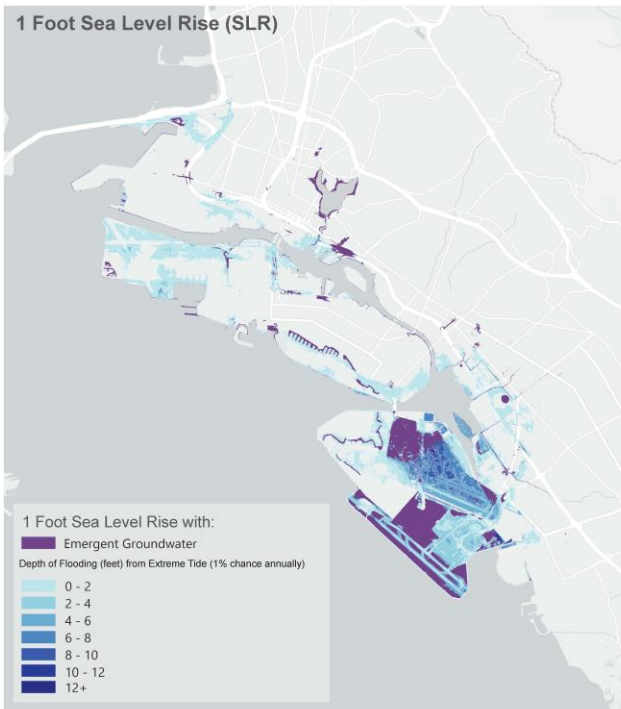


HISTORICAL BAYLANDS

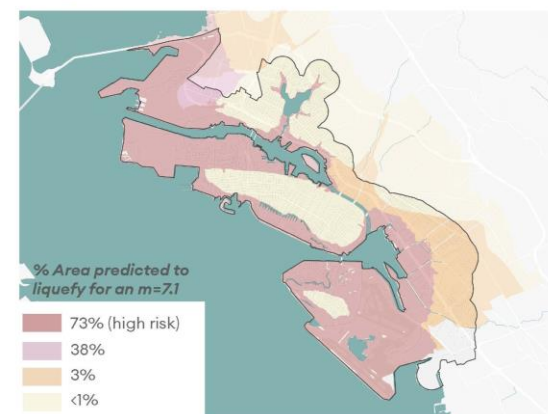


Alameda's Risks

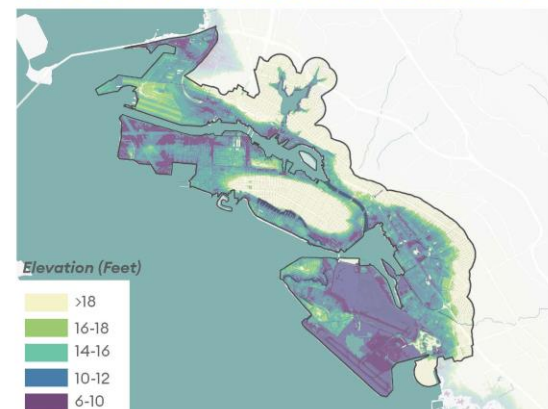
COASTAL FLOODING AND EMERGENT GROUNDWATER



LIQUEFACTION RISK



LOW-LYING FLOOD-PRONE AREAS



Coastal Challenges

King Tide Storms
December 2024

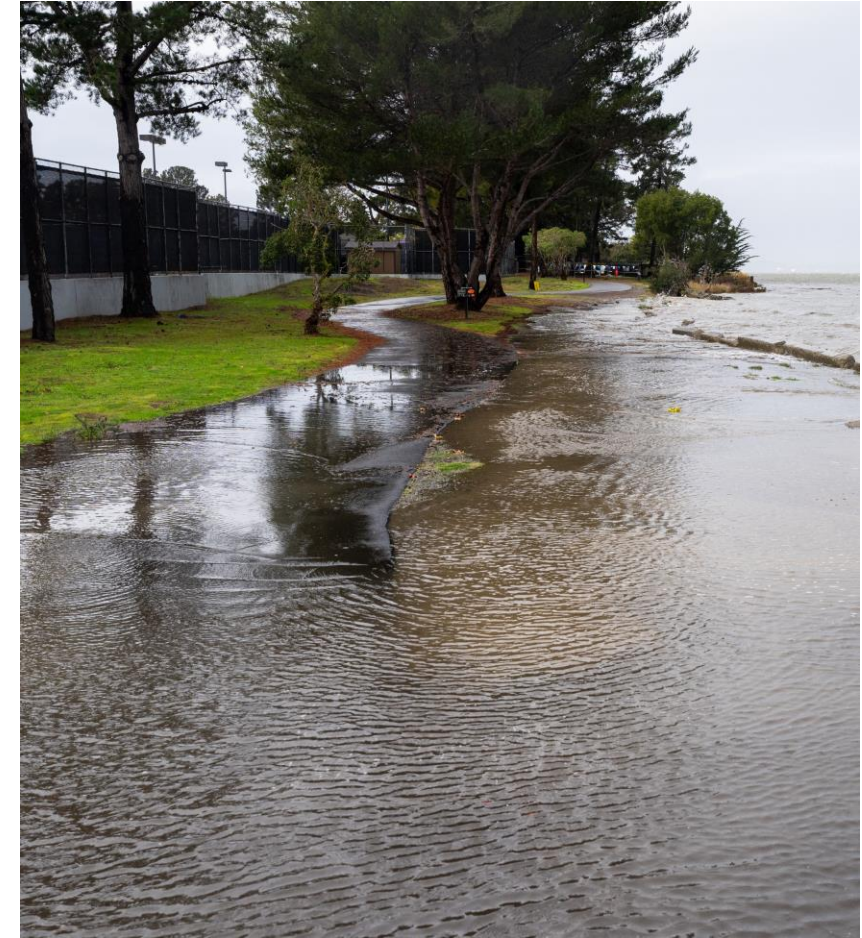




Photo credit: Maurice Ramirez

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



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

- Project Advancement
- Leadership Development
- Unlocking Resources
- Statewide Learning & Policy Advocacy



CALIFORNIA
RESILIENCE PARTNERSHIP



RESILIENT CITIES CATALYST



Preserve South Shore Beaches



Maintain Recreational Opportunities



Maintain Public Shoreline Access



Protect Shoreline Residential Neighborhoods



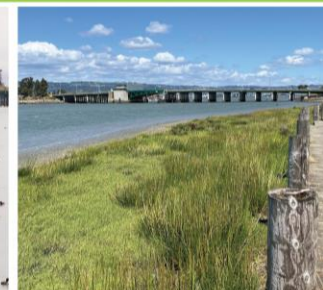
Protect Historic Buildings and Cultural Districts



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



Coarse beaches



Living seawalls

Recreational Amenities



Access to the water



Shoreline trails

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

Flood Protection



Levee with seawall



Levee with beach access



Levee with tidal marsh

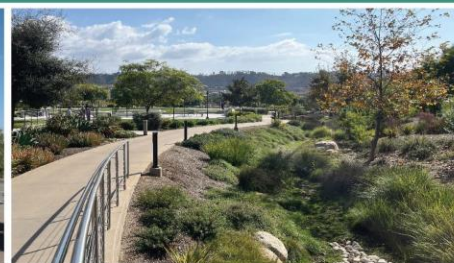


Elevated, hardened shorelines

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



Mixed-use development



Maritime industry



New housing types

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

Let us know!



Focus on Immediate and Near-Term Flood Risk



Flood Risk Reduction Measures (0 - 3 years)

1. Citywide Basement Flooding Campaign
2. Golf Course and Eastshore / Central Pump Station Drainage Study
3. Lagoon Maintenance
4. Shoreline Maintenance
5. South Shore Geomorphology / Ecological Study
6. Stormwater Management

Near-term (3 - 10 years)

7. Bay Farm Island Adaptation Study
8. De-Pave Park Flood Risk Reduction and Adaptation
9. Estuary Adaptation Project
10. Mudflat and Eelgrass Restoration Pilot Project
11. Shoreline Drive / Crown Beach Adaptation
12. State Route 61 / Doolittle Drive Adaptation

Mid-term (10 - 30 years)

13. Alameda Point Adaptation
14. Bridgeview Isle and Towata Park
15. Eastshore Drive Flood Risk Reduction
16. Shoreline Drive Stormwater Improvements



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	30% Design – Federal Earmark (FEMA); applied for BRIC grant – program canceled			60% Design – Prop 4	
Estuary	10% Design – 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?	
Alameda Point Northern Shoreline		WRDA Authorization	Applied for WRDA Appropriations (30% design)		30% Design – WRDA?

Legend

	Completed
	In Progress
	Not Yet Started/Funded

Project Descriptions:

www.alamedaca.gov/OaklandAlamedaAdaptationCommittee



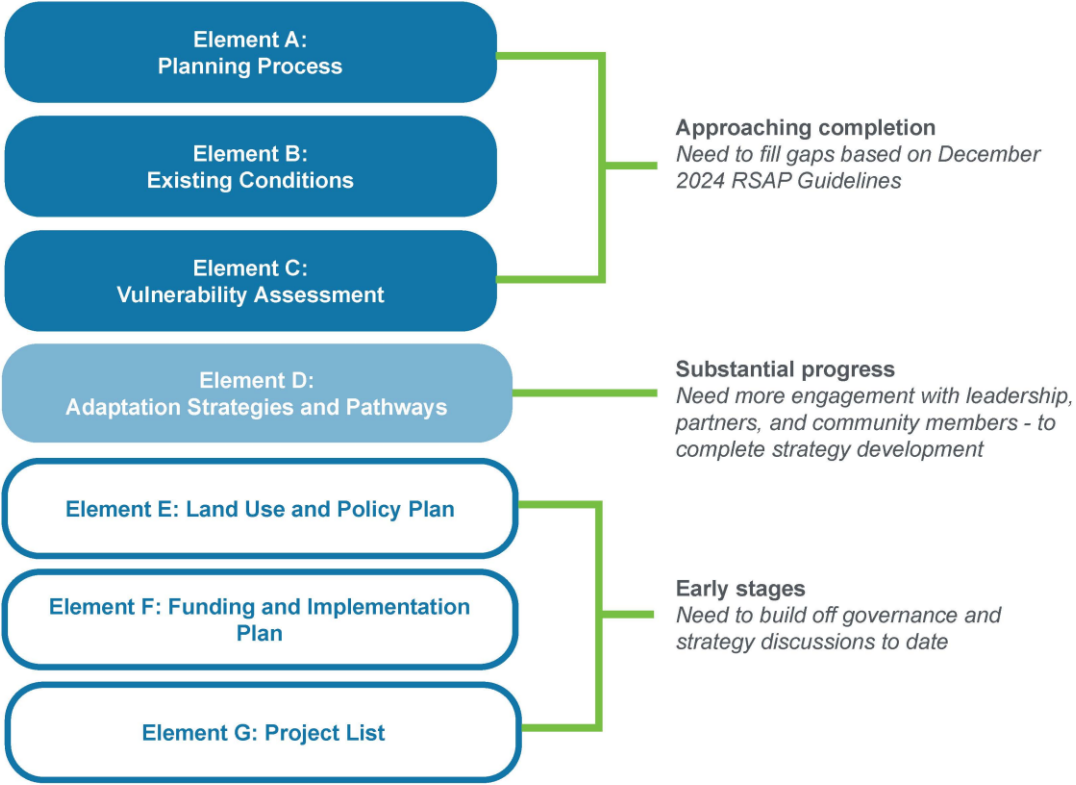
Summary of Adaptation Infrastructure Costs

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



MAY 2024	AUGUST 2024	SEPTEMBER 2025	SPRING/SUMMER 2026	SPRING/SUMMER 2027	FALL 2027
Community Workshops <i>Focus: Existing Conditions and Vulnerability</i>	Community Workshops <i>Focus: Near-term projects (Bay Farm Island and Estuary Project)</i>	Adaptation Planning Fair <i>Focus: Draft Strategies by Reach, emphasis on near-term adaptation</i>	Community Outreach and Focus Groups <i>Focus: Varies by Stakeholder</i>	Community Workshops <i>Focus: Draft Shoreline Adaptation Plan</i>	Adaptation Planning Fair <i>Focus: Release of Final Shoreline Adaptation Plan</i>



Community Engagement



**Alameda Sea Level Rise
Planning Fair**
REAP Climate Center
September 27, 2025



All photo credits: Maurice Ramirez

What's Next

- **View Workshop Boards**
 - www.alamedaca.gov/ShorelineAdaptationPlan
- **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

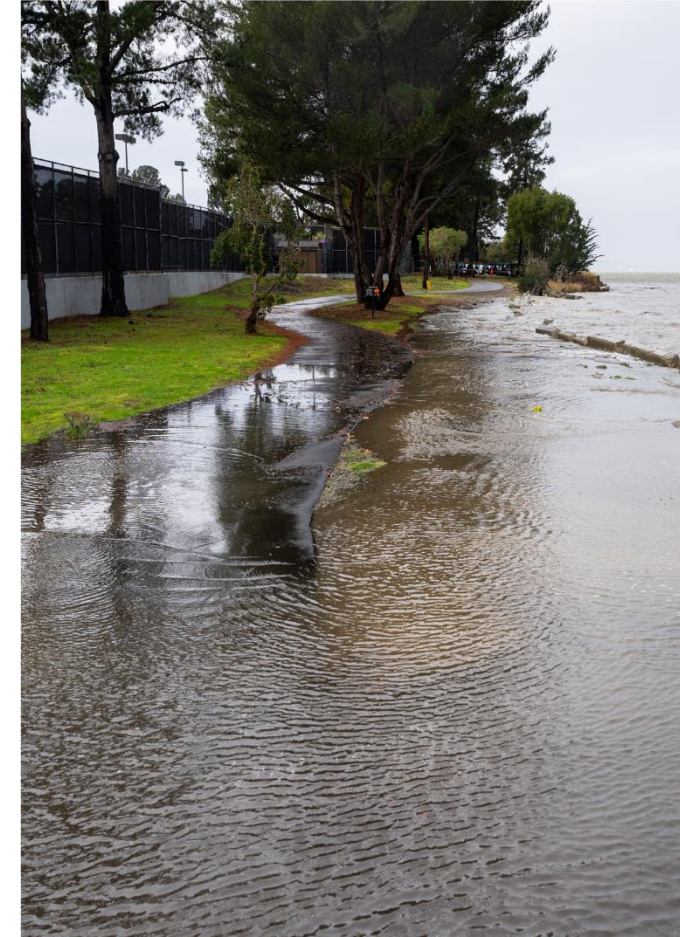
These four major planning and construction projects represent a current investment of \$295 million to protect essential City assets.

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

