

Hazards and Climate Resilience Plan 2025 Update

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Land Use and Transportation Committee
July 14, 2025

Summary

We are asking this committee to recommend approval of the resolution proposed under file number 250707 to adopt the 2025 Hazards and Climate Resilience Plan as San Francisco's Local Hazard Mitigation Plan.

This resolution would:

- Demonstrate San Francisco's continued commitment to hazard mitigation planning and climate resilience
- Allow the Office of Resilience and Capital Planning to obtain final approval of the Plan by FEMA Region IX
- Make San Francisco eligible for FEMA pre-disaster mitigation grants
- Make San Francisco eligible for reduced local cost-share for post-disaster FEMA Public Assistance per AB 2140

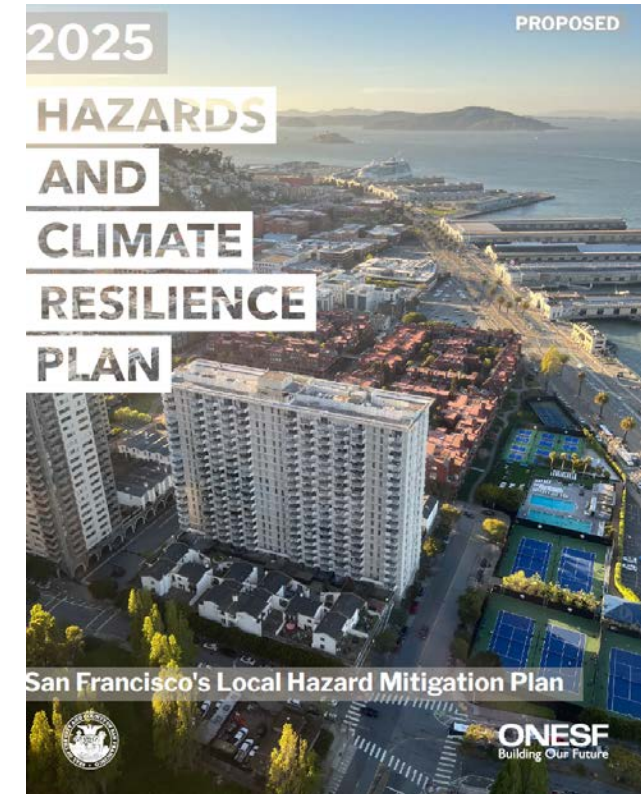
Hazards and Climate Resilience Plan

What it is:

- Citywide action plan to improve resilience to natural hazards and climate change that is updated every five years
- Set of buildings, community, and infrastructure priorities (projects, plans, programs)
- Vulnerability and risk assessment for 13 hazards

Why we have it:

- Federal: Eligibility for FEMA grants
- State: Compliance with state laws
- Local: Companion to Safety & Resilience Element; Emergency Operations Plan; Climate Action Plan



HAZARDS

The HCR characterizes 13 natural hazards that impact San Francisco. The hazards are grouped into four different types: geological, weather-related, fire-related, and biological & toxic. This chapter also includes an overview of climate change science and how climate change influences hazards in San Francisco.

GEOLOGICAL



EARTHQUAKE



TSUNAMI



LANDSLIDE



DAM OR RESERVOIR
FAILURE

WEATHER-RELATED



FLOODING



HIGH WIND



EXTREME HEAT



DROUGHT

FIRE-RELATED



LARGE URBAN FIRE



WILDFIRE



POOR AIR QUALITY

BIOLOGICAL & TOXIC



PANDEMIC

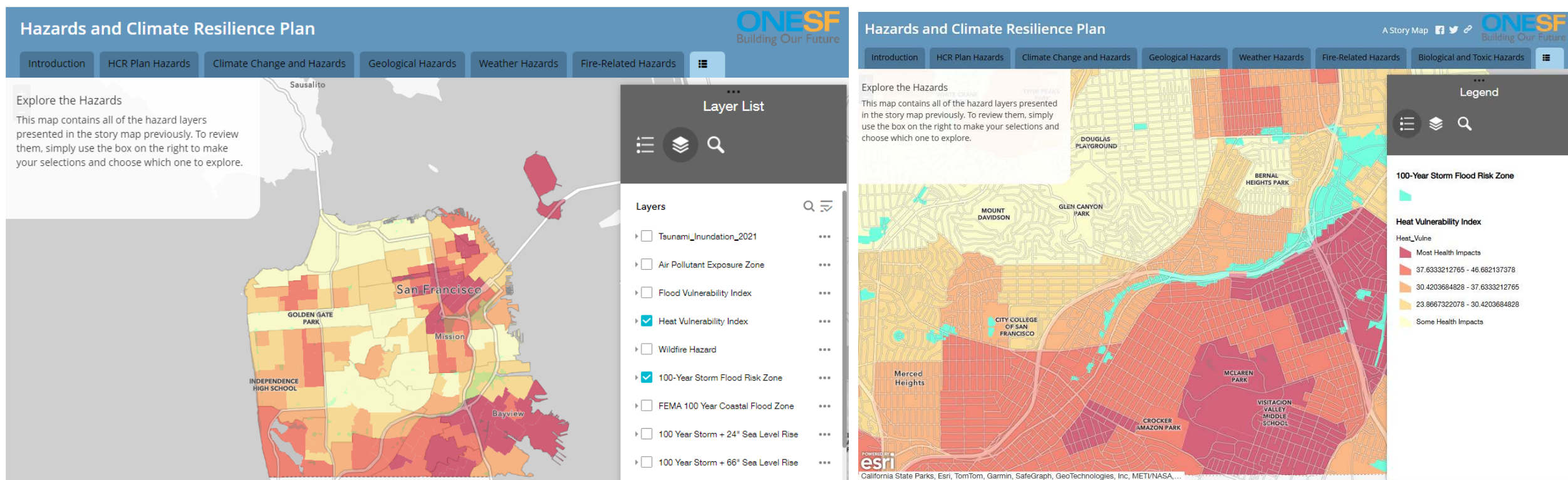


HAZARDOUS
MATERIALS

Makes Hazard Data More Accessible

Hazards and Climate Resilience Storymap

www.OneSanFrancisco.org/hazards



2025 Update Key Milestones



What's New in the 2025 Plan

- Prioritization criteria helped reduce 96 actions to 75
- New climate change research and planning
- New seismic safety programs
- Highlights nature-based solutions
- Highlights energy resilience actions
- Incorporates resilience efforts related to housing and development changes



New infrastructure and housing on Treasure Island

2025 Resilience Objectives

(B) BUILDINGS

B-1	Increase the resilience of existing seismically vulnerable buildings.
B-2	Increase climate and multi-hazard resilience of existing buildings.
B-3	Design and construct new buildings for high resilience performance for current and future hazards.

(C) COMMUNITIES

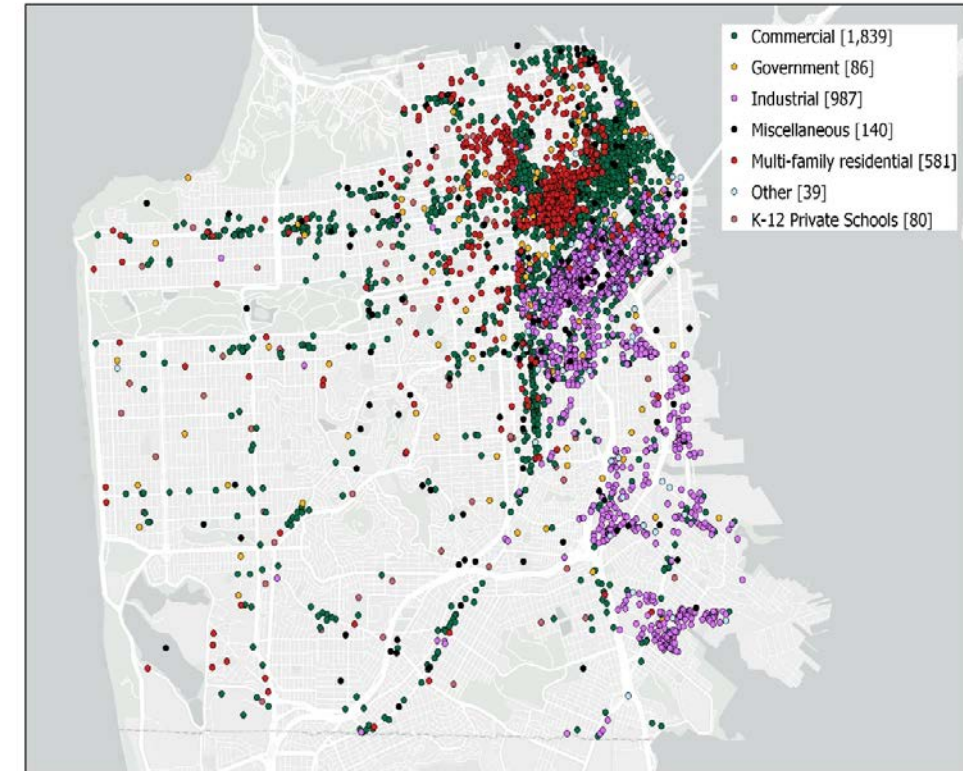
C-1	Limit exposure and protect public health against hazards related to environmental health.
C-2	Support the growth of community resilience networks to empower all people.
C-3	Increase the City's capacity to improve resilience through collaboration among peer agencies, the private sector, and community-based organizations
C-4	Support robust emergency response planning in partnership with communities most adversely impacted by hazards.
C-5	Prepare small businesses and workers to bounce back faster after a hazard.
C-6	Make housing more affordable to increase community adaptive capacity.

(IN) INFRASTRUCTURE

IN-1	Increase the resilience of electric power systems and increase access to resilient backup power.
IN-2	Increase the resilience of critical communications systems.
IN-3	Support sustainable and resilient multi-modal mobility.
IN-4	Promote, design, and use nature-based solutions to mitigate current and future hazards.
IN-5	Protect waterfront assets and communities from near-term flooding and seismic hazards.
IN-6	Adapt the city's bay and ocean shorelines to current and future climate flood hazards.
IN-7	Increase the resilience of local water and wastewater systems to natural hazards and climate change.
IN-8	Increase resilience of the regional water system to natural hazards and climate change.

Example Buildings Actions

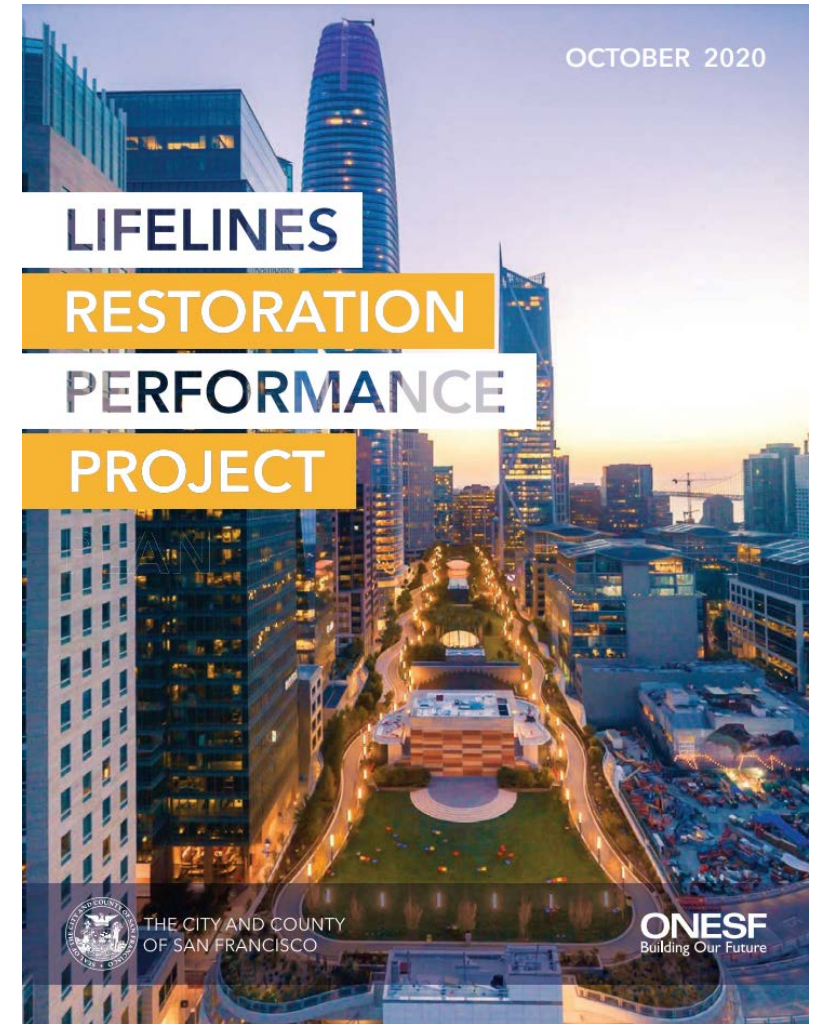
- **Earthquake Safety Implementation Program (ESIP)** outlines a long-term phased strategy for improving the seismic safety of buildings. To date, 4,900 soft story buildings and 1,800 un-reinforced masonry buildings have been retrofitted.
- ESIP recommends addressing **concrete** and **tilt-up** buildings as the next high priority building types. Department of Building Inspection and ORCP are implementing the concrete building screening and voluntary retrofit ordinance that recently passed (B-1.2).
- The City is also working to retrofit or replace high hazard City-owned concrete buildings through programs such as the Earthquake Safety and Emergency Response G.O. Bond (B-1.1).



Map of possible concrete buildings (3,753 total)

Example Infrastructure Action

- **Lifelines Council** is a group of public and private infrastructure providers that meets quarterly to collaborate, coordinate, and share information to support a faster restoration and recovery of lifeline infrastructure following a disaster.
- **The Lifelines Restoration Performance Project** (2020) evaluates the expected state of restoration timelines following a **major earthquake** for lifeline systems serving San Francisco and establishes performance. The plan is undergoing a 5-year update track progress and update recommendations (C-2.2).





Example Communities Actions

- **The Heat and Air Quality Resilience Project (HAQR)** partners with community and academic stakeholders to develop and implement medium-to-long term extreme heat and wildfire smoke resilience actions to support short-term emergency response.
- Example actions: Green infrastructure priority zones (C-1.1), installing temperature and air quality sensors (C-1.4), connecting asthma patients with home weatherization (B-2.5), connecting CBOs with equipment and trainings (C-2.1).

FIGURE 4-22
HAQR GREEN INFRASTRUCTURE PRIORITY ZONES⁸



0 0.5 1 2
Miles

Sources: Public Works (2022)

Heat and Air Quality Impact Analysis

HAQR Identified Green Infrastructure Priority Area

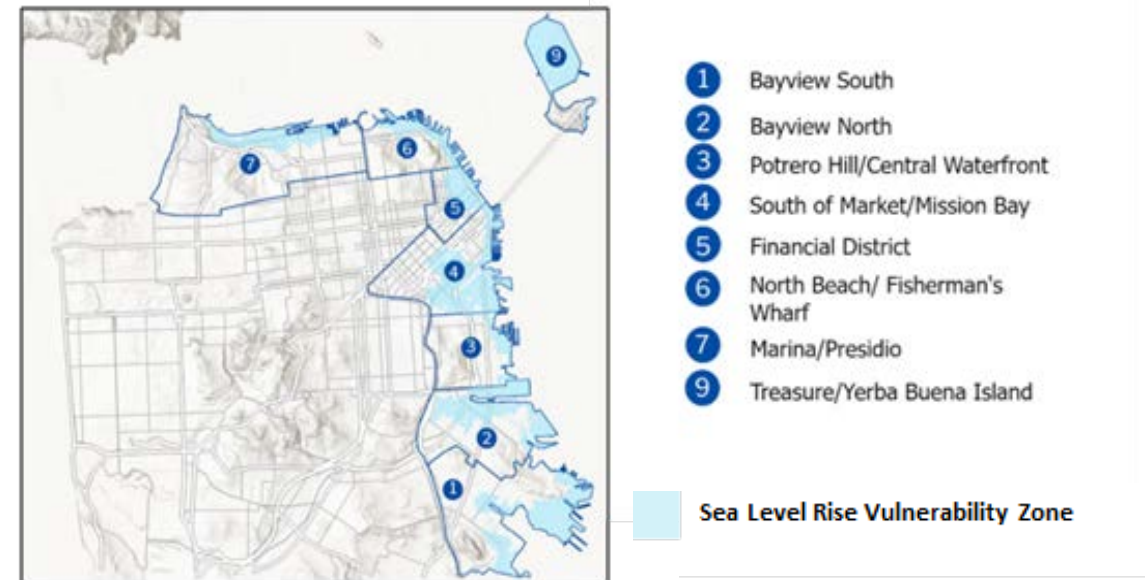


Arbor Day 2024

Example Infrastructure Actions

- **SF Bay Shoreline Adaptation Plan** will be developed and submitted to the Bay Conservation and Development Commission (BCDC) as required by SB 272. The City has a \$1.5M grant to develop a vulnerability assessment and adaptation plan for all reaches of the city's Bay shoreline (IN-6.1).
- The Plan will knit together existing actions like the Port's Flood Study (IN-6.2) and Yosemite Slough Neighborhood Adaptation Plan (IN-6.3), major shoreline development projects (IN-6.5), and develop new adaptation strategies for the southern and northern waterfronts with community participation.
- SB 272 prioritizes state funding for projects in jurisdictions with BCDC-approved plans.

San Francisco's Bay Shoreline Planning Reaches



Plan Implementation and Maintenance

- Lead departments to identify and seek resources to implement actions
- ORCP considers HCR actions in Capital Plan and Budget development
- Annual “Planning Team” Meeting
- Mid-point progress report
- Continued public engagement through specific actions and other opportunities



Engagement at the Youth Climate Summit



Thank you! Questions?

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