

FLOOD & SEA LEVEL RISE IMPACTS + COMMUNITY ACTION IN THE BAY AREA



Sarah Atkinson

Hazard Resilience Sr. Policy Manager, SPUR

November 12, 2024



Our Mission

Through research, education and advocacy, SPUR works to create an equitable, sustainable and prosperous region in which all people thrive.



Sustainability + Resilience

Platform: The region should be environmentally just, carbon-neutral, and resilient to climate change and earthquakes.



Relevant SPUR Policy Reports


 01/2012

Safe Enough to Stay



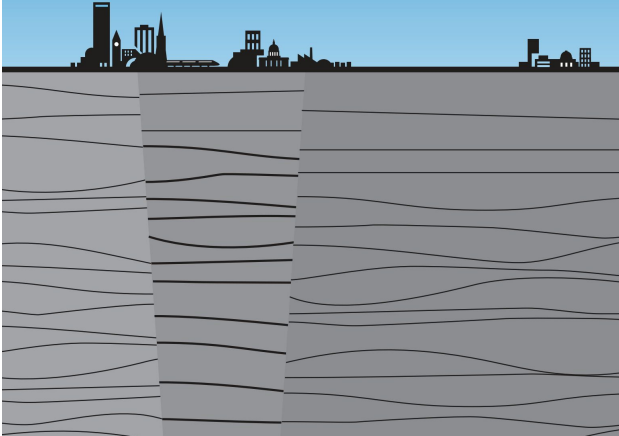
What will it take for San Franciscans to live safely in their homes after an earthquake? A significant amount of housing may be too damaged to live in while it's being repaired. Residents may leave. And that will put the city's recovery at risk. Here's how to prevent San Francisco from losing its most important asset: its people.

SPUR REPORT 01/2012

 02/2013

On Solid Ground

How Good Land Use Planning Can Prepare the Bay Area for a Strong Disaster Recovery



BRIEFING PAPER
CLIMATE

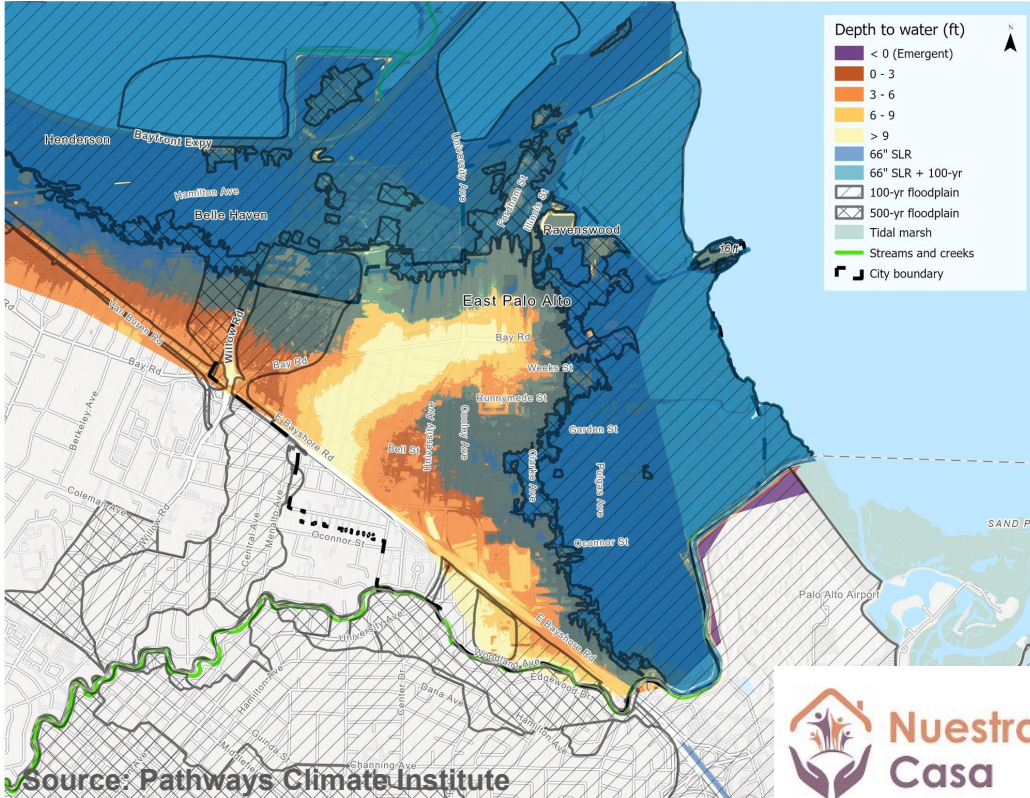
SPUR
REGIONAL
STRATEGY

Safety First

Improving hazard resilience in the Bay Area

MARCH 2020

Flood impacts in low-lying communities of color



SPUR CASE STUDY
MAY 2024



Look Out Below

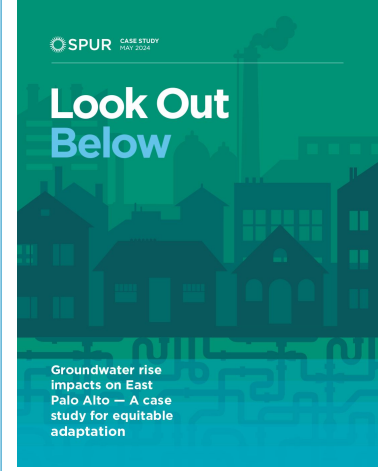
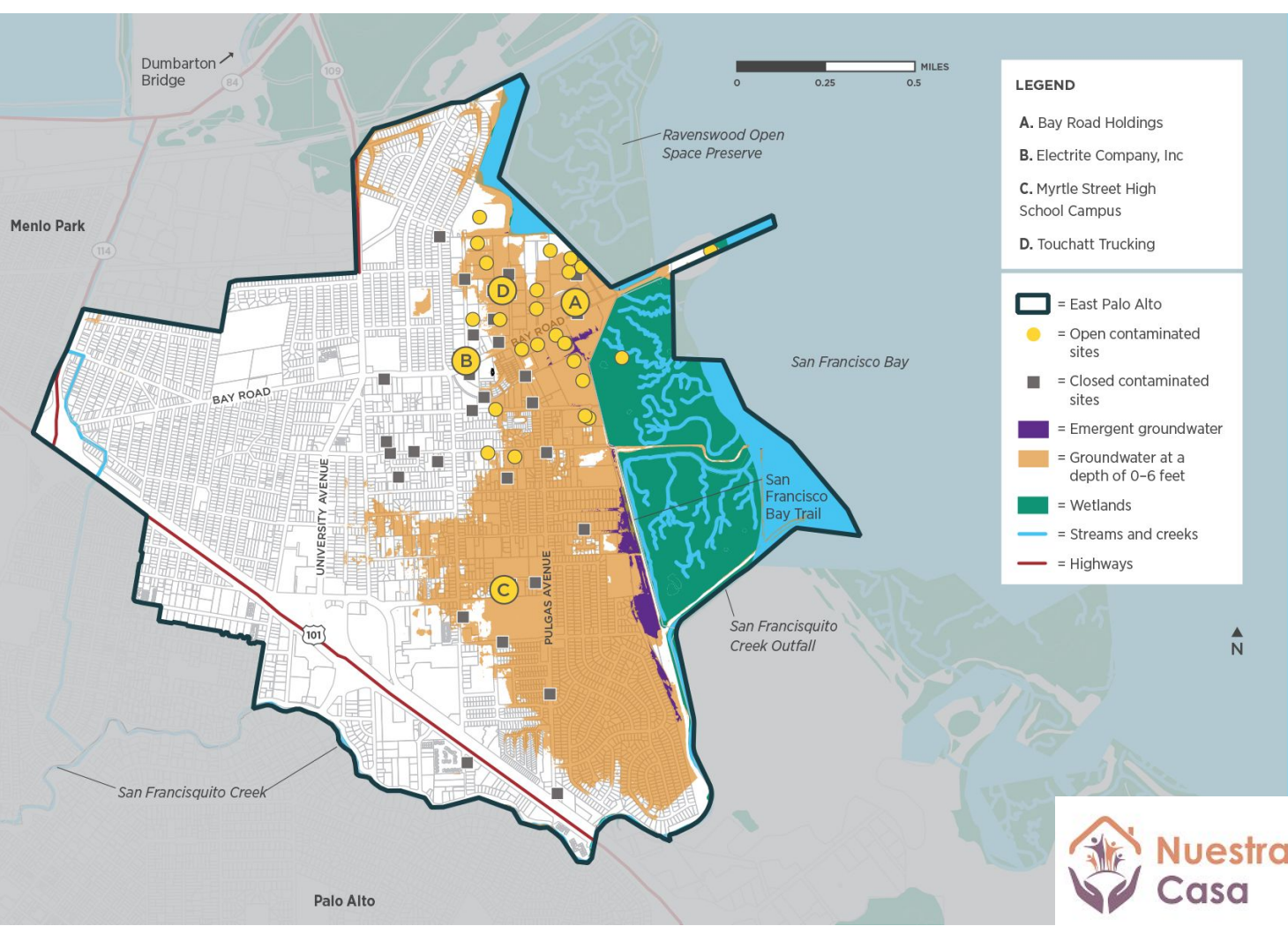
Groundwater rise impacts on East Palo Alto — A case study for equitable adaptation

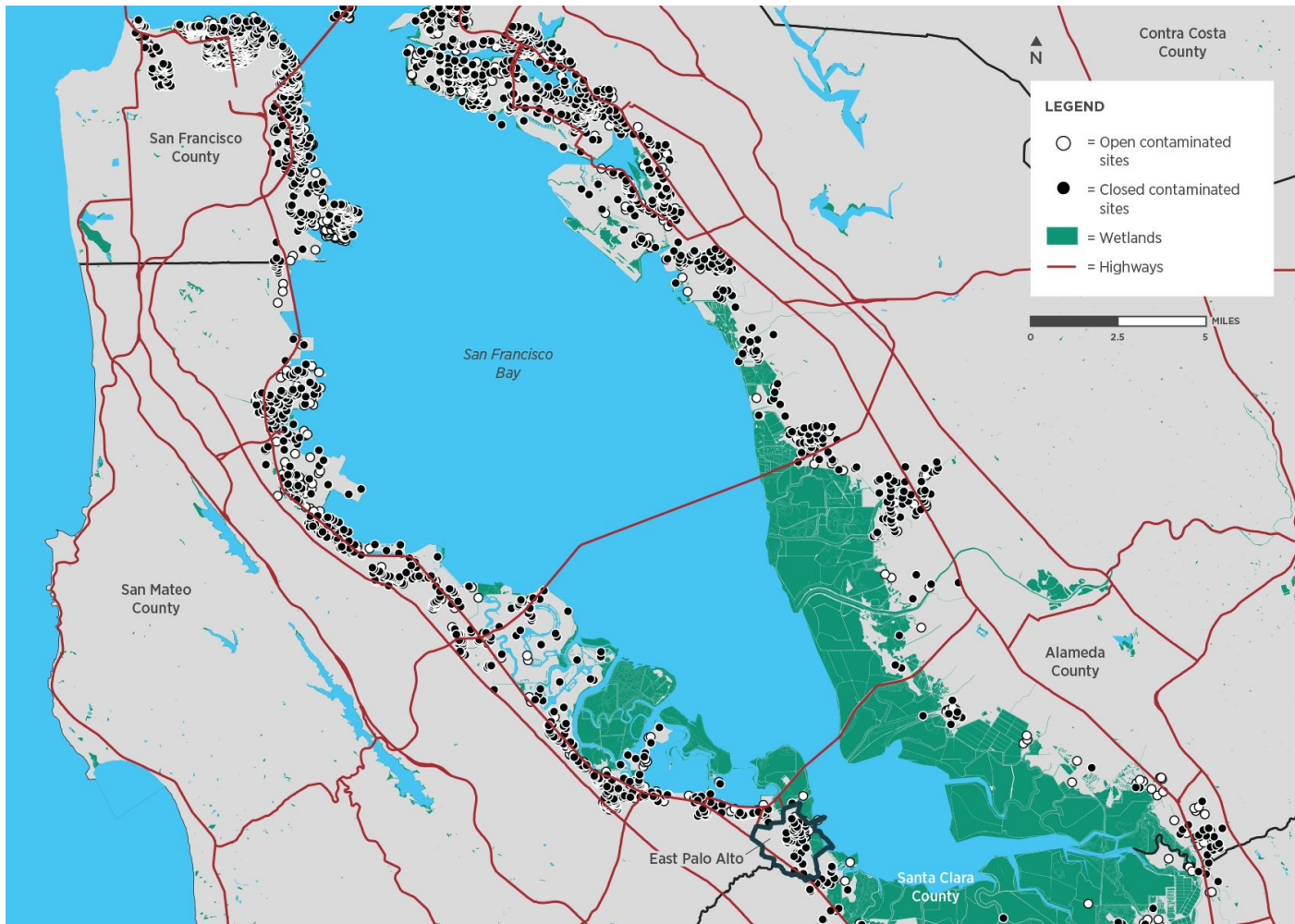
East Palo Alto Contaminated Sites

LEGEND

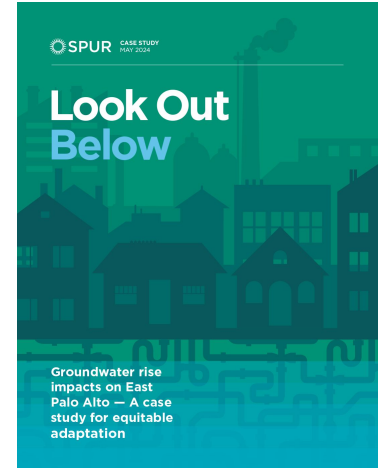
- A. Bay Road Holdings
- B. Electrite Company, Inc
- C. Myrtle Street High School Campus
- D. Touchatt Trucking

-  = East Palo Alto
-  = Open contaminated sites
-  = Closed contaminated sites
-  = Emergent groundwater
-  = Groundwater at a depth of 0-6 feet
-  = Wetlands
-  = Streams and creeks
-  = Highways





Bayshore Contaminated Sites



Look Out Belows Policy Recommendations

Recommendation 1

Require all city plans and infrastructure projects to assess the risks of groundwater rise and compound flooding.

Recommendation 2

Consider adopting Shallow Groundwater Rise Overlay Districts, which specify design and retrofit requirements for underground infrastructure, roadways, and new shoreline development in high-hazard areas.

Recommendation 3

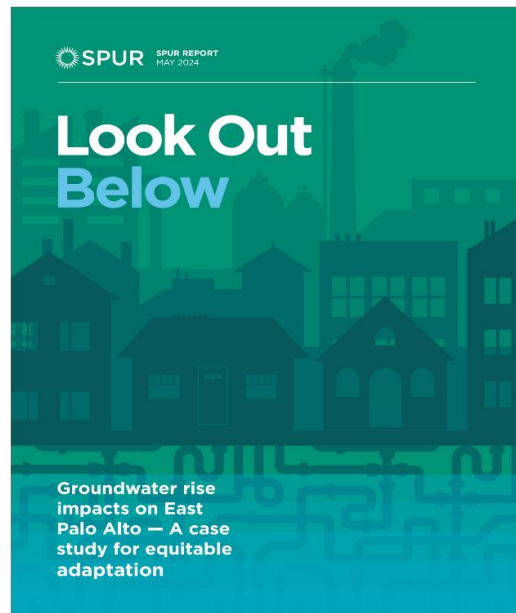
In partnership with impacted communities, update guidance for remediation requirements of shoreline sites to incorporate risks of contaminant mobilization from groundwater and sea level rise.

Recommendation 4

Update sea level rise and flood maps to reflect shallow groundwater rise so that relevant agencies can begin planning processes to address it.

Recommendation 5

Pursue a variety of innovative funding mechanisms to support groundwater rise research, adaptation planning, and implementation projects.



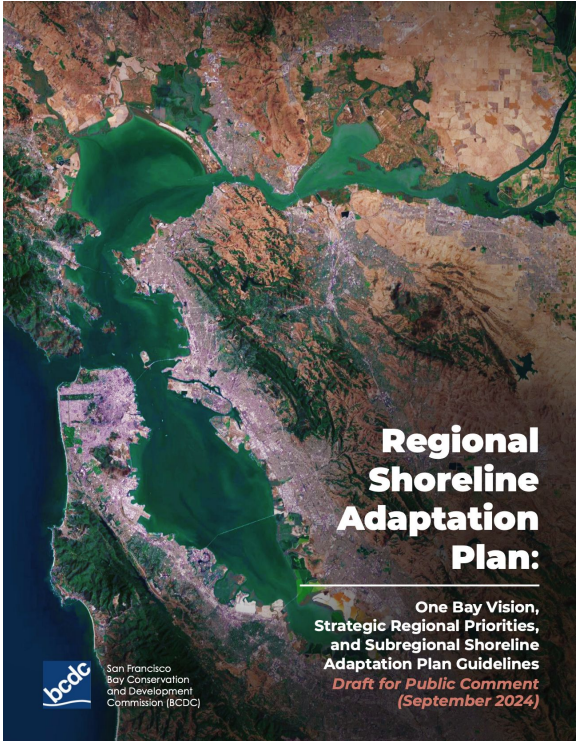
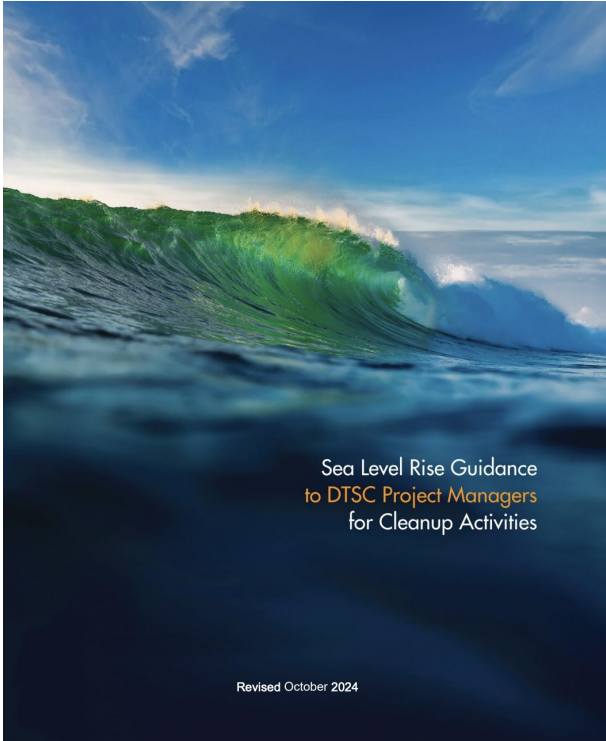
Overlay Districts

Example. Reduce risk through hazard mitigation districts:
Burlingame Sea Level Rise Overlay District



Source: City of Burlingame

Updating Guidance for Shoreline Contaminated Sites



Retrofitting at-risk homes for flooding

**Example:
SF Public
Utilities
Commission
Floodwater
Grant Program**

Programmatic Strategies

Floodwater Grant Program

- Up to \$100K reimbursement for flood-proofing projects, residential or commercial
- Grant payments available through multiple installments
- Multiple eligible project types
 1. Plumbing Modifications
 2. Dry Floodproofing
 3. Wet Floodproofing
 4. Elevate Structure

Green Infrastructure Grant Programs

- Large public and private parcels
- Residential properties



Source: Slide from SFPUC

State funding for hazard mitigation

CA Prop 4 Climate Bond

BOND

Authorizes Bonds for Safe Drinking Water, Wildfire Prevention, and Protecting Communities and Natural Lands from Climate Risks

Authorizes a \$10 million general obligation bond to fund climate adaptation and resiliency projects.

Vote YES



OFFICIAL TITLE AND SUMMARY

PREPARED BY THE ATTORNEY GENERAL

The text of this measure can be found on page 75 and the Secretary of State's website at voterguide.sos.ca.gov.

- Authorizes \$10 billion in state general obligation bonds for various projects to reduce climate risks and impacts: \$3.8 billion for safe drinking water and water resilience; \$1.95 billion for wildfire prevention and extreme heat mitigation; \$1.9 billion for protection of natural lands, parks, and wildlife; \$1.2 billion for protection of coastal lands, bays, and oceans; \$850 million for clean energy; and \$300 million for agriculture.
- Prioritizes projects benefitting disadvantaged communities.
- Requires annual audits.
- Appropriates money from General Fund to repay bonds.

SUMMARY OF LEGISLATIVE ANALYST'S ESTIMATE OF NET STATE AND LOCAL GOVERNMENT FISCAL IMPACT:

- Increased state costs of about \$400 million annually for 40 years to repay the bond.

State Bond Cost Estimate

Amount borrowed	\$10 billion
Average repayment cost	\$400 million per year over 40 years
Source of repayment	General tax revenue

Peninsula Accountability for Contamination Team (PACT)

Mission Statement:

Our mission is to advocate alongside community members to advance **contaminated site clean-up and infrastructure resilience**, addressing the impacts of sea level and groundwater rise in **low-lying areas of the Peninsula**. Through this work, we aim to safeguard the health and well-being of our community for generations to come.



Speakers



Osvaldo Macias
Environmental Justice
Fellow, Nuestra Casa



Carly Finkle
Senior Policy
Manager, Canal
Alliance



Zoe Siegel,
Senior Director of
Climate Resilience,
Greenbelt Alliance