

# Board of Directors Meeting

## San Mateo County Flood and Sea Level Rise Resiliency District

- 1. Roll Call**
- 2. Public Comment** Persons wishing to address the Board on District-related matters not on this Agenda may speak for up to two minutes; comments on Agenda items shall be heard during that item for up to two minutes.
- 3. Action to Set the Agenda**
- 4. Regular Business**
  - A. Update on OneShoreline's Millbrae and Burlingame Shoreline Area Protection and Enhancement Project
  - B. Update on San Francisquito Creek Joint Powers Authority activities and projects
  - C. Discussion of OneShoreline's winter preparedness activities
- 5. Chair's Report \***
- 6. CEO's Report \***
- 7. Board Member Reports and Items for a Future Agenda \***
- 8. Adjournment**

## Agenda Item 4A – Update on the Millbrae and Burlingame Shoreline Area Protection and Enhancement Project

Long-term resilience to future conditions requires that:

1. Local leaders champion long-term resilience
2. Public infrastructure and private developments are integrated into a regional protection and enhancement project through land use plans and zoning

### OneShoreline project with Millbrae & Burlingame, and the Burlingame Zoning Ordinance

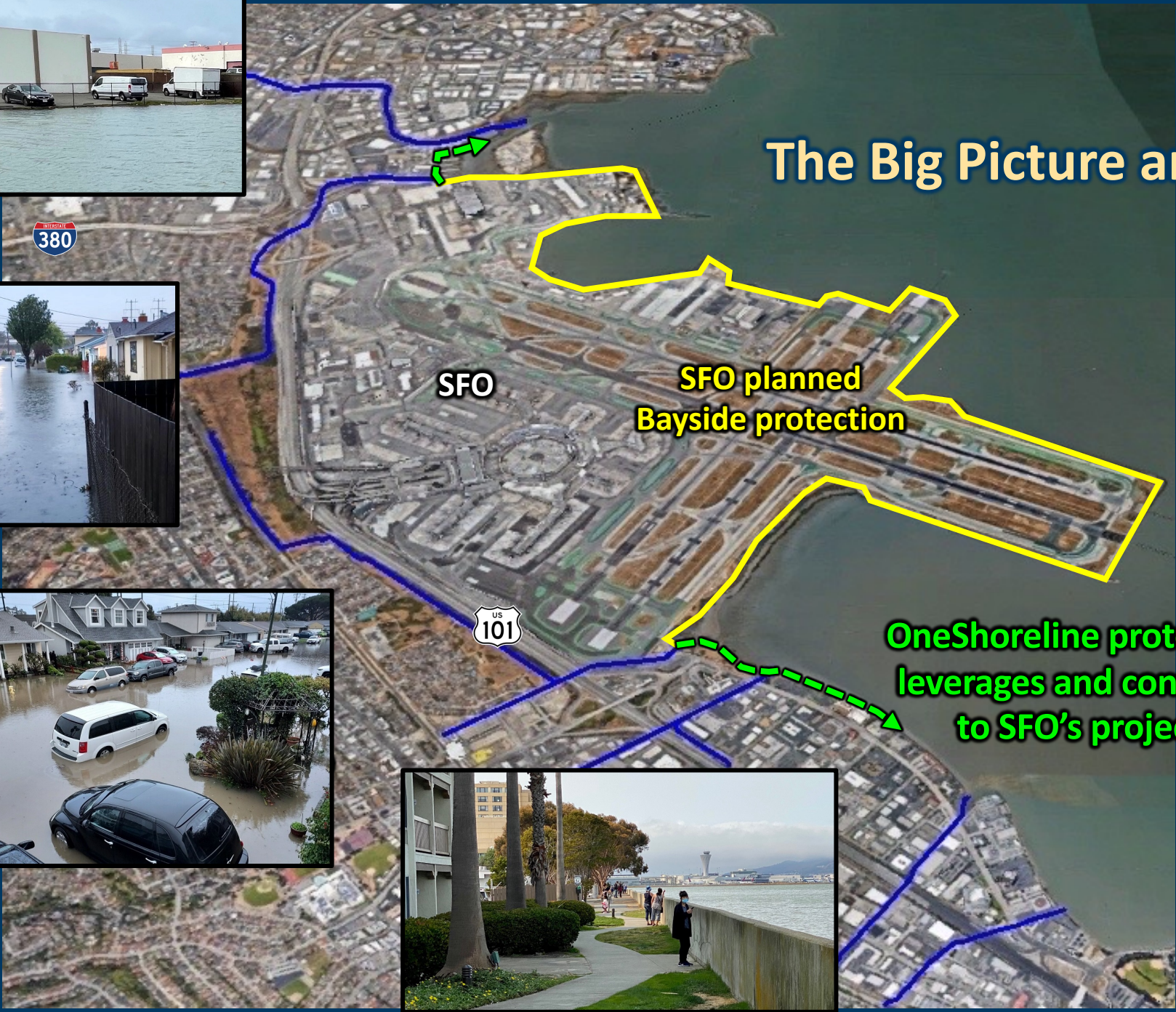
- Project's coastal protection objective is to keep the Bay shoreline, creeks, and lagoons in the area from overtopping when the Bay water level equals FEMA's Base Flood Elevation + 6 feet.
- In 2022, Burlingame became one of the first Bay Area cities to incorporate SLR into its zoning ordinance. Key development requirements relate to shoreline protection infrastructure, buffer zone, elevations, stormwater capture/drainage, and groundwater.



# The Big Picture around SFO



380



SFO

SFO planned  
Bayside protection

101

OneShoreline protection  
leverages and connects  
to SFO's project



San Francisco  
International Airport

## Project objectives

**COASTAL PROTECTION:** Protect areas along the shoreline and nearby creeks and lagoons against current coastal hazards and substantial sea level rise

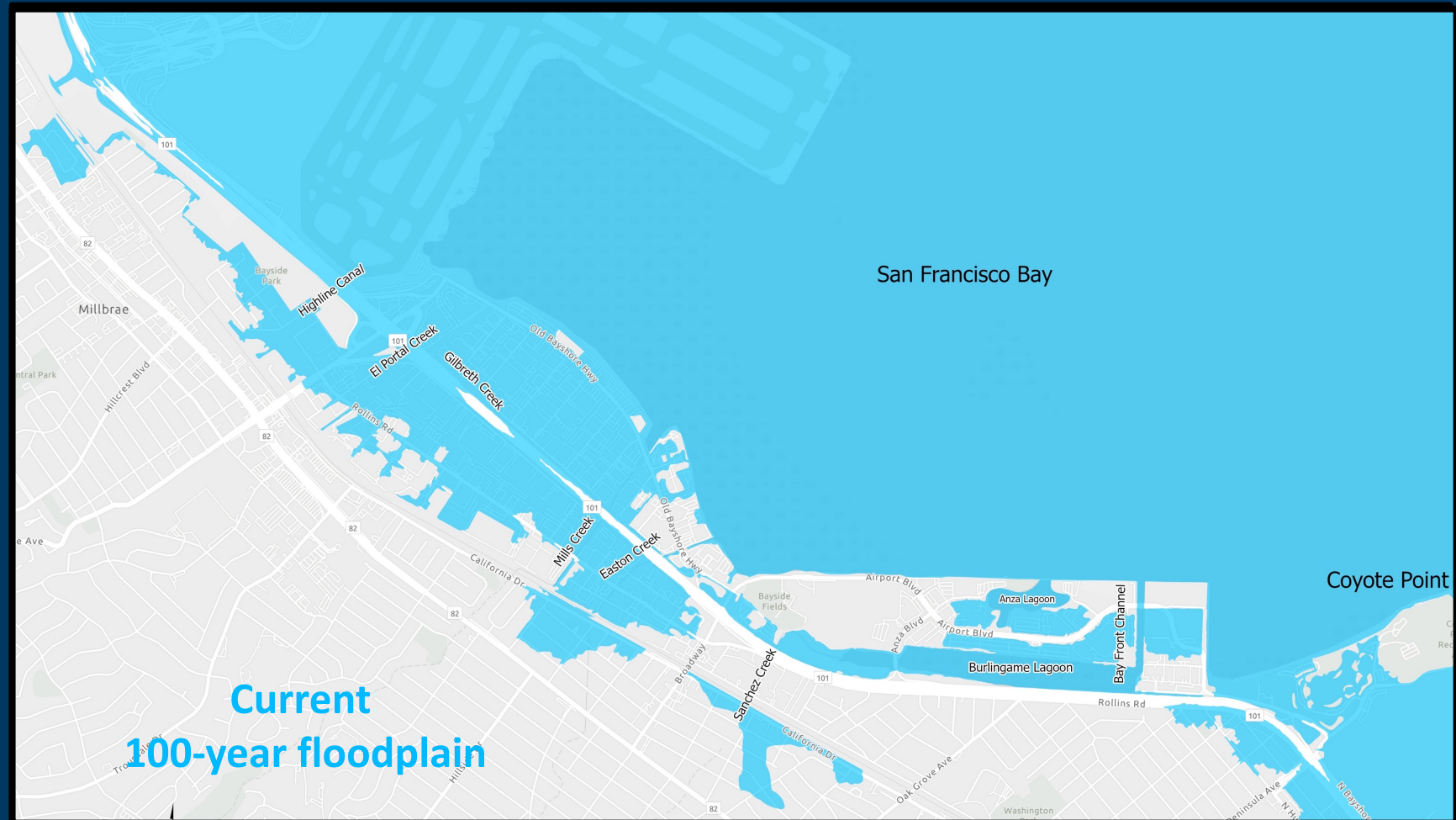
**PUBLIC ACCESS AND RECREATION:** Enhance the shoreline area experience

**HABITAT:** Promote healthy and sustainable ecosystems proximate to the Bay shoreline



# Project's Coastal Protection Benefits

- Protects properties against higher Bay water levels from sea level rise, storm surge, and waves
- Keeps the higher Bay water levels from going up creeks
- Completes regional studies to inform future work and each city's Storm Drain Master Plan



# Proposed Project Features

— Creeks and lagoons

## Project Offshore Features

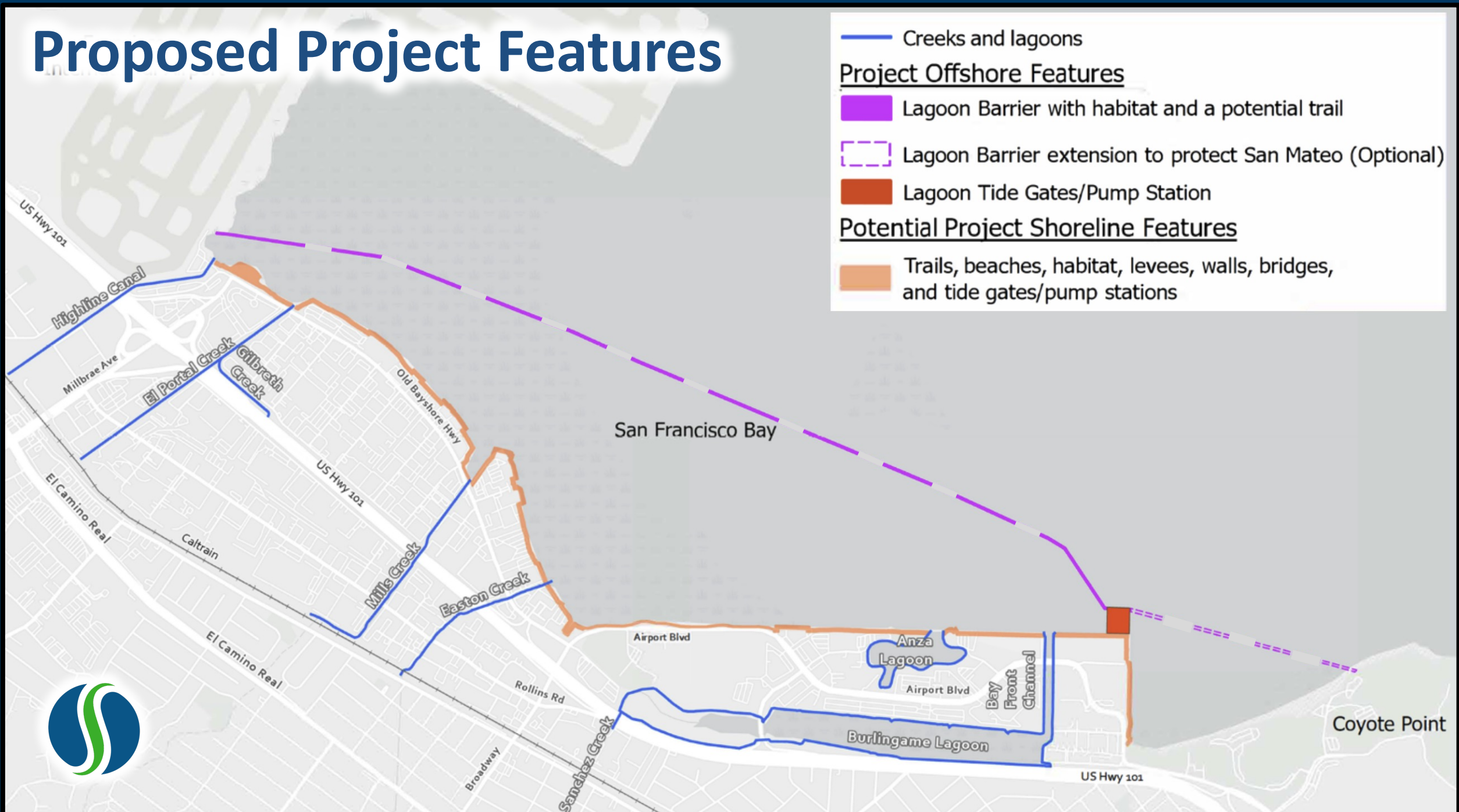
■ Lagoon Barrier with habitat and a potential trail

□ Lagoon Barrier extension to protect San Mateo (Optional)

■ Lagoon Tide Gates/Pump Station

## Potential Project Shoreline Features

■ Trails, beaches, habitat, levees, walls, bridges, and tide gates/pump stations



# Potential Project impacts we propose to analyze in the EIR

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Transportation
- Tribal/Cultural Resources
- Utilities & Service Systems
- Wildfire

The EIR will analyze the topics identified above, and potentially others, and propose mitigation measures to reduce or avoid impacts determined to be significant.

## Special attention will be given to:

- Lagoon water quality
- Fish migration and birds
- Adaptability to future conditions
- Regional context

**Public outreach** during the Oct. 10 – Nov. 15 comment period on the EIR’s scope is through email and presentations:

October 16 – Burlingame City Council

October 23 – OneShoreline Board meeting

October 24 – Millbrae City Council

November 2 – EIR Scoping Meeting

14 Thursday • Oct. 19, 2023 **SPORTS**

## LOUNGE

Continued from page 9



She said she didn't have the hood up, which featured bear ears, because she thought she would look silly. I then received a email from Staley Wednesday morning, in which she mentioned, "The bear costume got toasty." The temperature was in the mid to high 70s during the match.

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The Mavericks surf break gets most of the headlines around here, but due south is another world-class wave — Santa Cruz's Steamer Lane. And "The Lane" is home to most well-known contest in Northern California, the O'Neill Cold Water Classic, which began in 1985, which returns for the 2023 edition in mid-November.

The Classic is part of the World Surf League's Qualifying Series, essentially the minor league's to the WSL big leagues. This contest is for those athletes looking to earn points toward making the main world tour.

NATHAN MOLLAT/DAILY JOURNAL  
Sarah Staley, center in bear costume, along with an unidentified 'student bear' cheer on the M-A water polo team Tuesday at Woodside High School.

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### EIR PUBLIC SCOPING MEETING

#### FOR THE MILLBRAE AND BURLINGAME SHORELINE AREA PROTECTION AND ENHANCEMENT PROJECT

Join us to comment on the scope of the issues to be addressed in the Project's Environmental Impact Report.



**NOVEMBER 2, 2023 • 7 PM**  
IN PERSON AT BURLINGAME COMMUNITY CENTER, SEQUOIA ROOM  
850 BURLINGAME AVENUE

To participate in this meeting remotely via Zoom:  
<https://oneshoreline-org.zoom.us/j/87923899434>  
or call 669-444-9171 (Meeting ID# 87923899434)

For more details: [oneshoreline.org/projects/millbrae-burlingame](https://oneshoreline.org/projects/millbrae-burlingame)



# THE DAILY JOURNAL

Leading local news coverage on the Peninsula

Weekend • Oct. 21-22, 2023 • XXIII, Edition 54 [www.smdailyjournal.com](http://www.smdailyjournal.com)

## Bayside flood barrier proposed

### Structure would stretch from SFO to San Mateo to protect from sea-level rise

**By Nicholas Mazzoni**  
DAILY JOURNAL STAFF

An off-shore barrier is being proposed from SFO to as far south as Coyote Point to create a lagoon that would protect the shoreline from sea-level rise through doors that could close during large storms or extreme tides. The proposal is by OneShoreline, the county's Flood and Sea Level Rise Resiliency District, and its CEO Len Materman is making the rounds to various government agencies to explain the concept and gather feedback.

"OneShoreline was created to address huge problems that need huge solutions. I don't want our legacy to do things on the margins. I want to address this issue," Materman said.

The proposed off-shore barrier is still in the concept phase. However, if approved, the structure would connect from the San Francisco International Airport's barrier it is constructing and would span from Millbrae as far south as Coyote Point on the San Mateo and Burlingame border, Materman said during a Burlingame City Council presentation Monday, Oct. 16.

During extreme tides or storms, there can be less than a foot of protection. However, Materman said the barrier would address this issue, allowing water to ebb and flow. The structure's doors would be open about 99% of the time, and OneShoreline would close the doors when large storms or extreme tides occur, restricting the water back and allowing the on-shore drainage systems to flow freely.

Materman said drainage systems are like a clogged shower pipe and water has nowhere to go so it gets increasingly higher. This winter's storm is a prime example, he added. Many of the streets far from the Bay were flooding because the water in

See **BARRIER**, Page 21

# **EIR Notice of Preparation and Public Scoping Period**

**Notice of Preparation available at:**

**[OneShoreline.org/Projects/Millbrae-Burlingame](https://OneShoreline.org/Projects/Millbrae-Burlingame)**

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**Public Comment Period:**

**October 10 – November 15, 2023**

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**Public Scoping Meeting:**

**November 2, 2023 at 7:00 PM**

**Burlingame Community Center, 850 Burlingame Avenue**

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**Email questions or comments to: [Projects@OneShoreline.org](mailto:Projects@OneShoreline.org)**

# Next Steps

**Nov. 2023**

**EIR Scoping  
Ends**

**Spring 2024**

- 30% (conceptual) design
- Develop Draft EIR
- Regulatory agency and public outreach

**Fall 2024**

- Complete LEDPA analysis
- Complete Draft EIR

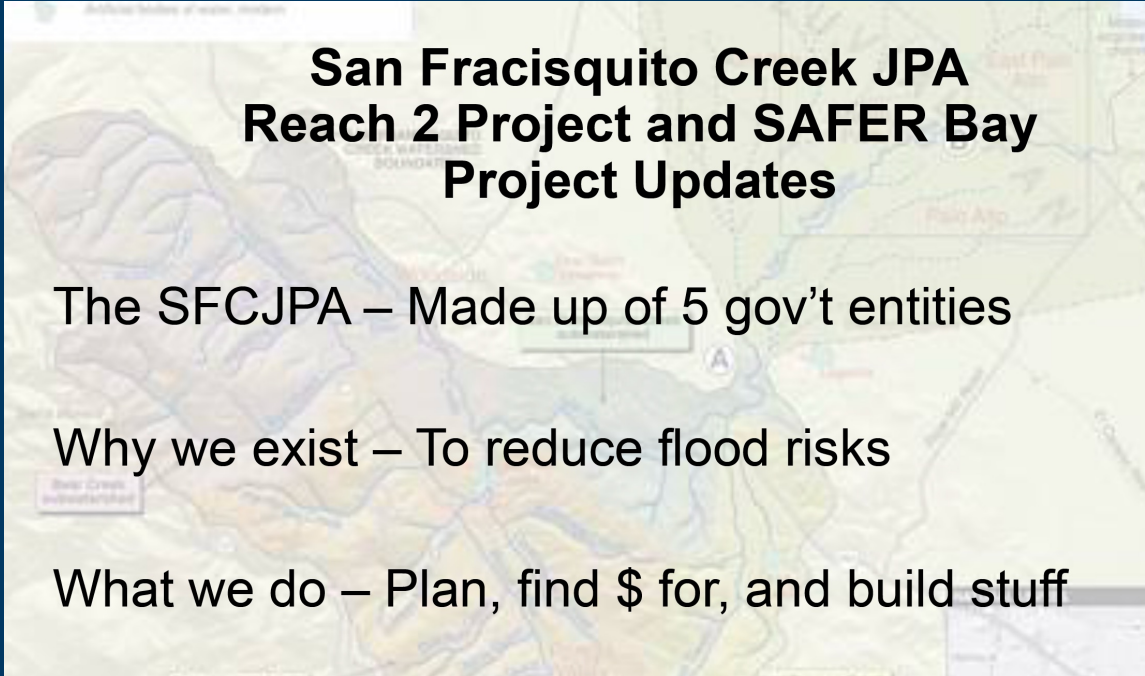
**\$ ?**

# Agenda Item 4B

**Community meeting regarding winter preparedness along San Francisquito Creek**

**October 26, 2023, 6:30 pm – 8:00 p.m.**

**Laurel School Upper Campus Atrium  
275 Elliott Drive in Menlo Park**



## **San Francisquito Creek JPA Reach 2 Project and SAFER Bay Project Updates**

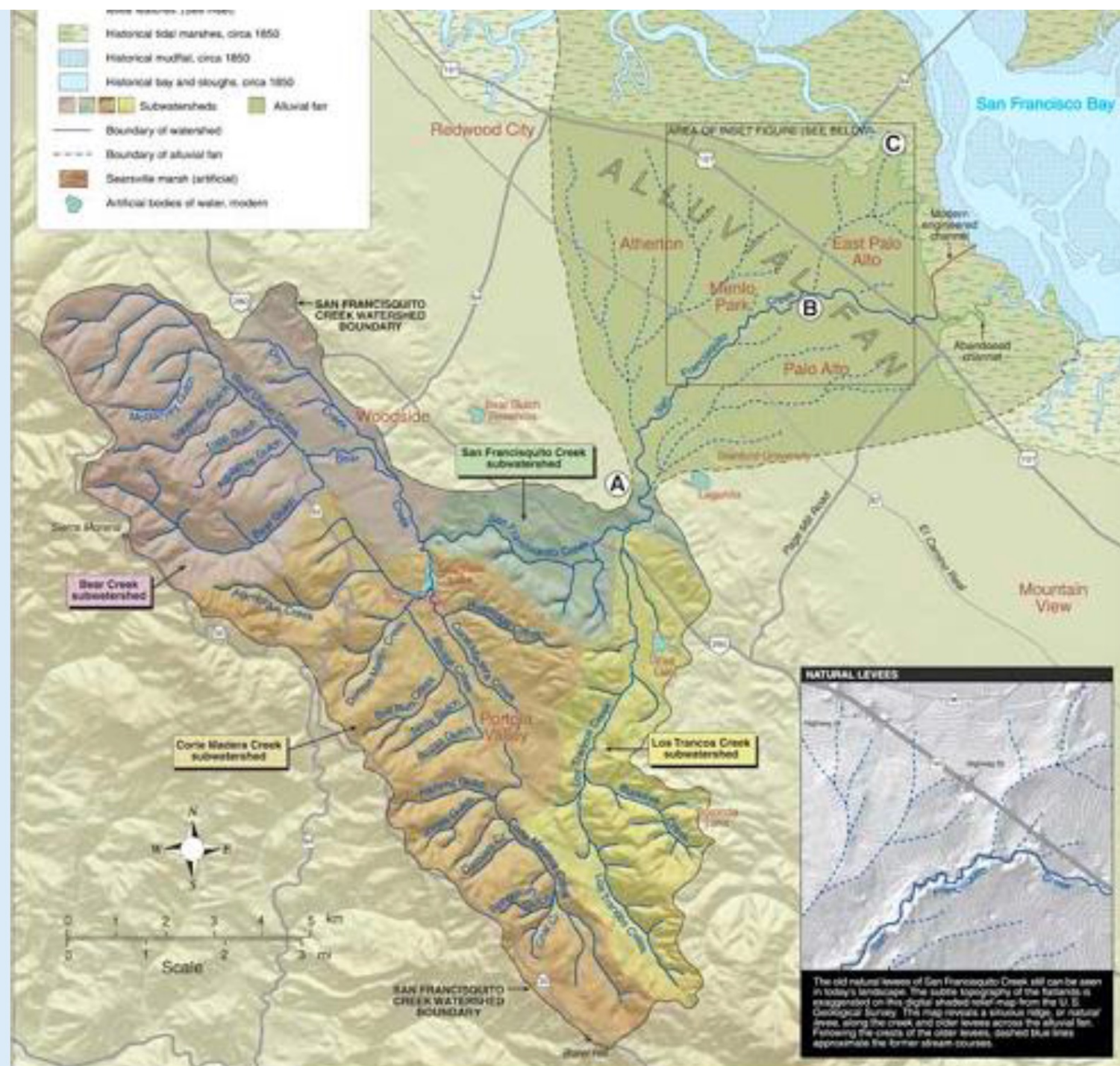
The SFCJPA – Made up of 5 gov't entities

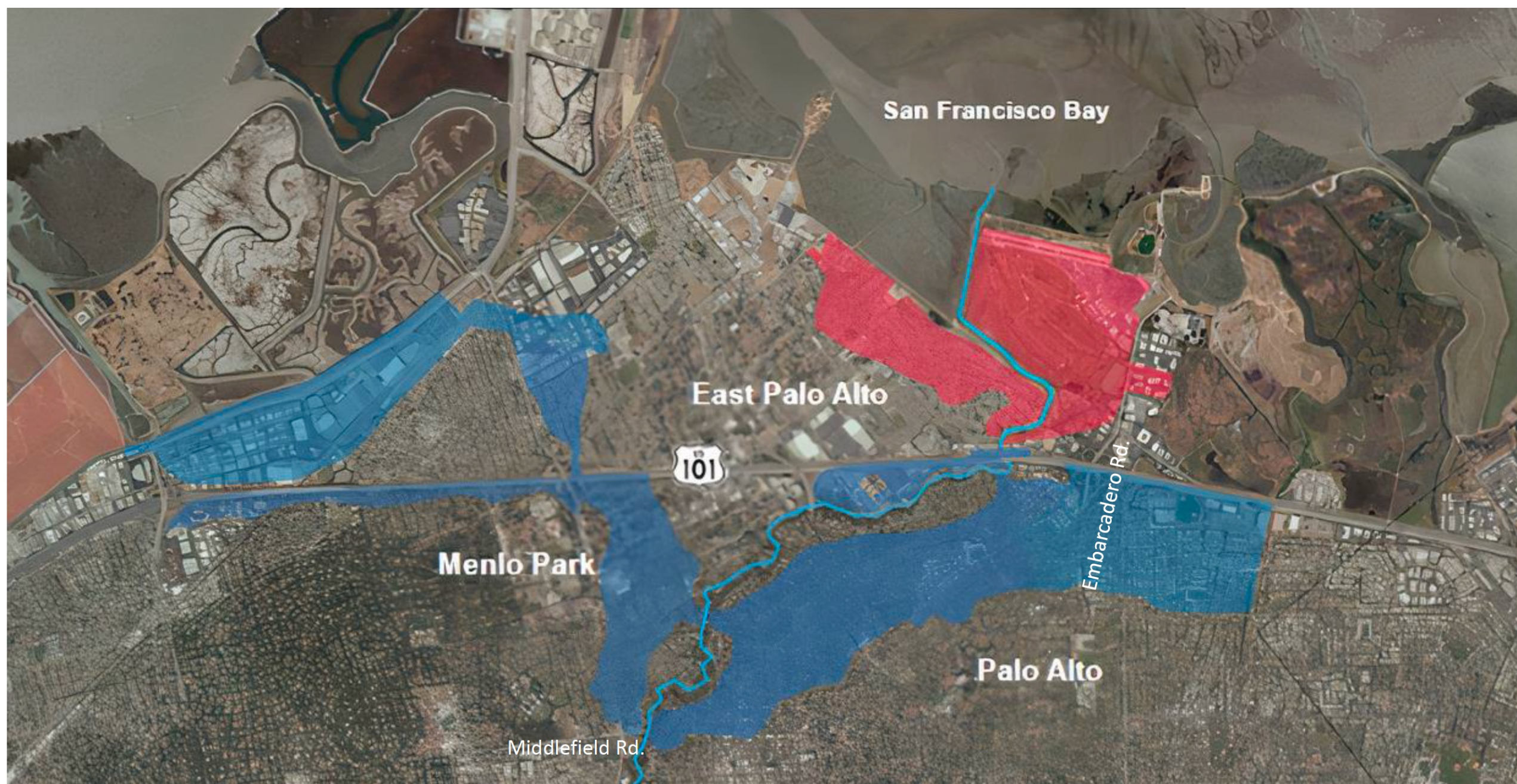
Why we exist – To reduce flood risks

What we do – Plan, find \$ for, and build stuff

# We Live in a Watershed

- ~ 45 square miles
- Supports diverse habitats and species
- Many tributaries in the SC Mountains
- A large alluvial fan across the valley floor
- We live on the ancestral homeland of the Ohlone peoples





FEMA 100 Year Flood Plain

# Reach 1 or Downstream Project

Broke ground in 2016 – Completed in 2019

1 ½ Miles of widened channel, new floodwalls and levees, expanded trail

Over 9000 cfs capacity – planned for 100yr storm, plus 3 ½ feet of sea level rise, plus freeboard

22 Acres of restored marsh between the levees and beyond Friendship Bridge

Protects East Palo Alto and eastern Palo Alto directly. Protects Menlo Park and Palo Alto indirectly.



Photo credit: Santa Clara Valley Water District, 2019

A map of the San Francisco Bay Area is visible in the background. It shows the San Francisco Peninsula, the Golden Gate Bridge, and the surrounding water bodies. Several project locations are marked with yellow boxes and labels: 'Newell Road Bridge' near Palo Alto, 'Channel Widening' near the San Francisco Peninsula, 'Top-of-Bank' near the San Francisco Peninsula, and 'Pope-Chaucer Bridge' near the San Francisco Peninsula. The map also shows major roads and geographical features like the San Francisco Bay and the Golden Gate.

# **Reach 2 Project follows Reach 1 and has four components**

1. Newell Road Bridge replacement – Palo Alto leading
2. Channel Widening – USACE CAP205 Project with Valley Water support
3. Top-of-Bank – SFCJPA and Valley Water leading
4. Pope-Chaucer Bridge replacement – SFCJPA and Valley Water leading

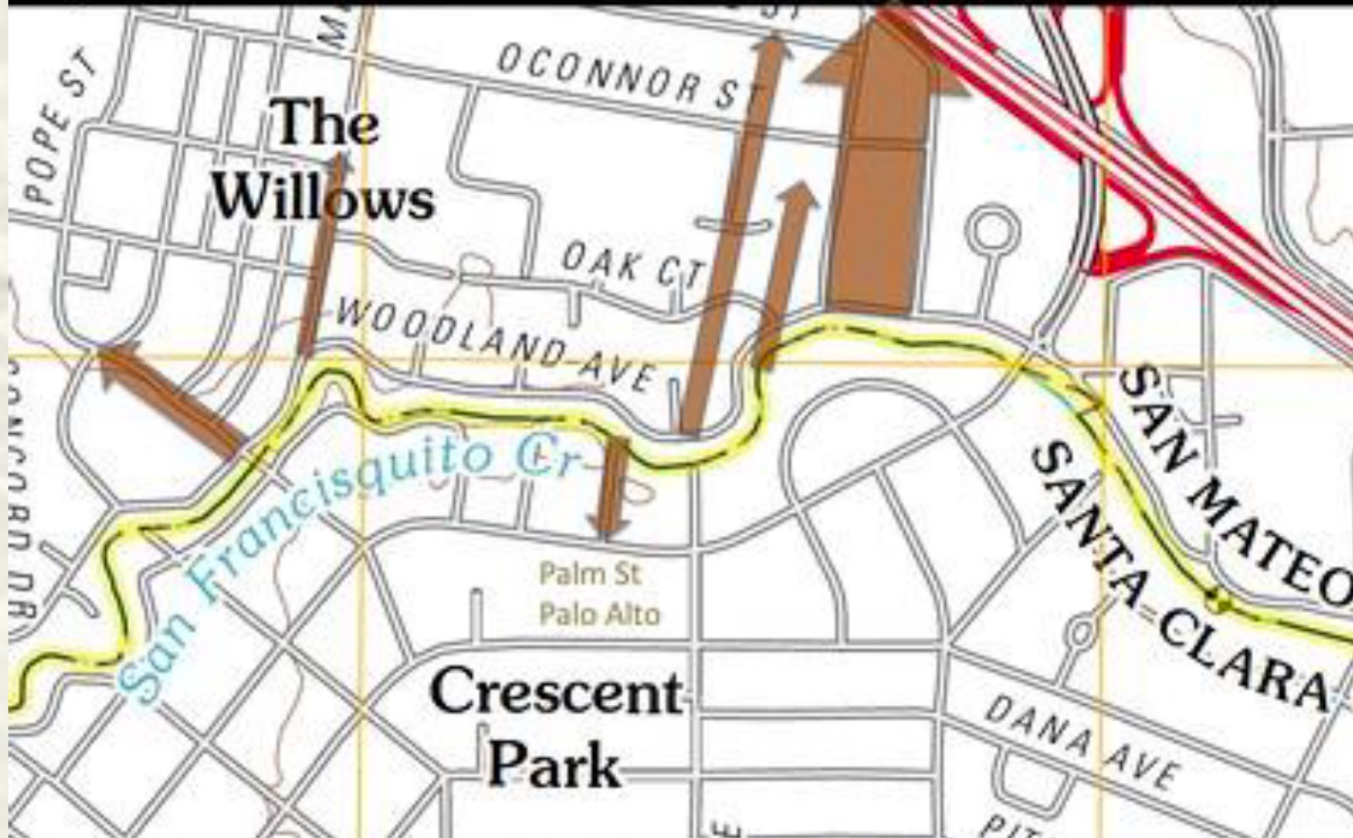
# Schedule and Next Steps

- Replacement of the Newell Road Bridge is planned for summer 2024
- Channel Widening and Top-of-Bank work is planned for summer 2025
- Replacement of the Pope-Chaucer Bridge is planned for summer 2026\*



# Citizen Observation of Creek Breakout Locations

**2022 Observed Overtopping Woodland Ave, San Mateo County**  
Minor flows at Pope St, Menalto Ave, Oat Ct & Emma Ct, Menlo Park  
Major flow between Euclid Ave and Manhattan Ave, East Palo Alto



The New Year's Storm resulted in break outs and flooding.

This is a diagram of locations and relative amounts of creek flooding observed by a Menlo Park resident, Jim Wiley.

This is not an official record and does not reflect flooding details on the Palo Alto side.

# Lessons from the New Year's Eve storm

## Hydraulic Model vs. Observed Creek Behavior

- Actual flood breakout locations were different than predicted in the hydraulic model used for designs

## Changes in creek behavior require validating our model and our project designs

- A LiDAR survey of parts of the creek channel has been done and data is being reviewed
- Schaaf & Wheeler have been retained to do an independent evaluation of the model

# Over-arching Reach 2 Project Objectives

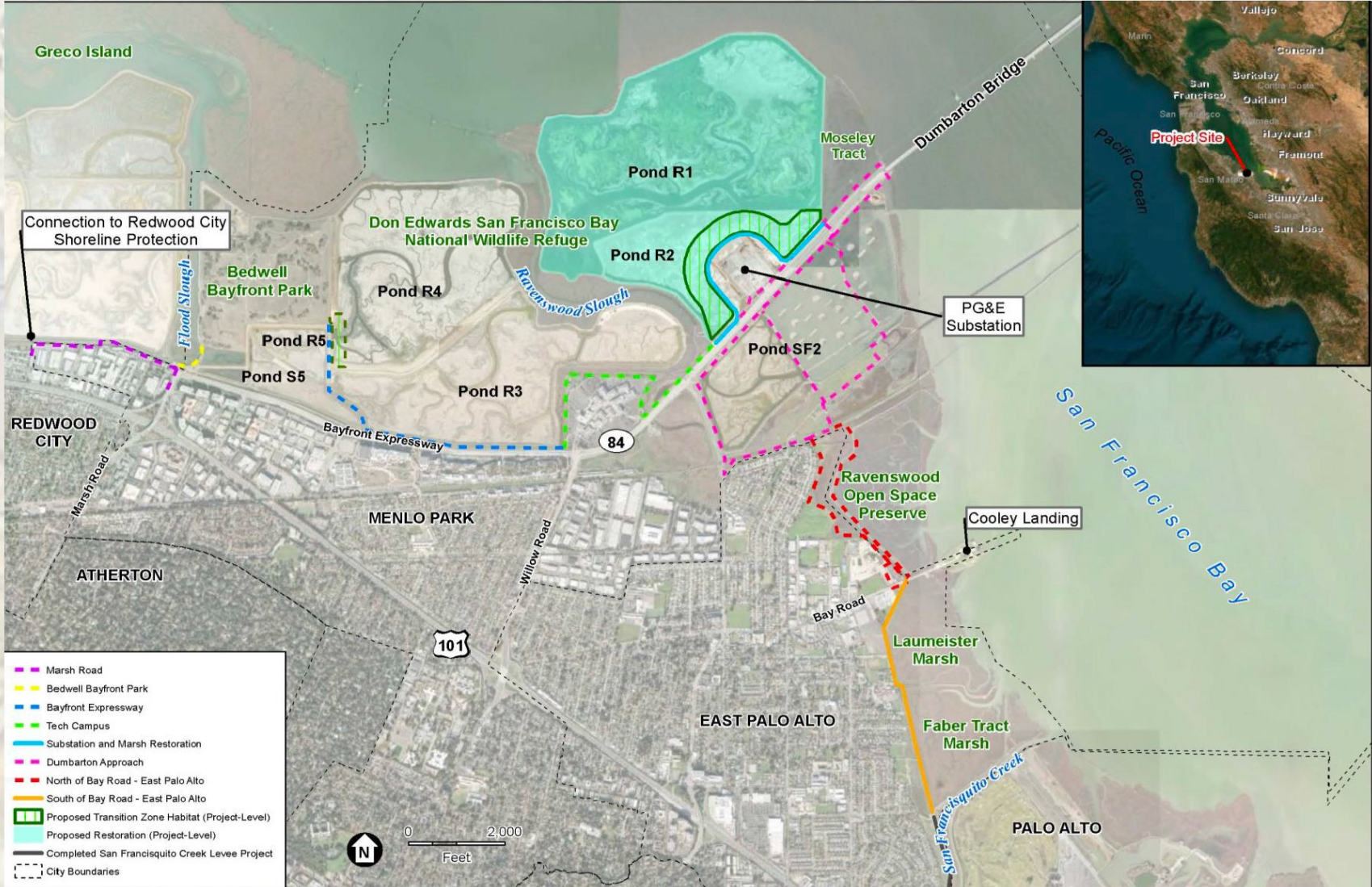
- Contain storm flow “of record” (the “flood of ’98”)
- **No transfer of risk**
- Design a project that regulatory agencies will permit
- New insights from our hydraulic analysis may change some project details



Photo credit: P. Burt, 31 Dec. 2022. Upstream face of Pope-Chaucer bridge

# SAFER Bay Project Update

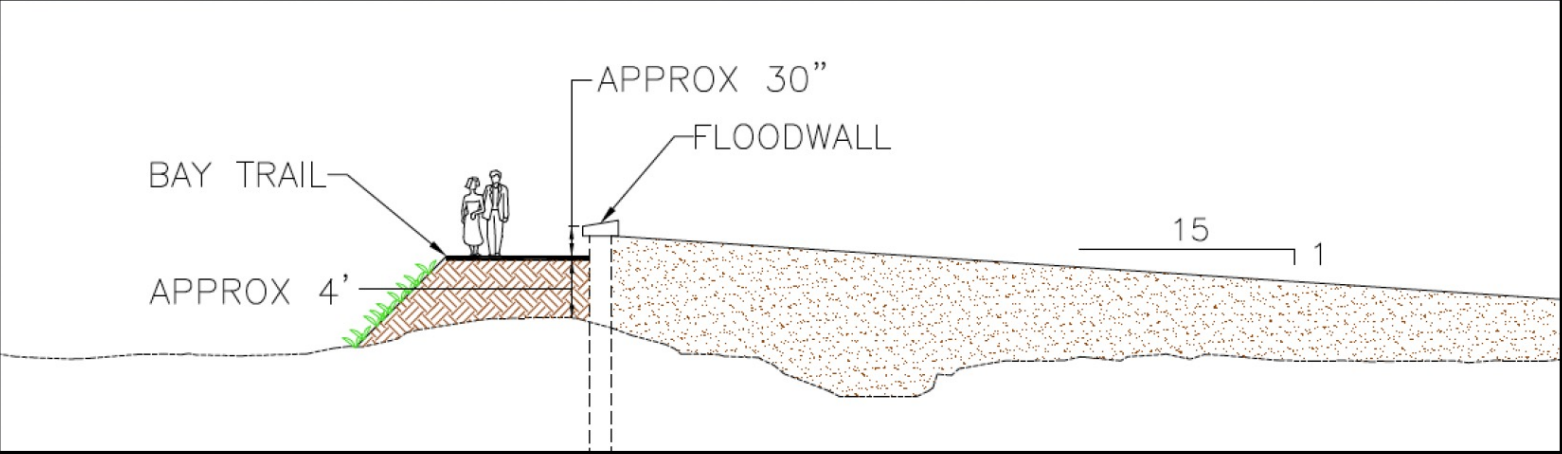
**S**trategy to  
**A**dvance  
**F**lood protection,  
**E**cosystems, and  
**R**ecreation along  
San Francisco  
**B**ay



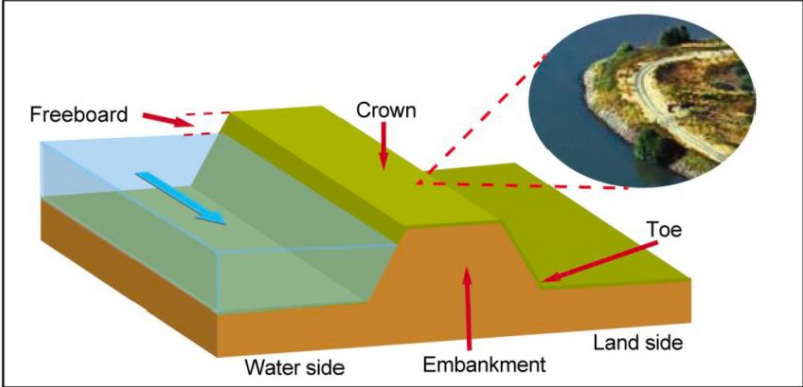
# SAFER Bay Project Schedule

- March 2023 – December 2024
  - Evaluations to support EIR existing conditions
  - 10% to 30% flood protection design (all reaches)
  - Proposed mitigation approach
- May 2025
  - Public Draft Project Description
- November 2023- May 2024
  - 30% flood protection/restoration design (project-specific reaches)
- October 2025
  - Draft EIR released

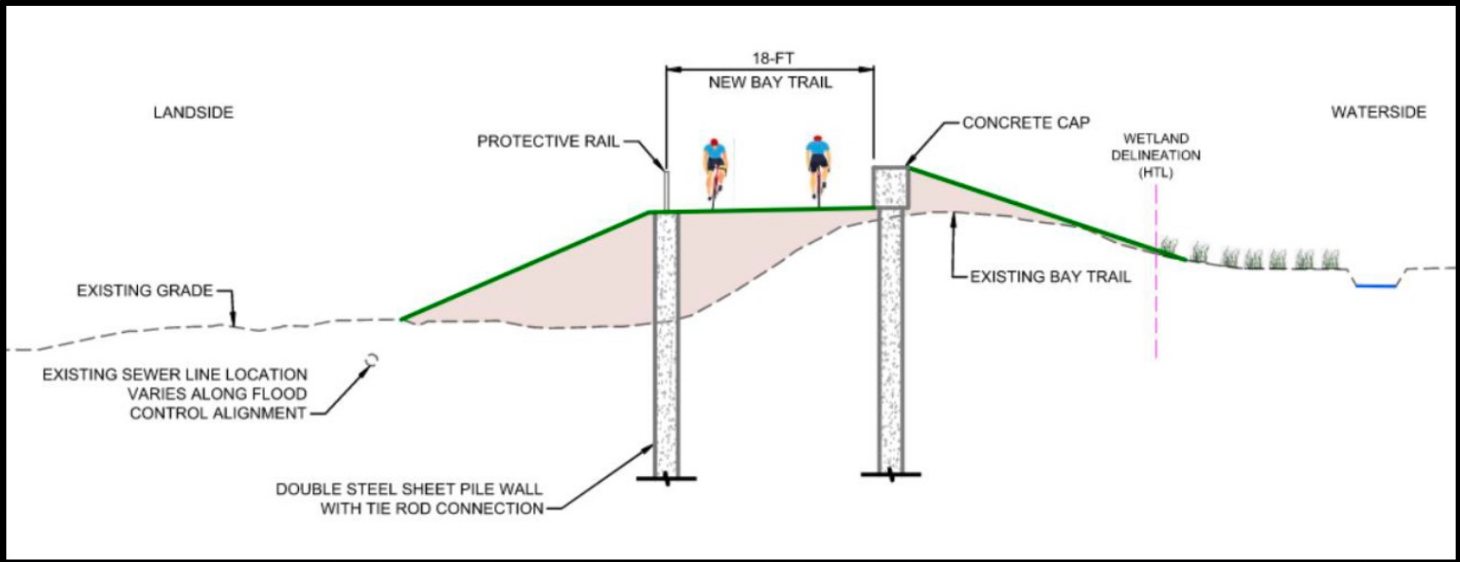
# Conceptual Flood Protection Features



Earthen levee



Sources (left to right): California Department of Water Resources and U.S. Army Corps of Engineers.



# Project Information Links

Reach 2 project information can be found on the SFCJPA's website at:  
<https://www.sfcjpa.org/reach-2-upstream-project>

Information about Palo Alto's Newell Road Bridge project can be found on the City's website at: <https://www.cityofpaloalto.org/newell>

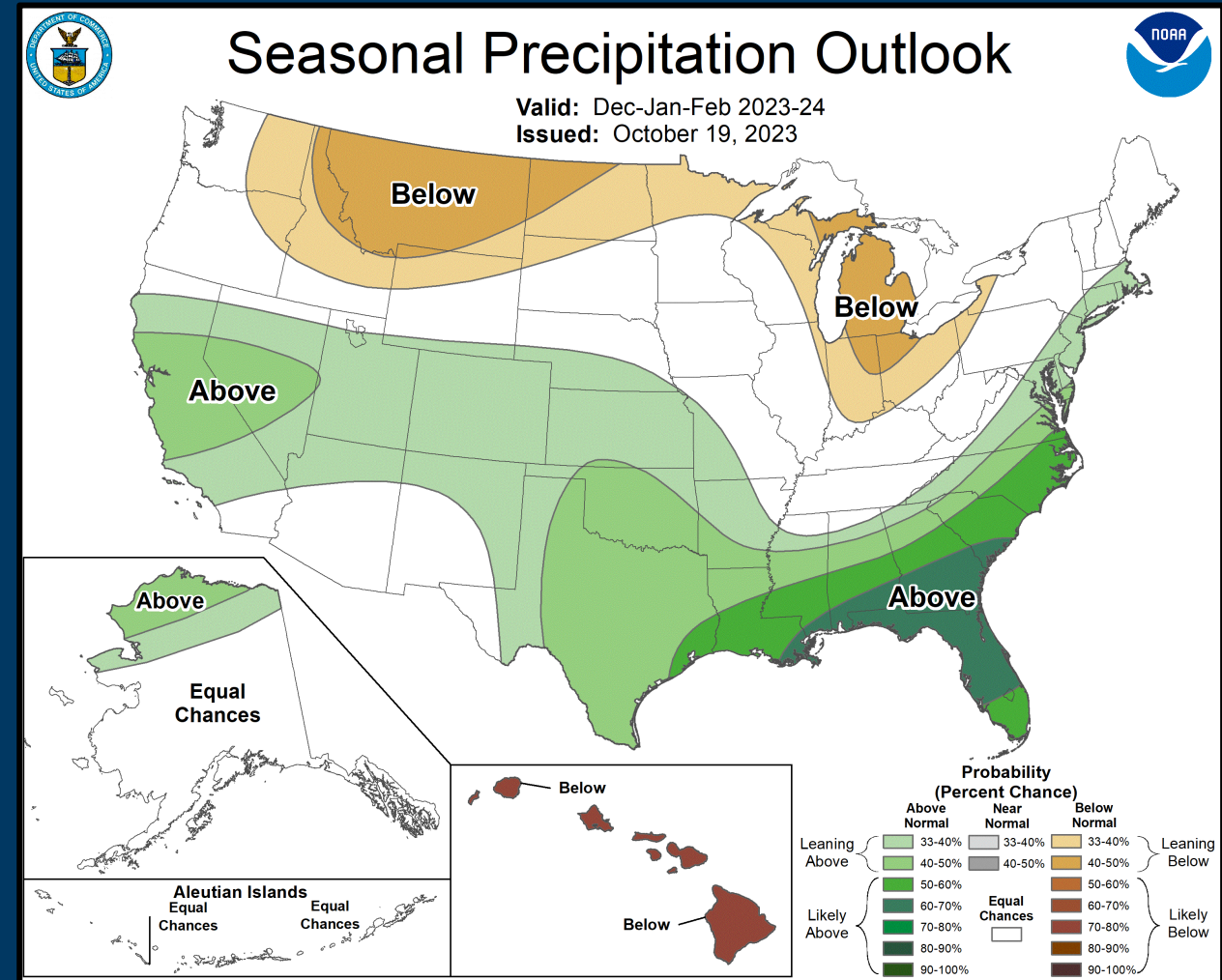
<https://www.cityofpaloalto.org/newell>

SAFER Bay project information can be found on the SFCJPA website at: <https://www.sfcjpa.org/safer-bay-project>

# Agenda Item 4C: Discussion of OneShoreline's winter preparedness activities

**Objective:** to efficiently alert people to, and reduce the impacts of, climate-driven atmospheric rivers. This year we focused on:

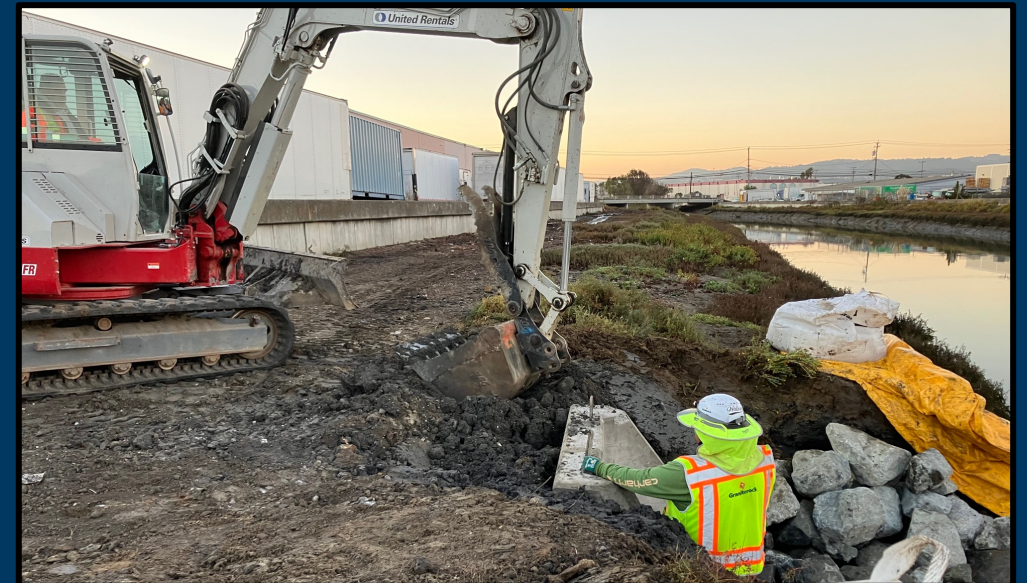
- Bayfront Canal
- Colma Creek
- Emergency work to remove debris in flood prone areas
- 5-year stream maintenance permits
- Flood Early Warning System upgrades and maintenance



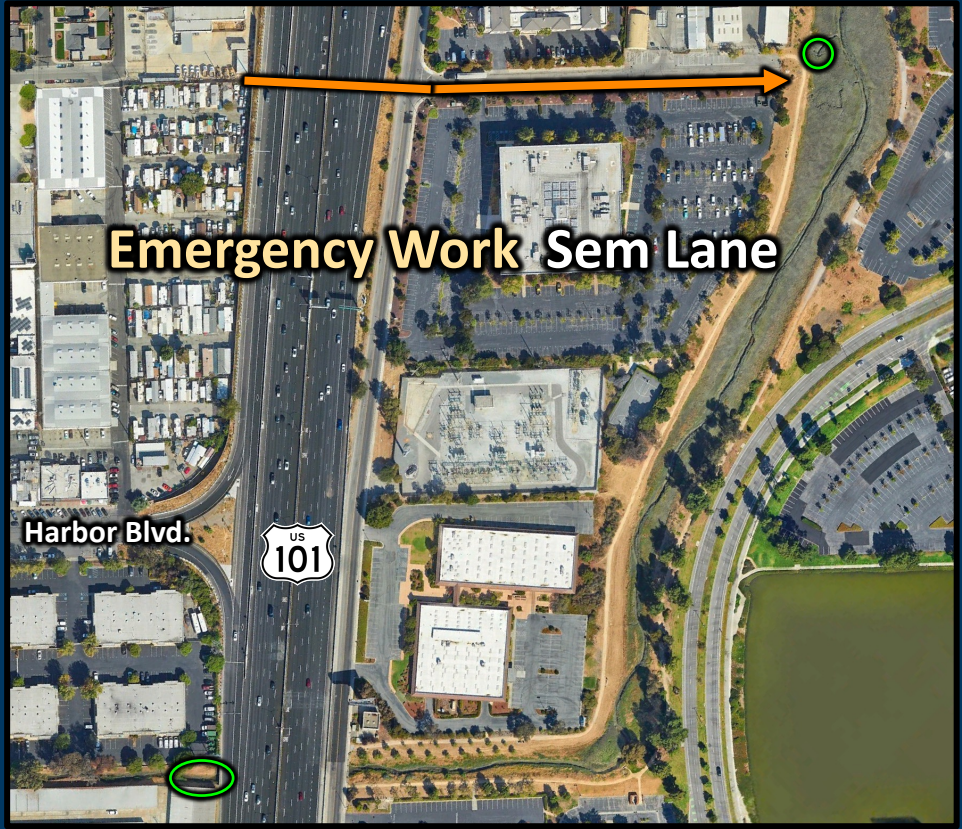
**Bayfront Canal:** Repairs, maintenance,  
and preparing for this winter



**Colma Creek:** Repairs and upgrades  
to storm drain outfalls downstream  
of Highway 101



# Debris work in San Francisquito Creek



Secure environmental regulatory permits for our **5-year stream maintenance program** for specific sections of Bayside creeks that caused flooding the winter of 2022-23. Permits will allow local agencies to remove sediment and vegetation along Atherton, Cordilleras, Belmont, San Mateo, and San Bruno Creeks in 2024.



**Flood Early Warning System** ([OneShorelineEarlyWarning.onerain.com/map](https://www.onerain.com/map)) provides actionable information to emergency response personnel regarding Colma, San Bruno, Atherton, and Belmont Creeks. Over the past few months, we've been working to expand this system to the Pacific coastside:

- Install a new monitoring station on Pescadero Creek within the Town of Pescadero
- Integrate an existing stream and precipitation gauge on Butano Creek into our System
- Modify an existing road-side flasher to issue notifications when water is on Pescadero Creek Road
- Upgrade a radio repeater to transmit the data to our receiver in Redwood City.

Ongoing efforts include: Site new gauges in upstream areas along Pilarcitos Creek and in Millbrae, and develop an operational protocol to empower local agencies to directly use real time data.



**Next Scheduled Board meeting**

**November 20, 2023 at 4:00 PM**