Sea Level Rise and Flood Resilience Snapshots

May 2026 Presentation to BCDC

Sea Level Rise and Flood Resilience Strategy

Save The Bay's principles for a flood-resilient Bay Area.

Utilize nature-based solutions – such as ecotone levees, restored marshland, and green stormwater infrastructure – wherever possible.

Center the voices of frontline communities.

Build for flood resilience by focusing new development in less vulnerable areas and implementing flood-resilient building standards.

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Local Sea Level Rise & Flood Resilience Snapshot Project

What standard policies should Bay Area cities adopt for resilience to sea level rise, groundwater rise, and stormwater?

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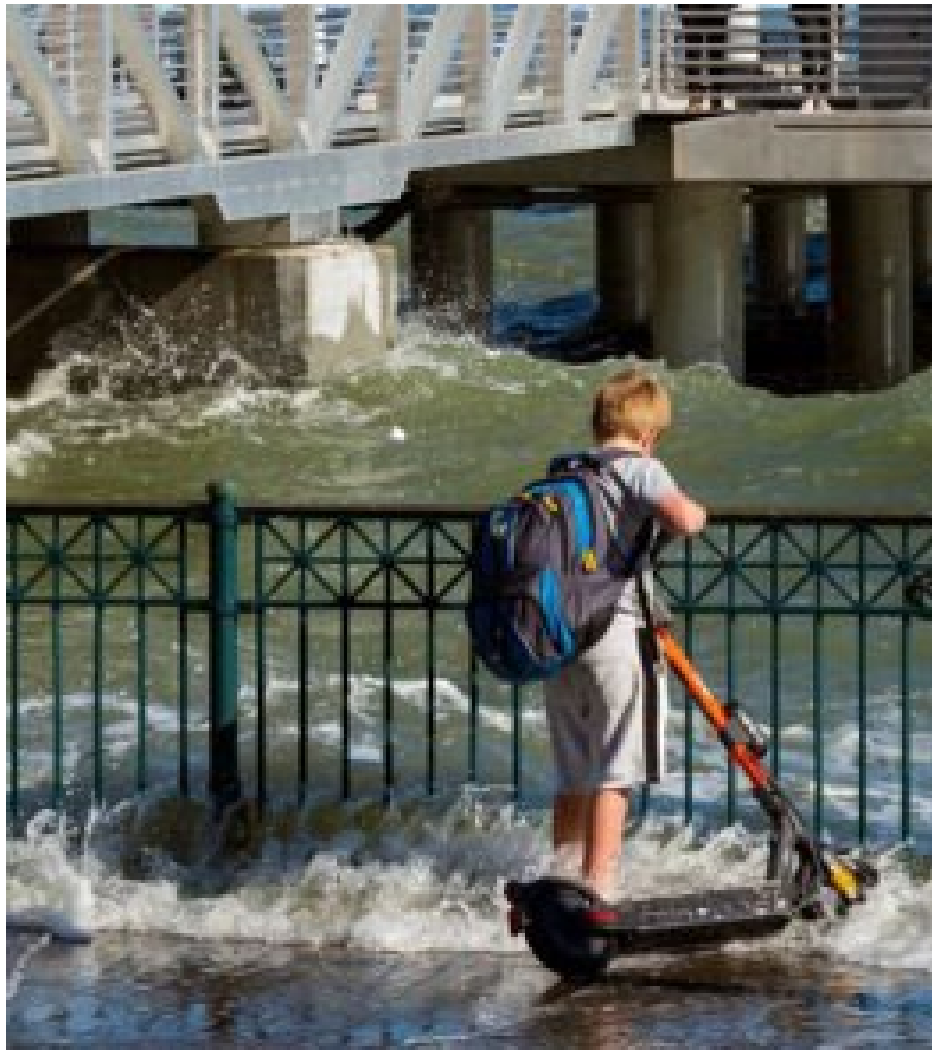
Local Sea Level Rise & Flood Resilience Snapshot Project



- Developed 25 policy recommendations related to:
  - Sea level rise & groundwater rise
  - Nature-based solutions
  - Green stormwater infrastructure
  - Environmental justice & community health
- Drew on regional guidance, expert knowledge, and existing city policy
- Evaluated 45 Bay-adjacent cities for these policies

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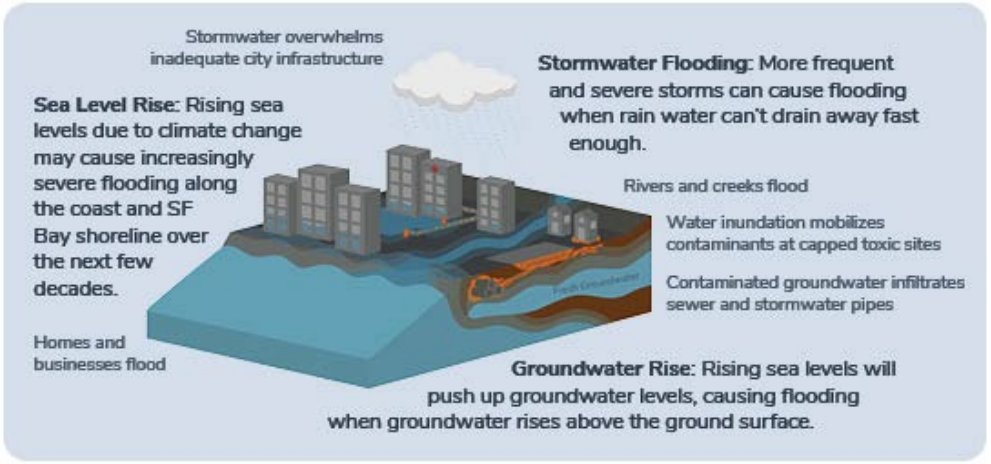
Flood Resilience Snapshot

Burlingame

What is flood resilience?

Cities can reduce flooding and minimize damage by planning ahead. Flooding impacts cities from multiple sources:



Burlingame's shoreline is only minimally protected by rock floodwalls with no natural defenses such as beaches or wetlands. Because the shoreline is low-lying and heavily developed, the city faces heightened risk of sea level rise and already experiences flooding during extreme storms. Most of the Bayfront Area - which includes industrial, commercial, and residential areas - and parts of Rollins Road could be permanently inundated by sea level rise by 2070.

Burlingame stands out among Bay Area cities for being one of the first cities to update its Zoning Code to establish public access and sea level rise resilience standards for new developments. It also plans to partner with other northern San Mateo County cities to create a Regional Shoreline Adaptation Plan (RSAP).

Bay Trail King Tides, OneShoreline

Shoreline Resilience Project Tour, OneShoreline

Summary of sources of climate-driven flooding

Summary of the city's flood vulnerabilities and what they've done so far to address flooding

Project Spotlight: Millbrae and Burlingame Shoreline Resilience Project

A collaboration between Millbrae, Burlingame, and OneShoreline (the county's flood protection agency), the Millbrae and Burlingame Shoreline Resilience Project aims to protect communities, infrastructure, and habitats from sea level rise and storms while enhancing public shoreline access and creating sustainable ecosystems. The project will be designed to integrate with San Francisco International Airport's shoreline projects to the north and San Mateo's to the south. Currently the project is considering using a combination of multipurpose levees, floodwalls, raised park areas, and tide gates for flood protection. Though opportunities for major wetland projects are minimal because of the heavily urbanized nature of this shoreline, we encourage Burlingame to incorporate nature-based adaptations and native vegetation wherever possible.

Key Policy & Planning Opportunities

We recommend that Burlingame focus on these key opportunities to advance flood resilience:

1. **Groundwater Rise Overlay Zones:** Burlingame has passed a zoning amendment to establish flood resilience guidelines related to sea level rise in the Bayfront Area. As a next step, it should also create a groundwater rise overlay zone and establish retrofit and building standards to ensure infrastructure (including underground infrastructure) is resilient to rising groundwater. OneShoreline's Planning Guidance offers template language for an overlay zone zoning amendment.

2. **Storm Drain Master Plan:** Update the city's Storm Drain Master Plan to ensure that Burlingame's storm drain system has the capacity to function under future conditions. It should integrate green stormwater infrastructure wherever possible and prioritize projects based on future flood risk, water quality, and benefits to disadvantaged communities.

Example of a nature-based project in or near the city

2 priority recommendations based on the city's greatest flood risk and gaps in existing policy

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Burlingame

Burlingame already has implemented 13 of our recommended flood resilience policies. Burlingame's remaining flood resilience opportunities lie in completing the 7 partially implemented policies and implementing the 5 non-implemented policies.

Find more details on the recommended policies and scoring criteria here.

Indicates that this policy fulfills a requirement from the Bay Conservation Development Commission's (BCDC) Regional Shoreline Adaptation Plan (RSAP) Guidance.

Indicates that this policy helps the city achieve more comprehensive flood resilience beyond the RSAP requirements.

Sea Level Rise & Groundwater Rise Resilience Planning

Has completed a vulnerability assessment that accounts for the high-end scenario of 6.6 ft of sea level rise by 2100	Yes
Identifies adaptive management pathways for the high-end sea level rise scenario of 6.6 ft of sea level rise by 2100	Partial
Requires flood resilience projects to account for the compounding effects sea level rise, groundwater rise, and stormwater	Yes
Has robust sea level rise guidelines for new public infrastructure projects	Partial
Requires disclosure of sea level rise and other climate-related flood hazards during real estate transactions	Yes
Participates in FEMA's National Flood Insurance Program (NFIP) Community Rating System	Yes
Adopted a Shallow Groundwater Rise Overlay District	No
Adopted a Sea Level Rise Overlay District	Yes
Establishes robust flood-resilience policies for new housing, commercial, and industrial developments in the Overlay Districts	Partial
Is actively involved in multijurisdictional shoreline resilience planning with adjacent cities	Yes
Has a funding strategy for shoreline adaptation projects	Yes
Identifies areas for infill housing, including affordable housing, development outside of flood zones	Yes

Nature-Based Shoreline Resilience

Established buffer zones at least 100 ft from the Bay shoreline and at least 35 ft from the top of creek banks	Yes
Restores and preserves wetlands for flood protection, habitat restoration, public access, and recreation	Yes

Green Stormwater Infrastructure

Identifies areas at risk of flooding due to current and future storms	Partial
Has created a Storm Drain Master Plan that considers future storm conditions	Partial
Major developments are required to build green stormwater infrastructure to treat runoff from the adjacent public right-of-way	No
Has planning processes for designing complete green streets and neighborhoods	Yes
Transportation, climate, and storm drain plans integrate green stormwater infrastructure components	Yes
Involves and invests in workforce development programs for maintenance of urban greening features	No
Engages the community and prioritizes community knowledge in urban greening projects	Partial
Uses data on overlapping community vulnerabilities to create equitable urban greening strategies	Partial

Environmental Justice & Community Health

Has a plan for protecting buildings from toxic vapor intrusion from underground contamination	No
Supports community health studies for populations near contaminated sites at risk of flooding	No
Uses an equity analysis framework in adaptation planning	Yes

Relationship with the Regional Shoreline Adaptation Plan (RSAP)

- Provides a toolkit of policy and planning actions that can fulfill the RSAP guidelines
- Connects RSAP planning with stormwater and green infrastructure planning
- Creates tailored recommendations cities can use while they're creating their RSAPs – especially Element E, the Land Use and Policy Plan

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Snapshot Recommendation	RSAP Principle
Establish a Sea Level Rise Overlay District that enacts robust flood-resilience policies for developments in the sea level rise zone.	*Adaptation Strategy 15 - Incorporate climate-responsive standards, codes, and zoning for adaptive design.*
Create a Storm Drain Master Plan that ensures the storm drain system has the capacity to function under future sea level rise, groundwater rise, and precipitation conditions.	*Adaptation Strategy 19 - Integrate coastal flood protection with stormwater and riverine flood management*
Support, fund, or create partnerships for community health studies near contaminated sites at risk of flooding.	*Adaptation Strategy 11 - Prioritize contamination remediation in Environmental Justice communities, and Adaptation Strategy 12 - Reduce contamination risks across communities and Baylands ecosystems.*

Using The Snapshots

Educate the public about cities' and the region's sea level rise and flood vulnerability and preparedness.

Collaborate with cities and counties to find opportunities to implement our recommended flood resilience policies.

Support cities' Regional Shoreline Adaption Planning efforts by sharing regional best practices on sea level rise and flood resilience policy.

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