2025 Contra Costa Resilient Shoreline Plan Progress

Climate Action and Adaptation Plan Implementation Update: Resilient Communities and Natural Infrastructure Section

Nicole Shimizu, Department of Conservation and Development December 8, 2025

Board of
Supervisors
Resilient
Shoreline
Committee

- •Supervisor representing the Bay
- •Supervisor representing the Delta

The County as a Convener and Facilitator

Contra Costa Resilient Shoreline Plan

Resilient Shoreline Coalition

- Shoreline cities
- •Special districts & other public agencies
- •Community-based organizations
- Residents
- Railroads
- Industry
- Private landowners
- •Others interested in shoreline resilience

Shoreline Leadership Academy

- •Residents from across the county
- •Focus on impacted communities

Contra Costa Resilient Shoreline Plan

County Awarded \$1,499,285 through Ocean Protection Council SB 1 Grant Program

Plan covers entire 90-mile shoreline from Bay to Delta

- Focus on impacted communities
- Coordinating and organizational role for local plans in alignment with BCDC Regional Shoreline Adaptation Plan guidelines
- Explores natural and constructed infrastructure

Phase 1: Community Visioning

- Participatory community engagement campaign
- Visioning workshop series
- Inventories of shoreline parcels and existing planning efforts

Phase 2: Data/Information Gathering

• Strategic update to County's existing vulnerability assessments

Phase 3: San Francisco Bay Shoreline Adaptation Plans

- Adaptation pathways and Plan review workshop series
- Plan will include adaptation pathways, implementation actions, partnership needs, financing strategies, and metrics

Contra Costa Resilient Shoreline Plan's Alignment with Regional Sea Level Planning Efforts

- Contra Costa Resilient Shoreline Plan is due by 2034 (SB 272, 2023)
- Regional Shoreline Adaptation Plan Topic Areas

Community Health & Well-Being

Ecosystem Health & Resilience

Development, Housing & Land Use Critical
Infrastructure &
Services

Public Access & Recreation

Transportation & Transit

Shoreline Contamination

Collaborative Governance, Flood Management & Funding

Contra Costa Resilient Shoreline Plan Key Milestones

- County executed contract with OPC for SB 1 grant funding.
- County and cities (Antioch, Hercules, Martinez, Oakley, Pinole, Pittsburg, and San Pablo) signed MOU to facilitate collaboration during development of the Plan.
- County is contracting with technical and community engagement consultants.

Early-Mid 2026

- County, along with cities and consultants, will host a series of community visioning workshops to answer the question: What does a resilient shoreline look like to you?
- Shoreline Leadership Academy (January-June 2026)

 Technical consultant(s) will translate the community vision into adaptation strategy alternatives and begin drafting the Contra Costa Resilient Shoreline Plan. The County, along with cities and consultants, will host Adaptation Strategy Alternatives Workshops. 2027 & Beyond

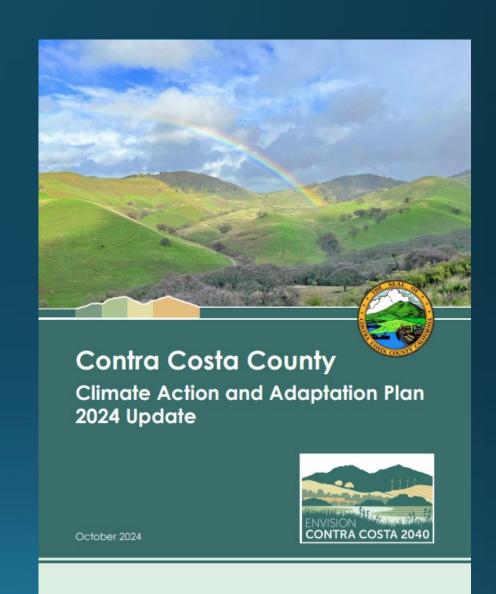
 County will adopt the Contra Costa Resilient Shoreline Plan and start to seek funding for Plan implementation.

Mid-Late 2026

2025

Resilient Communities and Natural Infrastructure (NI)

Contra Costa County will increase resilience to climate hazards and foster community health.



NI-1: Protect against and adapt to changes in sea levels and other shoreline flooding conditions.

Action: Require new development to locate habitable areas of buildings above the highest water level expected accounting for sea level rise and other changes in flood conditions, or construct natural and nature-based features, or a levee, if necessary, adequately designed to protect the project for its expected life.

 Update: Contra Costa Resilient Shoreline Plan will include adaptation strategies and pathways which will inform new development practices.

Action: Support the use of natural infrastructure, including ecosystem restoration and green infrastructure, to protect against sea level rise and associated shoreline flooding.

 Update: Contra Costa Resilient Shoreline Plan will build upon work that's already been done including San Francisco Estuary Institute's Adaptation Atlas and Baylands Resilience Framework to use natural infrastructure where feasible along the shoreline.

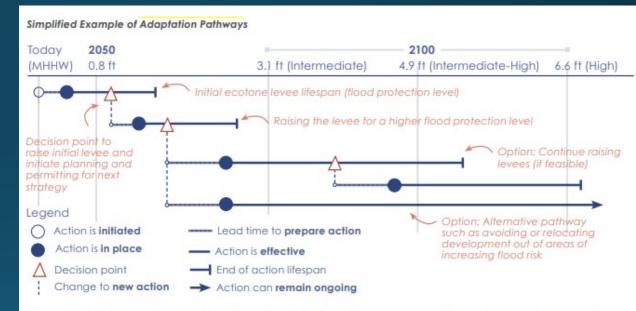


Figure 1–10. An illustrative example of adaptation pathways. Each line represents an adaptation action. Each action consists of: a point in which it is initiated, a period of time ("lead time") necessary for planning, permitting, and construction, a point in which the action is in place and providing flood protection, and either an end to an action's effective lifespan (such as for protection approaches), or the ability of the action to provide ongoing flood risk reduction (such as relocate or avoid approaches). Decision points represent the point at which a change in strategy or new strategy initiation should begin that provides enough lead time for the new action to be effective. Triggers serve as indicators that can inform decision points.

Example Adaptation Pathway from BCDC Regional Shoreline Adaptation Plan (p. 32)

NI-1: Protect against and adapt to changes in sea levels and other shoreline flooding conditions.



The Contra Costa County Shoreline Leadership Academy is a 6-month training program meeting every other Saturday for Contra Costa County residents interested in becoming local shoreline resilience experts and advisors. Participants will tour parts of the Contra Costa County shoreline and be trained by subject matter experts on topics including:

Community Health & Well-Being

Development, Housing & Land Use

Public Access & Recreation

Ecosystem Health & Resilience

Critical Infrastructure & Services

Transportation & Transit

Collaborative Governance, Flood Management & Funding

Upon completion of the Academy, each participant will receive a \$1,800 stipend and have the opportunity to advise the County on the Contra Costa Resilient Shoreline Plan.

This program will include both in-person and online sessions. In-person locations to be announced. Extensive travel within Contra Costa County is anticipated.

Participants are required to be 18 years or older. No previous experience or knowledge is necessary! Apply Now!

Session Schedule: Every other Saturday 10 am-2 pm

Dates: January 10, 2026 - June 13, 2026

Application Due Date: October 15, 2025

Food and travel stipends included!



Action: Coordinate with State and regional agencies, neighboring jurisdictions, property owners, utilities, and others to prepare a sea level rise adaptation plan.

- Contra Costa Resilient Shoreline Committee
- Contra Costa Resilient Shoreline Coalition
- Memorandum of Understanding with shoreline cities in support of County's OPC SB 1 Grant: Antioch, Hercules, Martinez, Oakley, Pinole, Pittsburg, and San Pablo
- Coordination with BCDC for consistency with Regional Shoreline Adaptation Plan
- Coordination with Delta Stewardship Council through efforts like Shoreline Leadership Academy

Action: Seek funding and pursue implementation of wetland restoration and other adaptation efforts for sea level rise.

- OPC SB 1 Grant: \$1,499,285 awarded
- National Fish and Wildlife Foundation National Coastal Resilience Fund: \$748,114.22 requested













Resilient Shoreline Coalition

Goal: Coordinate and align efforts to advance Contra Costa shoreline resilience

Involvement Based on Capacity



Level 1

Stay informed via email and meetings as needed/requested.



Level 2

Engage in the development of Contra Costa Resilient Shoreline Plan (meetings, workshops, curriculum development). Provide input on impact of Contra Costa Resilient Shoreline Plan to own organization.



Level 3

Incorporate Contra Costa Resilient Shoreline Plan into organization's own work.







NI-1: Protect against and adapt to changes in sea levels and other shoreline flooding conditions.

Action: Convene a working group that includes local jurisdictions, local shoreline communities, community-based organizations, property owners, businesses, and other stakeholders to collaborate on shoreline flooding adaptation strategies.

• Update: Resilient Shoreline Coalition

Action: Identify opportunities for employing natural areas as buffers against rising sea levels

 Update: Contra Costa Resilient Shoreline Plan will identify high priority areas, building upon existing work like San Francisco Estuary Institute's Adaptation Atlas and Baylands Resilience Framework to use natural infrastructure where feasible along the shoreline

Baylands resilience metrics for the **Walnut OLU** The Walnut OLU contains the Suisun Bay subembayment's largest and most compact tidal marsh patch, the 2,280-acre also another substantial 580-acre marsh patch at Peyton Slough Marsh and along Walnut Creek, However some marshes in this OLU are low-lying, with elevations skewed toward the lower end of the tidal frame (60-75% below fully tidally connected. This reduced tidal connectivity will hinder marsh resilience by limiting tidal flushing, sediment delivery, and the ability of marshes to migrate upland with Supporting natural processes and restoring diked baylands to create more marsh could significantly improve baylands resilience in this OLU. Roads and railroads interrupt connectivity between marshes both east and west of Navy Marsh habitat patch as sea level rises. Additionally, continued restoration (150+ acres of potential restoration) along lower Walnut Creek offers a chance to reconnect a compound flooding in the Walnut Creek watershed Tidal baylands* **Nontidal baylands***

Shallow subtida

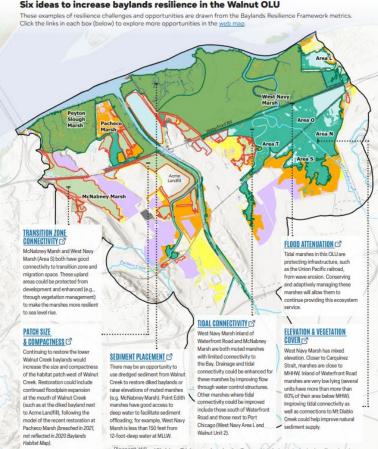
Deep subtidal

Raylands Habitat Man 2020

Analysis units

Diked bayland unit

How extensive are the baylands in this OLU? About a fifth of the tidal marsh in Suisun Bay is found in the Walnut OLU. There are many more acres of tidal marsh than diked baylands here. 676 acres of 2,925 acres of diked baylands Orange outlines in map on facing page map on facing page SUISUN BAY SIGNIFICANCE (AREA) 1% of diked baylands in Suisun Bay are located in this OLU McNabney Marsh and West Nav Marsh (Area S) both have good connectivity to transition zone and migration space. These upland areas could be protected from development and enhanced (e.g. through vegetation management to make the marshes more resilier to sea level rise Walnut Creek baylands would increase the size and compactness of the habitat patch west of Walnut Creek. Restoration could include continued floodplain expansion to Acme Landfill), following the Agriculture/other non-aquatic diked bayland model of the recent restoration at Pacheco Marsh (breached in 2021) not reflected in 2020 Raylands Marsh migration elevation (connected to Bay) Marsh migration elevation (disconnected from Bay Upper boundary transition zone



on our interpretation of the metrics we have calculated to date. The metrics are based on remotel

Coordination Effort Highlights for 2025



BCDC staff helped review and provide feedback on technical and community engagement subconsultant solicitations to ensure they aligned with the Regional Shoreline Adaptation Plan



County staff participated in San Francisco Estuary Institute's shallow groundwater mapping analysis of Contra Costa County (Addendum A)



County staff continue to meet with San Francisco Estuary Partnership on quarterly basis about complementary sea level rise resilience and adaptation planning effort of the East Bay Crescent Operational Landscape Unit



County staff coordinates with and continues to have dialogue with Solano County's <u>Solano Bayshore Resilience Roundtable</u> as it relates to Delta sea level rise considerations



County staff coordinated with cities of Pittsburg and Pinole on their independent OPC SB 1 grant applications



County staff continue to actively engage County departments and divisions on the topic of sea level rise resilience and adaptation (Public Works Flood Control District, Sustainability Team, Transportation Planning)



County staff presented about Contra Costa Resilient Shoreline Plan at conferences and workshops (American Planning Association Northern California Conference, East Bay Leadership Council Water & Energy Task Force, Bay Planning Coalition Spring Summit)



Pacheco Marsh on September 26, 2025

Thank you!

If you have any questions, please email Nicole Shimizu at Nicole. Shimizu@dcd.cccounty.us.

Sign up for Contra Costa Resilient Shoreline Plan email updates: https://www.contracosta.ca.gov/9981/Contra-Costa-Resilient-Shoreline-Plan.