



# Board of Directors Meeting

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

## AGENDA

September 23, 2024

4:00 PM

1. **Roll Call**
2. **Public Comment** Persons wishing to address the Board on District-related matters not on this Agenda, as well as items listed under Action to Approve the Consent 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 and Approve the Consent Agenda**
  - A. Approve the Minutes of the June 24, 2024 and August 26, 2024 District Board meetings
4. **Regular Business**
  - A. Adopt Resolution 2024-09-23-A approving the Third Amendment to the Employment Agreement with the CEO
  - B. Adopt Resolution 2024-09-23-B establishing a District Salary Schedule for Fiscal Year 2024-25
  - C. Approve Amendment to District Ordinance 1 to add a District holiday on June 19, known as Juneteenth
  - D. Adopt Resolution 2024-09-23-C supporting Proposition 4, the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024, known as the Climate Bond, on the November 5, 2024 statewide ballot
  - E. Receive an update on the District project to expand participation by local jurisdictions in the FEMA National Flood Insurance Program Community Rating System
  - F. Presentations by the District's 2024 Stanford Fellows, PhD students Emily Mongold on the impact of groundwater rise on liquefaction risk along the Bay shoreline, and Mavis Stone on equitable flood resilience
5. **Chair's Report \***
6. **CEO's Report \*** October 24 Flooding Workshop in San Bruno's Belle Air Neighborhood
7. **Board Member Reports and Items for a Future Agenda \***
8. **Adjournment**

## **Agenda Item 4A: Resolution 2024-09-23-A regarding CEO Employment Agreement**

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**In February 2020, the Board approved an Employment Agreement with the CEO that outlined the terms of employment, including the CEO's duration of employment and annual salary. In June 2022 and in August 2023, the Board amended that Agreement to increase the salary and extend the term.**

**At this time, the Board proposes a Third Amendment to this Agreement to:**

- 1) extend its term for one additional year, through June 30, 2028, and**
- 2) increase the CEO's annual salary by 5% from \$260,286 to \$273,300 effective July 1, 2024. All other terms and conditions of the Agreement remain in place.**

**RECOMMENDATION: Adopt Draft Resolution 2024-09-23-A, which includes the Third Amendment to the Employment Agreement with the CEO**

## **Agenda Item 4B: Resolution 2024-09-23-B establishing the Salary Schedule for FY 2024-25**

Public agencies in CA are required to publish an annual salary schedule. In February 2020, the Board approved the first salary schedule listing job classifications and benefits, which was amended at the beginning of each subsequent fiscal year.

The CEO now proposes a Salary Schedule Resolution for the recently begun 2024-25 fiscal year to:

- adjust employee salary ranges for the first time in three years
- amend staff organizational chart for the first time since OneShoreline was established
  - create Dir. of Project Management position to oversee project development & execution, and manage project staff
  - create the position of Flood Infrastructure Manager (within project management) to maintain District-owned assets
  - change the job title of Finance Manager to Director of Finance and Administration
- reflect an increase to the CEO's salary described in Board meeting Agenda item 4A
- allow employees – other than the CEO – to accrue vacation at a higher rate beginning in their 5<sup>th</sup> year of employment
- allow all District employees to cash out up to 40 hours of vacation per calendar year

**RECOMMENDATION: Adopt Resolution 2024-09-23-B establishing the Salary Schedule for FY 2024-25**

## **Agenda Item 4C: Amendment to add Juneteenth to Ordinance No. 1**

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- **On February 10, 2020, the Board adopted Ordinance No. 1, setting forth rules and procedures for the appointment, suspension, and termination of employment. Section 4.7, Holidays, of Ordinance No. 1 includes the list of 11 days that employees are entitled to holiday pay.**
- **Ordinance No. 1 also states “Holidays may also include every day appointed by the President of the United States or the Governor of the State of California to be a day of public mourning, thanksgiving, or holiday. The granting of such holidays shall be discretionary with the Board.”**
- **On June 17, 2021, President Biden signed a law designating Juneteenth National Independence Day as a federal holiday. Juneteenth commemorates the fact that on June 19, 1865, Union troops arrived in Texas to inform slaves that their freedom had been granted by the Emancipation Proclamation over two years earlier.**

**RECOMMENDATION: Approve Amendment to District Ordinance 1 to add an annual District holiday on June 19, known as Juneteenth**

## Agenda Item 4D: Resolution 2024-09-23-C, Proposition 4 (Climate Bond) on Nov. 5, 2024 ballot

- In January 2021, the Board authorized the CEO to support legislation placing a bond measure to fund climate resilience work on the statewide ballot. A month later, the Board adopted Resolution 2021.2.22.A, which authorized the CEO to participate in coalitions that support state bond funding.
- This year, OneShoreline supported Senate Bill 867, which became law in early July and placed on the Nov. 5, 2024 statewide ballot Proposition 4, known as the Climate Bond.
- Prop. 4 authorizes CA to sell \$10 billion in bonds to provide grants to many types of agencies, including special districts like OneShoreline, for the categories and amounts shown at right.
- Grantmaking agencies would include the State Coastal Conservancy, Dept. of Water Resources, Natural Resources Agency, State Water Resources Control Board, CA Coastal Commission, and State Parks, among others

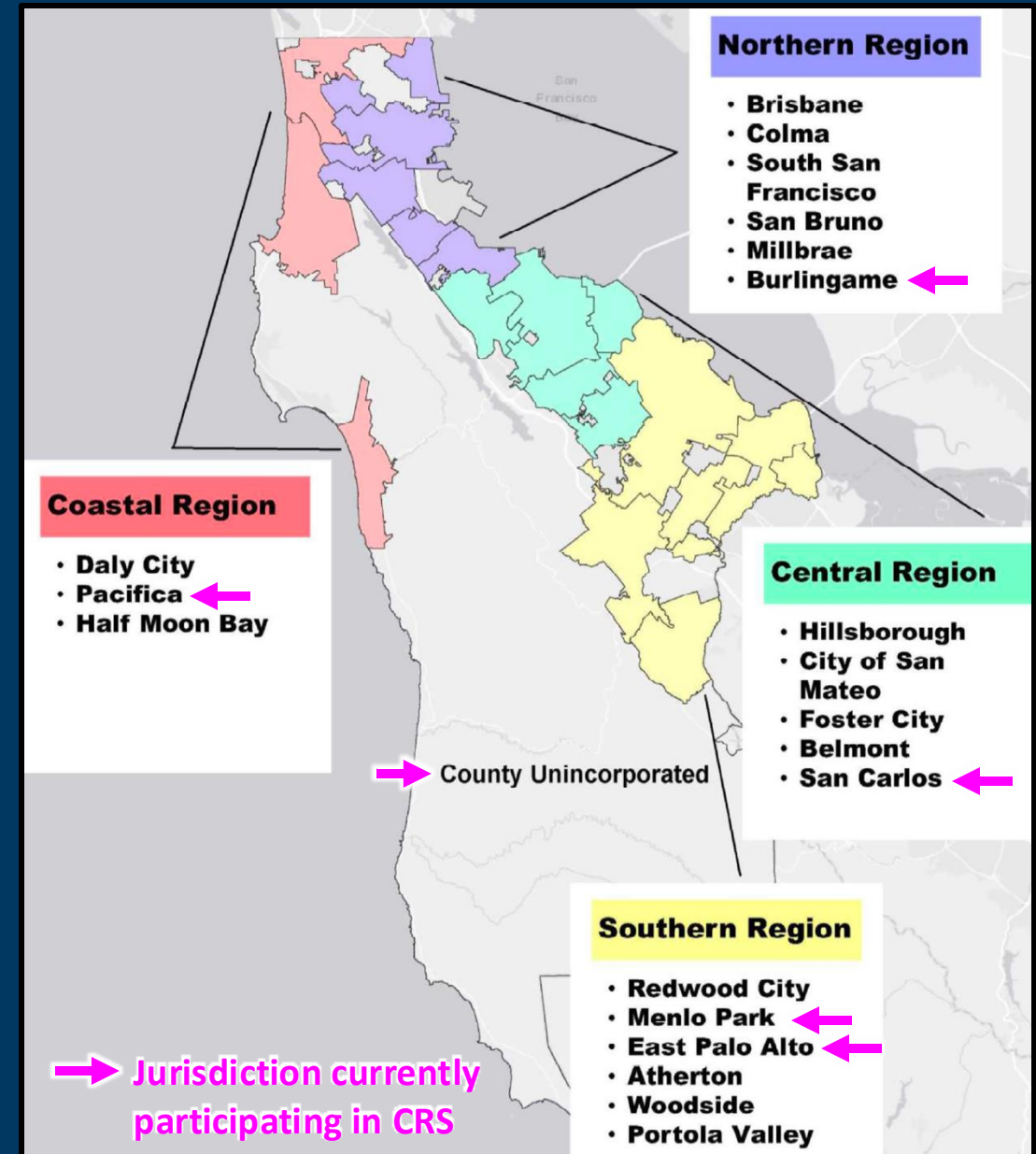
**RECOMMENDATION:** Adopt Resolution 2024-09-23-C supporting Proposition 4 “the Climate Bond” on the Nov. 5, 2024 ballot

<b>Key Goals of Proposition 4 Bond Funds</b>		
(In Millions)		
<b>Category</b>	<b>Key Goals</b>	<b>Amount</b>
<b>Drought, Flood, and Water Supply</b>	Increase the amount and quality of water available for people to use and reduce the risk of flooding.	\$3,800
<b>Forest Health and Wildfire Prevention</b>	Improve the health of forests and protect communities from wildfires.	1,500
<b>Sea-Level Rise and Coastal Areas</b>	Reduce the risks from sea-level rise, restore coastal areas, and protect fish.	1,200
<b>Land Conservation and Habitat Restoration</b>	Protect and restore natural areas.	1,200
<b>Energy Infrastructure</b>	Support the state's shift to more renewable sources of energy, such as offshore wind.	850
<b>Parks</b>	Expand, renovate, and repair local and state parks.	700
<b>Extreme Heat</b>	Reduce the effects of extreme heat on communities.	450
<b>Farms and Agriculture</b>	Help farms respond to the effects of climate change and become more sustainable.	300
<b>Total</b>		<b>\$10,000</b>

## Agenda Item 4E: Update on the District project to expand participation by local jurisdictions in the FEMA National Flood Insurance Program's (NFIP) Community Rating System (CRS)

- CRS participation reduces flood insurance premiums in communities that go beyond NFIP requirements
- San Mateo County, and 5 of the 20 cities within it, currently participate
- In September 2023, the Board authorized the CEO to execute a Measure K grant agreement with the County to, among other things, hire a consultant to support any of the 15 jurisdictions that wish to join CRS or the 6 that wish to more fully participate in CRS
- Spring & summer 2024, staff and our consultant studied local NFIP data and upcoming CRS changes

## CRS participation and OneShoreline City Board Member Regions



- August 2024 District reached out to all 20 municipalities and County soliciting interest in discussing CRS
- To date: 12 municipalities have responded, 8 presentations have been made, several expressed interest in District support

- Belmont
- Burlingame
- Daly City
- East Palo Alto
- Menlo Park
- Pacifica
- Redwood City
- San Bruno
- San Carlos
- San Mateo
- Woodside
- San Mateo County

- Average NFIP premiums are expected to continue to rise
- CRS Redesign initiative objective is to make program more accessible to communities
  - Stakeholder feedback indicated desire for updates to CRS
  - CRS alignment with larger transformations within FEMA regarding equity and climate resilience
  - US Government Accountability Office issued a report recommending CRS base ratings on actuarial evaluation

### FEMA CRS Redesign

<https://www.fema.gov/event/public-comment-period-proposed-alternatives-femas-community-rating-system>

### Schedule

- FY23 – Goals & Objectives
- FY24 – Evaluation and Alternatives
- FY25 – Implementation Plan
- FY26 – New CRS Program

## Agenda Item 4F

**Presentations by the District's 2024 Stanford Fellows, PhD students Emily Mongold on the impact of groundwater rise on liquefaction risk along the Bay shoreline, and Mavis Stone on equitable flood resilience**

**Since the summer of 2021, Stanford University graduate students have significantly contributed to OneShoreline efforts through a Haas Center fellowship. 2024 fellows included:**

### Emily Mongold (she/her)



- 4<sup>th</sup> year PhD candidate in structural engineering.
- Worked with OneShoreline to assess liquefaction risk to shoreline area flood protection infrastructure.

### Mavis Stone (they/them)



- 2<sup>nd</sup> year PhD student in Earth Systems.
- Worked to develop an online community-based flood map and assess community perspectives about green gentrification.

**At this Board meeting, Emily and Mavis will briefly present the results of their work and answer questions.**



# Liquefaction and Groundwater Considerations for Shoreline Projects

Emily Mongold  
23 September 2024

# Projects



MILLBRAE-BURLINGAME  
LIQUEFACTION ANALYSIS



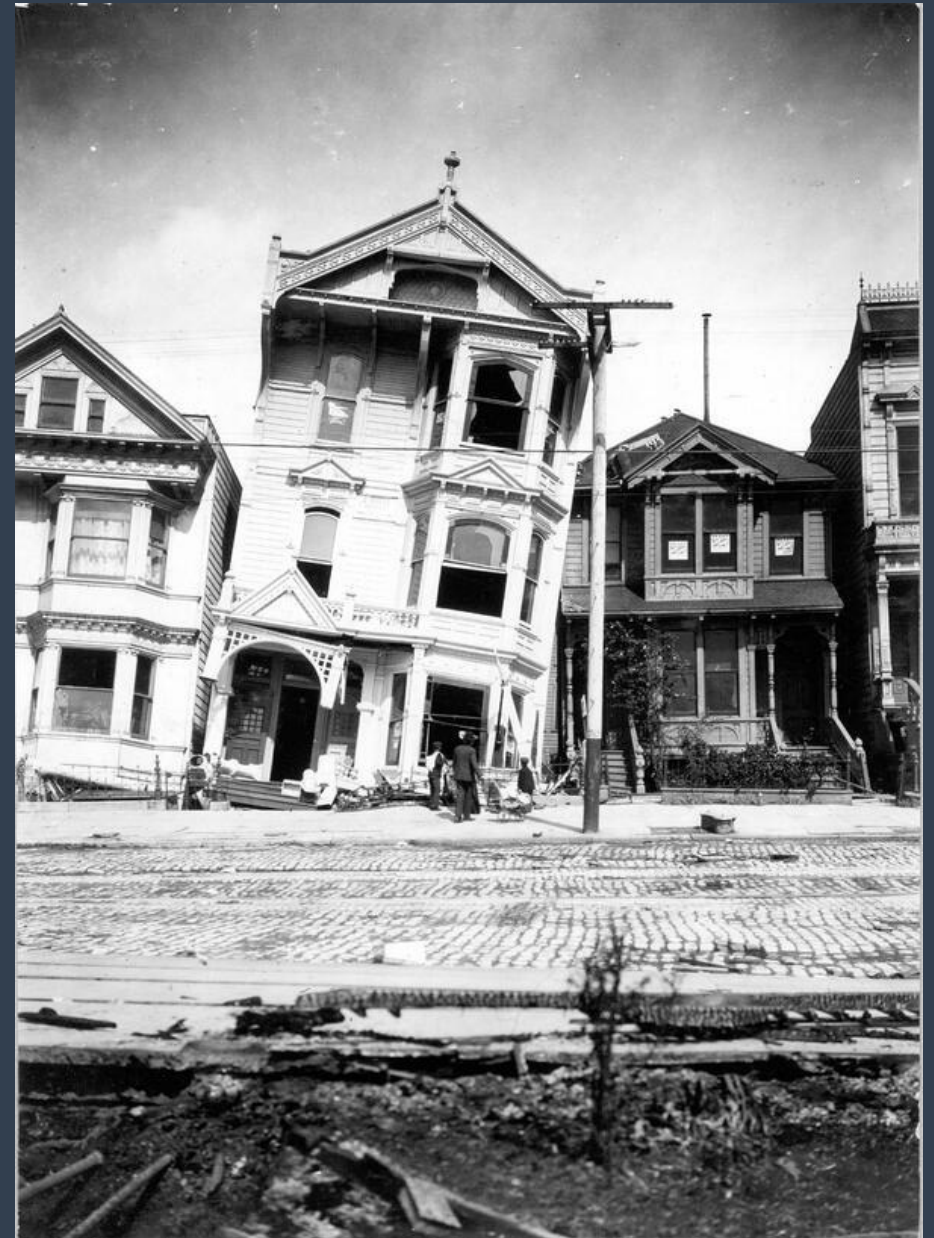
GROUNDWATER IMPACT  
LITERATURE REVIEW



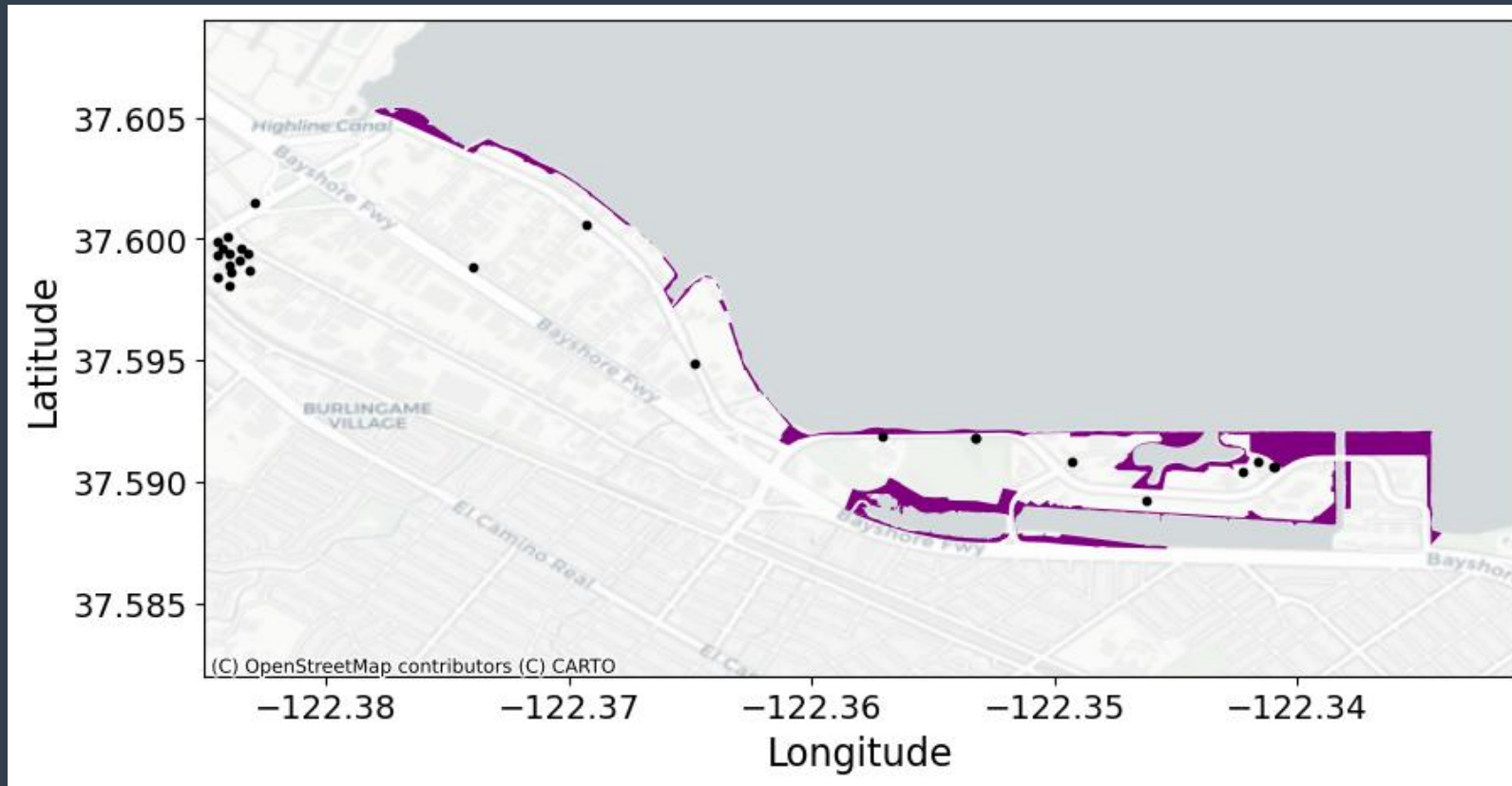
SOIL DATA COLLECTION  
TOOL

# What is liquefaction?

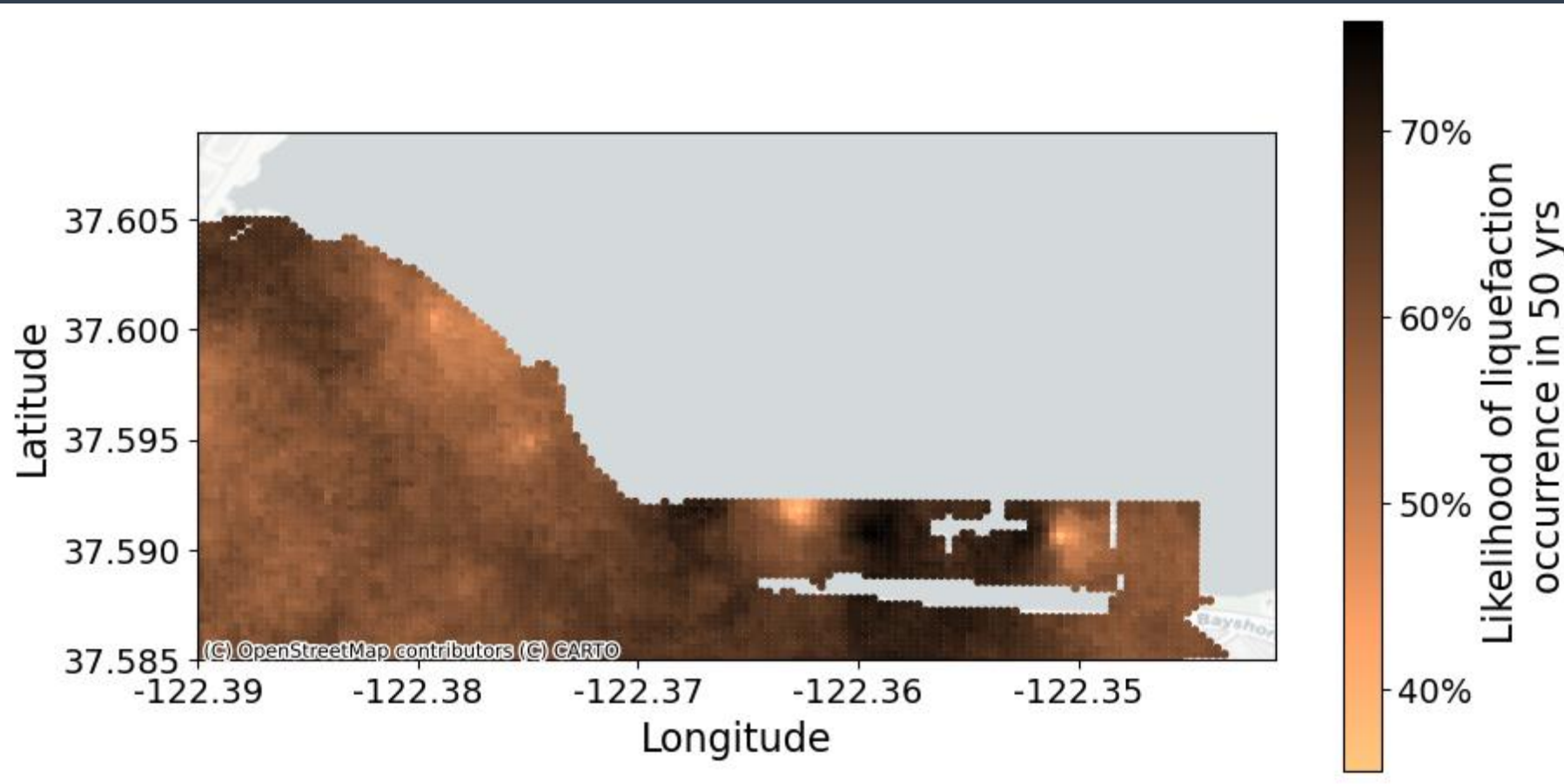
- Ground failure during an earthquake
- Damages buildings, pipes, roads, and can cause landslides
- Sandy, susceptible soil
  - Artificial fill and alluvial fan in Bay area
- Saturated soil
  - Shallow coastal groundwater table
  - Rising with sea level rise
- Strong ground shaking



# Millbrae-Burlingame Shoreline Resilience Project (MBSRP) Area

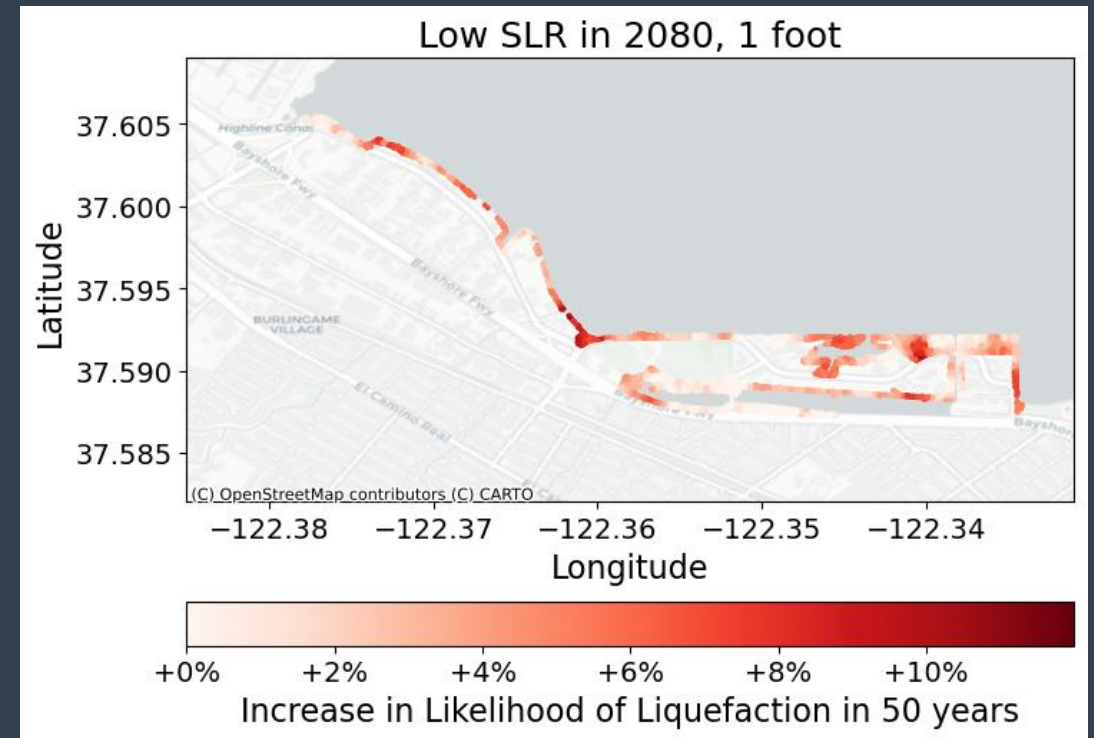
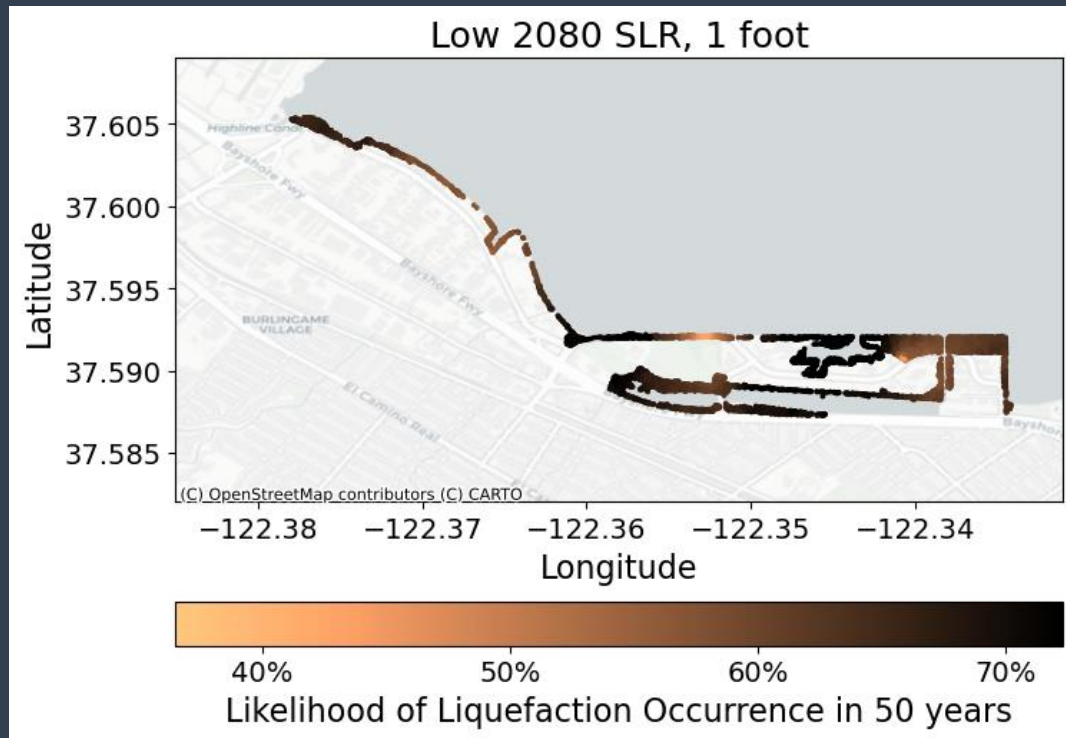


# High liquefaction hazard



There is a  
99.7%  
probability of  
an earthquake  
above  
magnitude 5.0  
in 50 years.

# Increase in liquefaction with SLR



- Liquefaction hazard continues to increase with sea level rise.

- The highest increase is on the eastern portion of the study area.

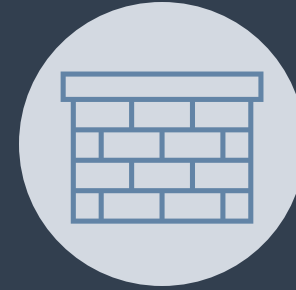
# Liquefaction Takeaways



The study area has high liquefaction hazard that continues to increase with sea level rise



The highest increase in liquefaction hazard occurs on the eastern portion of the area

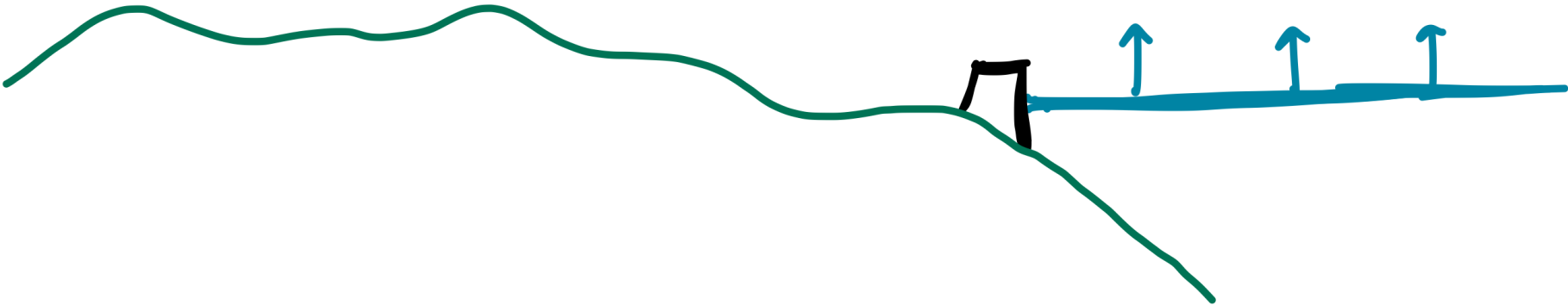


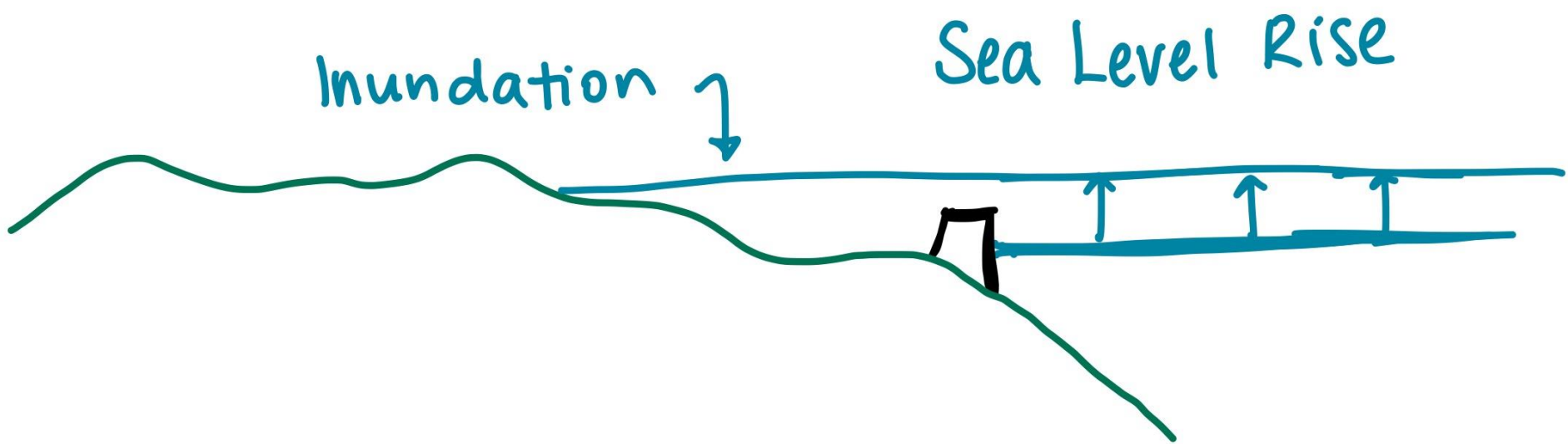
Deep pile foundations are the best solution to mitigate liquefaction risk across the alignment

Shoreline  
Protection



# Sea Level Rises

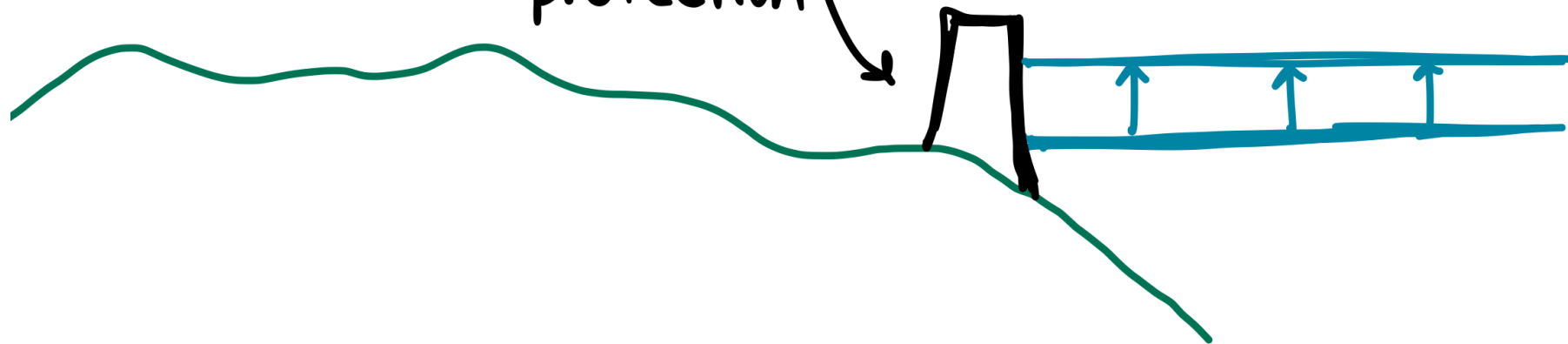




Solution:

Raise shoreline  
protection

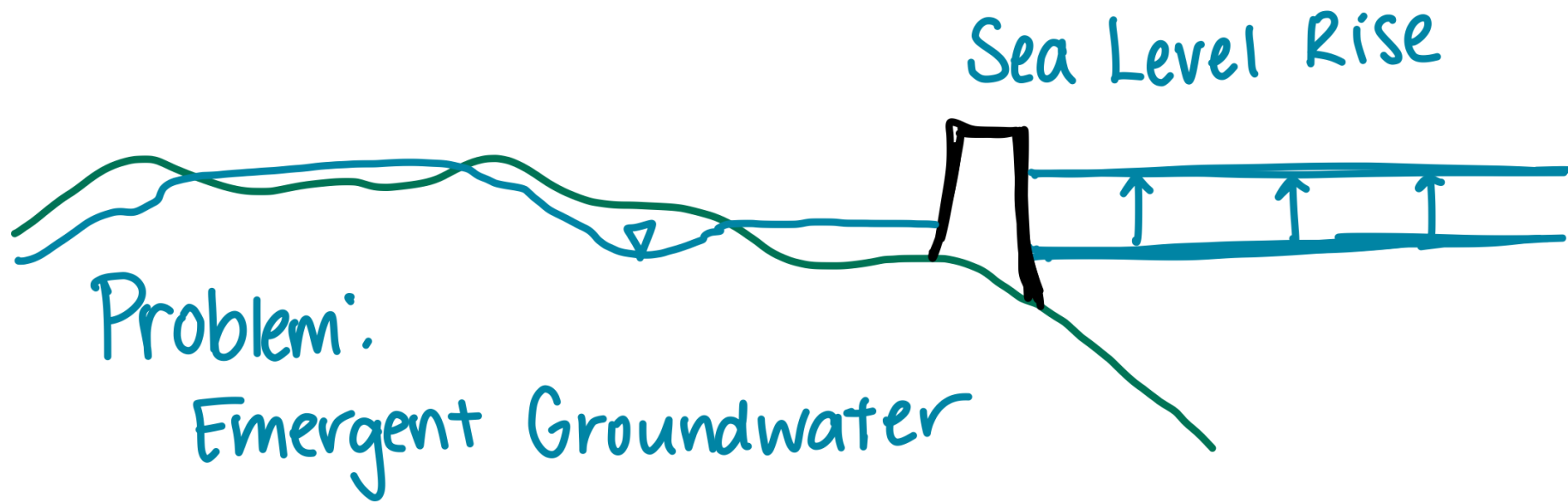
Sea Level Rise



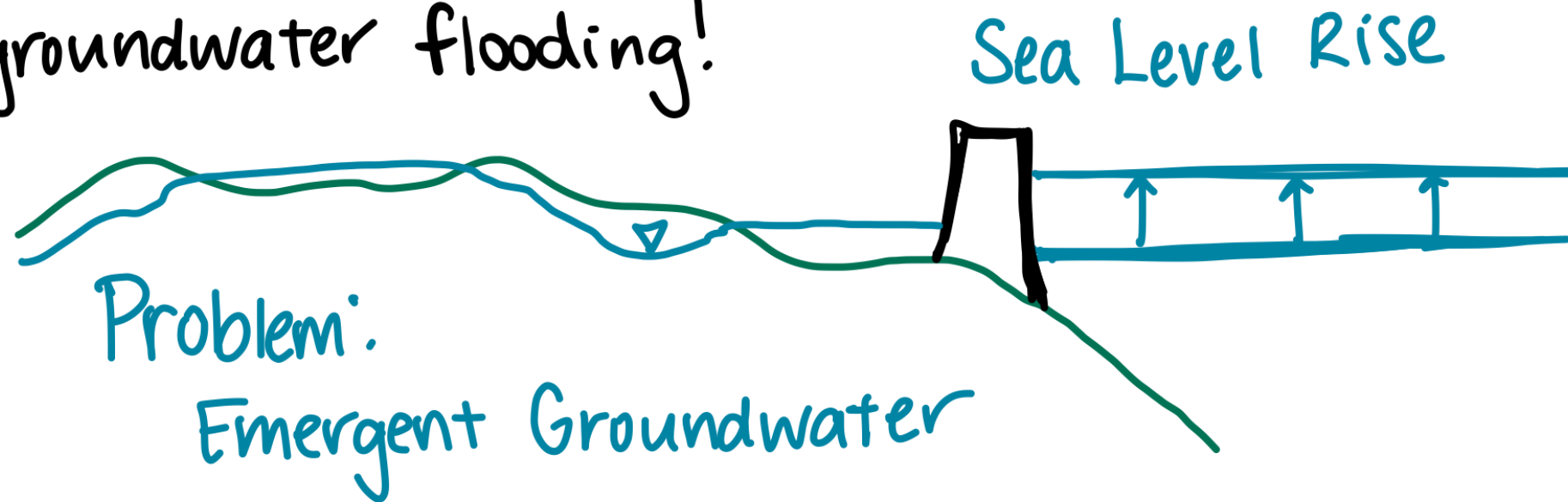
Initial Condition



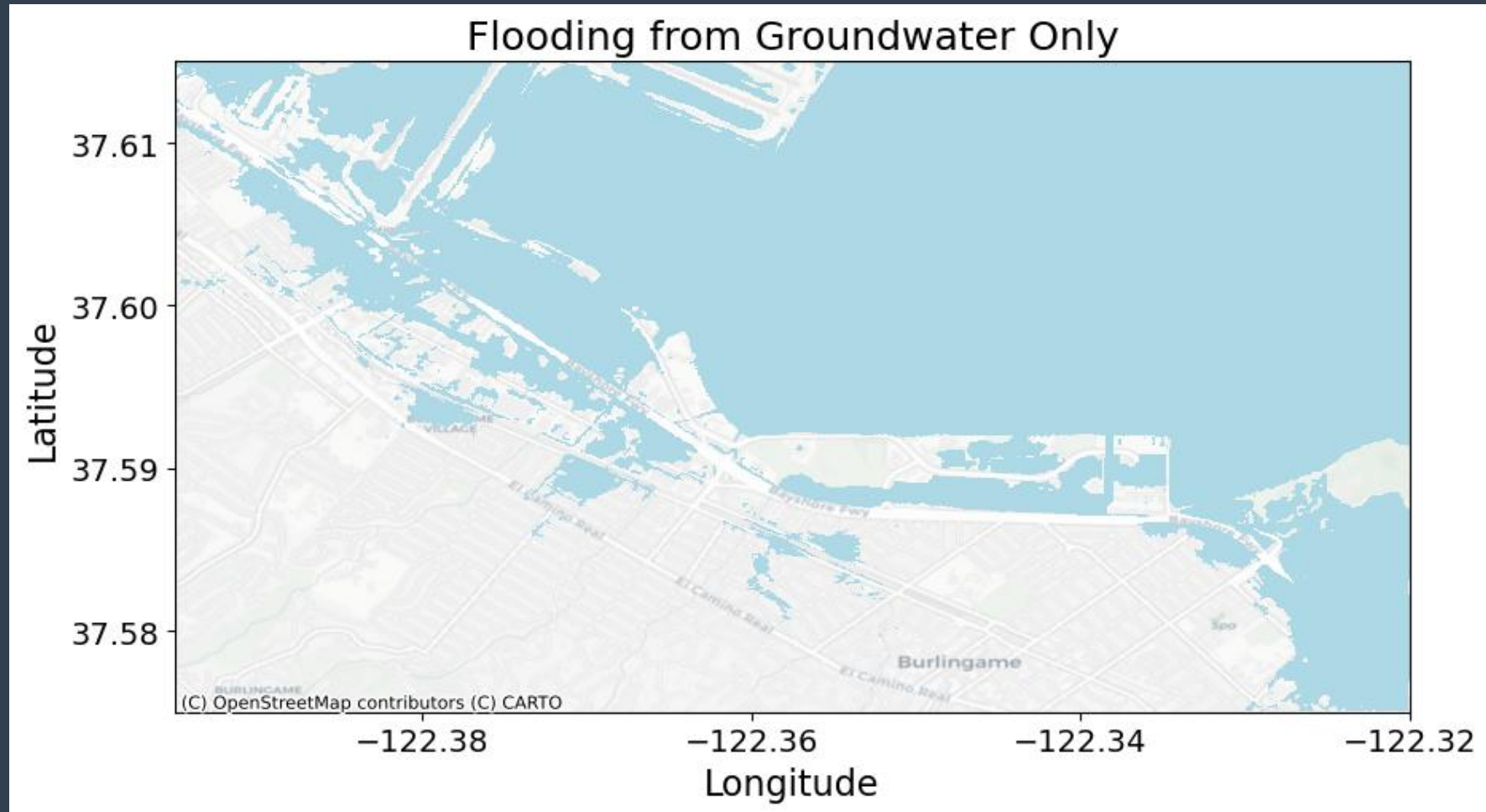
Groundwater



Shoreline protection is  
not a solution to  
groundwater flooding!



# Groundwater rise is a part of SLR



# Findings from literature review



Infrastructure at or below the ground surface are affected by shallow groundwater rise.



Rainfall-induced flooding will worsen due to decreased storm drain and infiltration capacity.



Roadways have decreased service life due to groundwater impact.



Underground parking can flood and potentially uplift.

# Recommendations for groundwater



Sea level rise resilience projects should address groundwater impacts

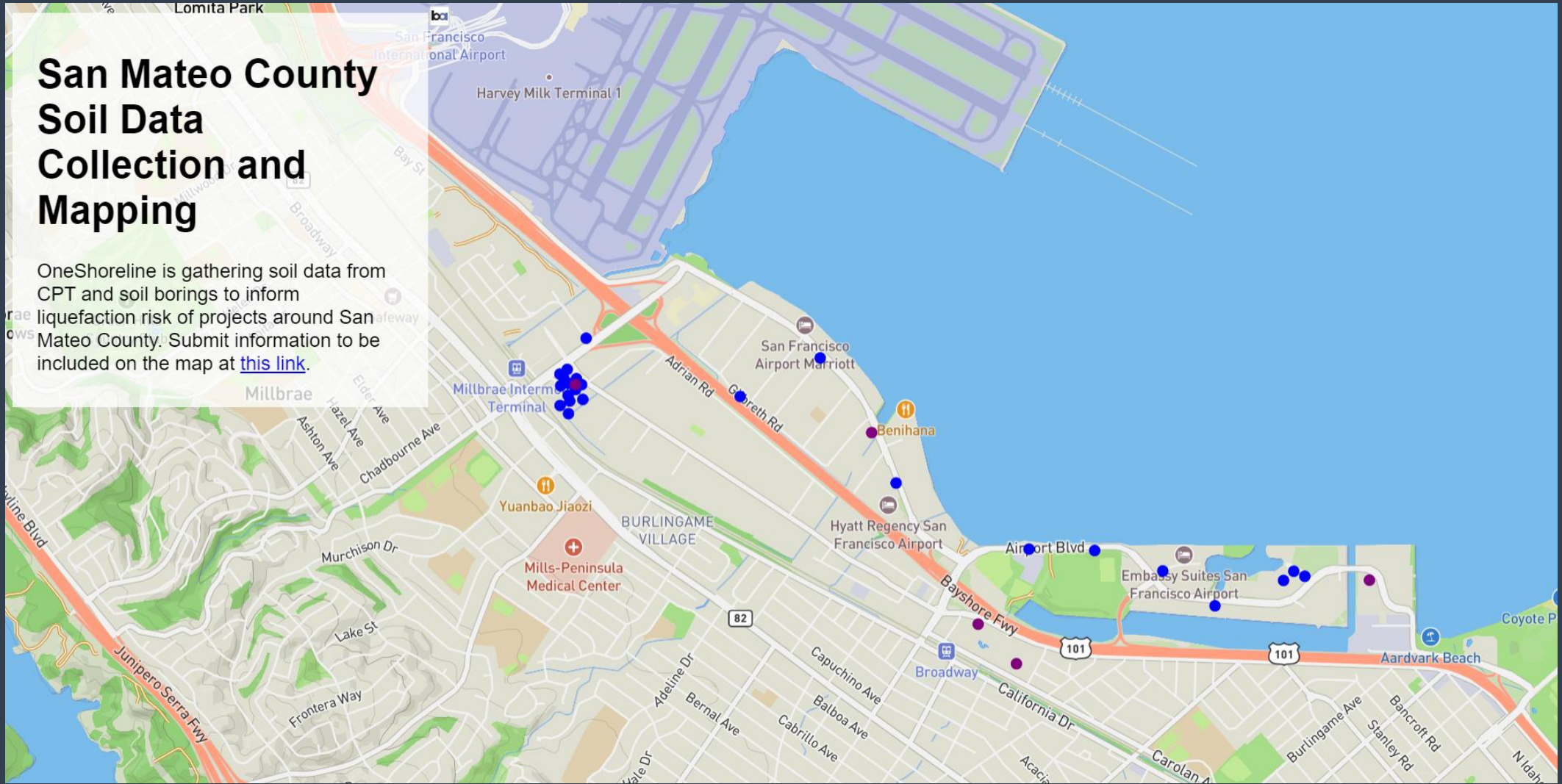


Storm drain master plans should account for increased water volumes

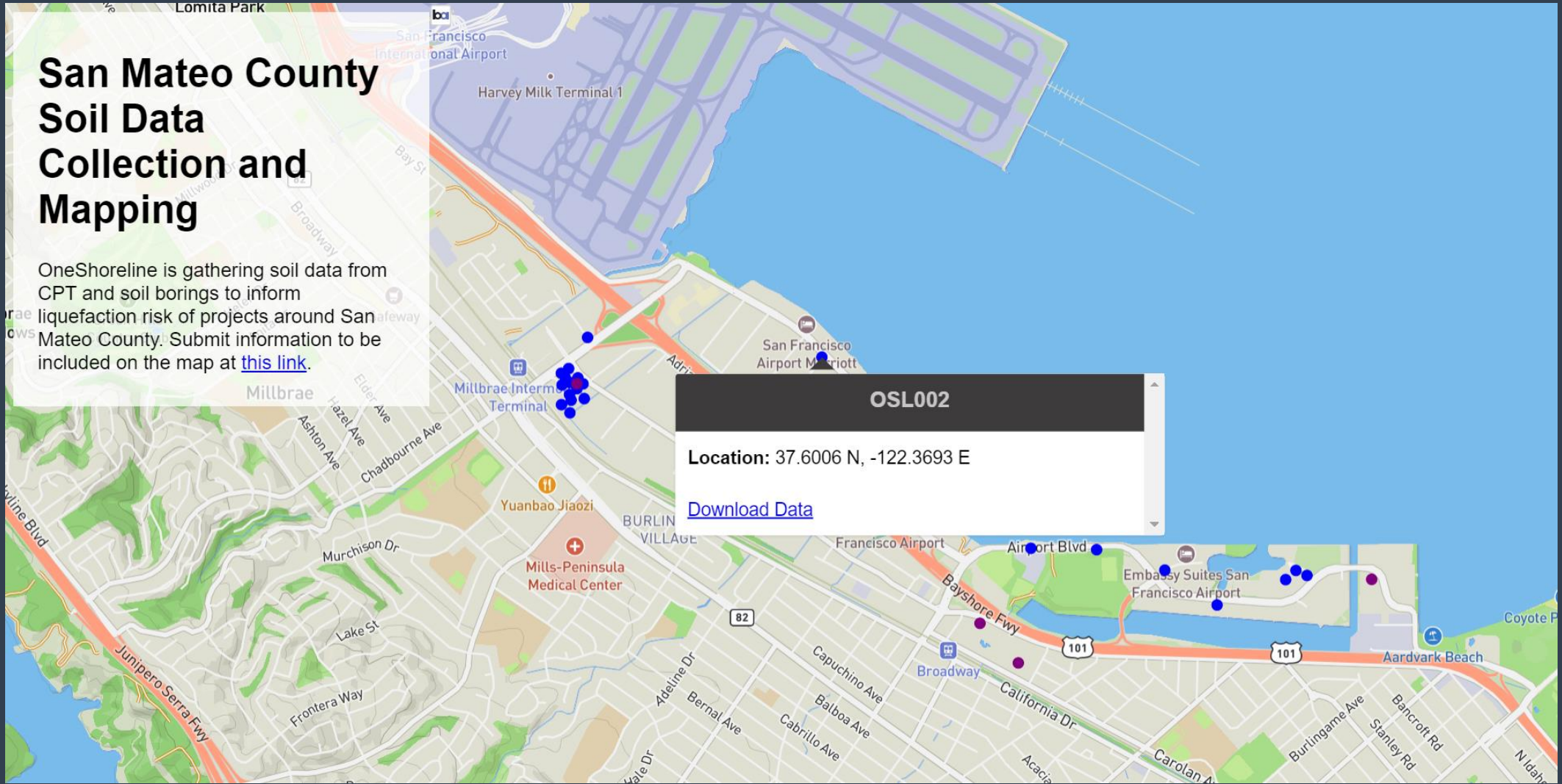


Public and private developments should account for projected sea level rise

# Soil exploration data tool



# Soil exploration data tool



# Conclusions



- Millbrae-Burlingame has high liquefaction risk that increases with sea level rise
- Deep pile foundations are preferred for this project



- To include resilience to shallow groundwater rise, stormwater capacity and storm drain functioning should be addressed



- If cities can request and publicly share soil exploration data, the soil data tool can increase our understanding of groundwater and soil conditions across the county

# Equitable Flood Resilience Pathways

*Amplifying Community Voices through Research with Impact*

Mavis Stone (they/them)

Doctoral Student

**Stanford** | **Doerr**

School of Sustainability

Earth System Science

## Preventative Measures Against Green Gentrification

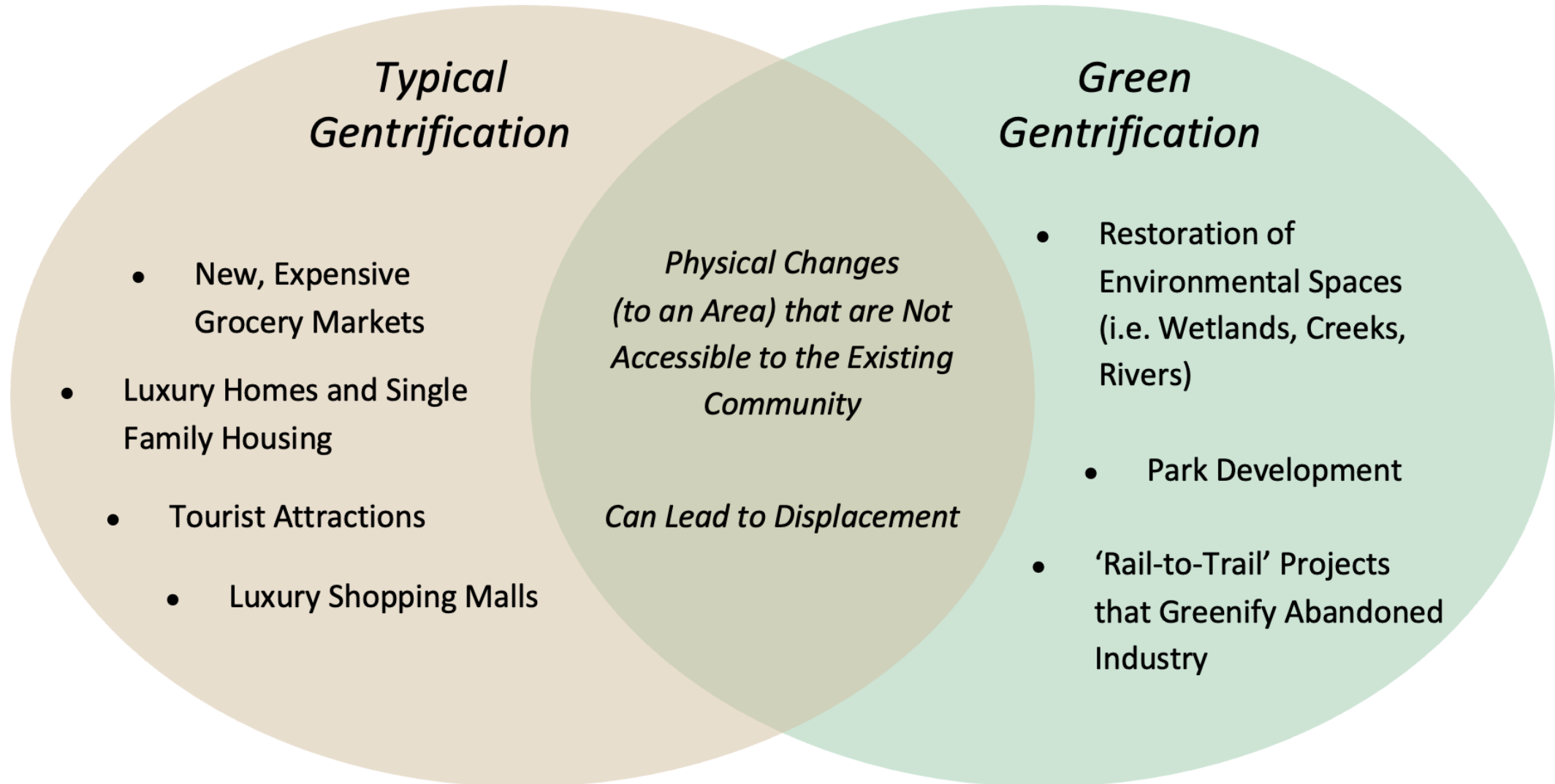
*How are Communities Preventing  
Green Gentrification?*

*How Can We Make Flood Reporting More  
Accessible?*

*How Can We Make the Flood Map Data  
More Actionable?*

## Flood Hotspot Map Improvements

# *Preventative Measures Against Green Gentrification*



# Preventative Measures Against Green Gentrification

## Methods

1



Literature Review of  
Green Gentrification

2



Interview Community  
and Government Leaders  
& Partners

3



Manually Determine  
Prevalent Themes from  
Interviews

4



Use Machine Learning (Text  
Analysis) to Identify Key  
Takeaways for Each of These  
Themes

*How are communities preventing green gentrification?*  
*Takeaways*

1

Tenant  
Protections



2

Community-led  
Greenification



*How are communities preventing green gentrification?*  
**Community-led Greenification**

2

**Community-led  
Greenification**



- **Educational Outreach**  
*Develop Communal Connection with the Local Environment*
- **Community Engagement**  
*Learn the Community's Environmental Needs*
- **Partnerships**
  - ◆ *Coordinate Events with Partners*
  - ◆ *Co-design Parks with Local Jurisdictions*
- **Community-Building**
  - ◆ *Unify Separated Neighborhoods*
  - ◆ *Involve the Youth*

*How are communities preventing green gentrification?  
How One Shoreline Can Assist These Efforts*



- **Develop Advisory Committee**
- **Address Intermittent Community Needs While Completing Lengthy Projects**

*How are communities preventing green gentrification?  
How One Shoreline Can Assist These Efforts*

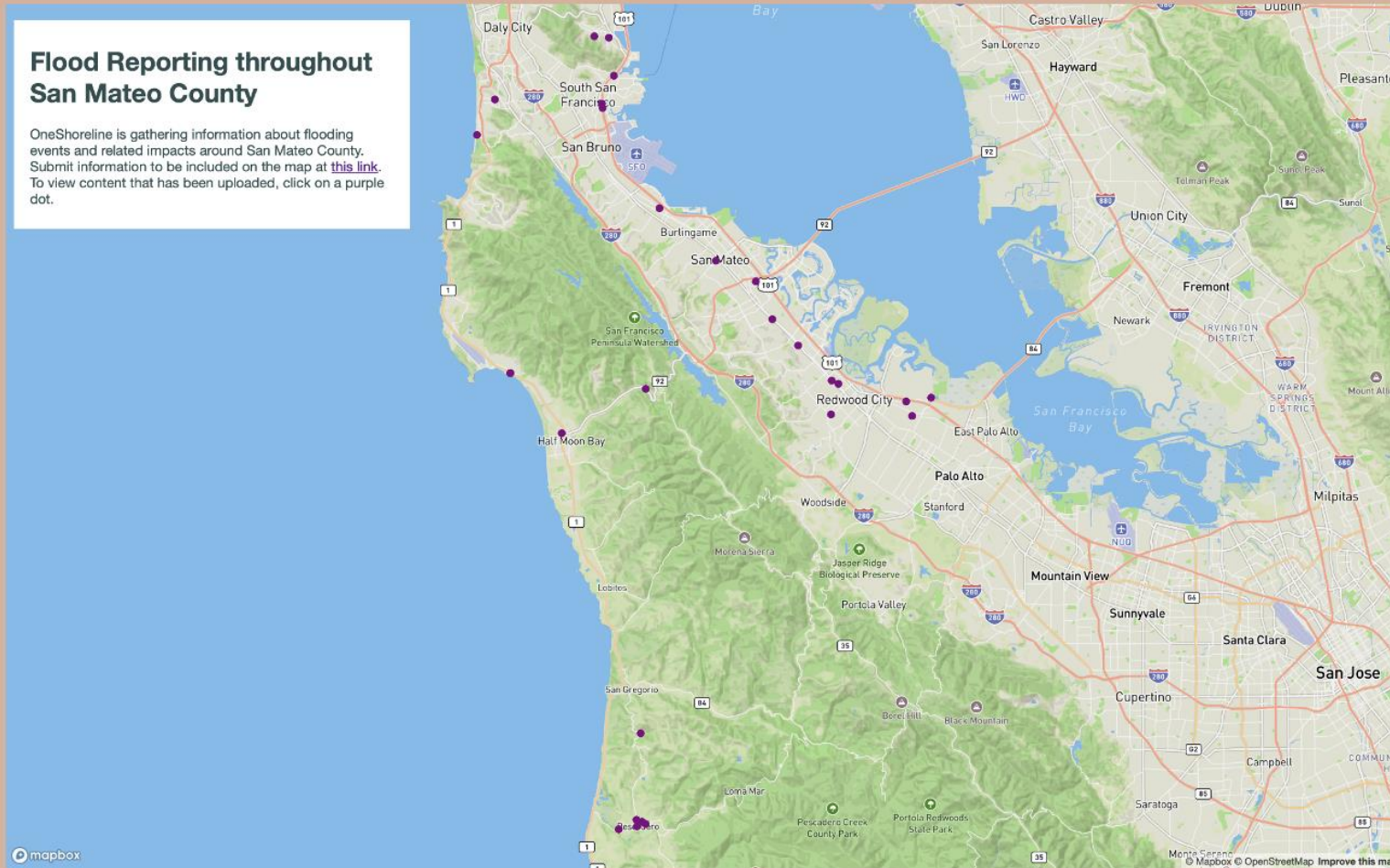


“The electrolyte tabs [help] heat exhaustion...**an elder or somebody that's sick, here are some small items that can actually improve your life right now**, so we look at things like that because, for me, that's most important right now because it's taking too long to get everything else. **You need a permit if you wanna put a heat pump in. You need a contractor or somebody to install it. That's a process that may take six months to a year, but an extra heat kit can change someone's life in that moment.”**

# Flood Hotspot Map Improvements

## Flood Reporting throughout San Mateo County

OneShoreline is gathering information about flooding events and related impacts around San Mateo County. Submit information to be included on the map at [this link](#). To view content that has been uploaded, click on a purple dot.



# Flood Hotspot Map Improvements



**I SEE CHANGE**  
COMMUNITY CLIMATE & WEATHER JOURNAL



# Flood Hotspot Map

## *How will it work?*

1



Community members submit flood images and experiences through the ISeeChange forum

2



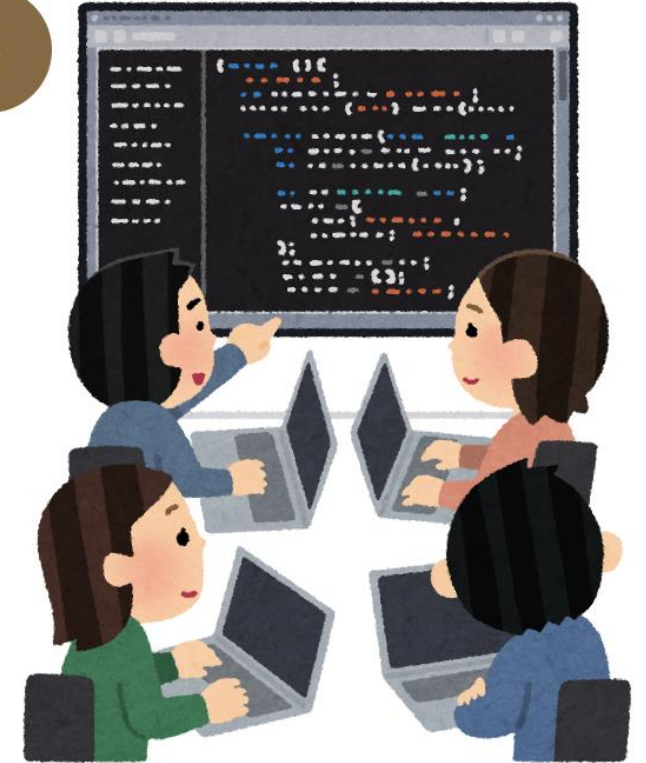
[ESA](#)



[ABC](#)

Use submitted flood images, satellite imagery, sensors and metadata to develop flood map

3



Validate map

Questions?

## **Agenda Item 6 CEO's Report: Oct. 24 Flooding Workshop in San Bruno's Belle Air Neighborhood**

**On Thursday, October 24 at 6:00pm at Belle Air Elementary, OneShoreline, Rise South City, and Climate Resilient Communities are hosting a workshop on flooding in the Belle Air neighborhood.**

**We will share findings from listening sessions and site walks with neighbors over the past winter, and plan for future winters.**

**This outreach lays the foundation for ongoing projects, including:**

- **OneShoreline's work to update the San Bruno Creek watershed model and assess the climate-readiness of our infrastructure.**
- **OneShoreline's FEMA-funded regional project planning along the shoreline between the Colma and San Bruno Creek outlets, and along San Bruno Creek.**
- **C/CAG's OneWatershed project to develop a first-of-its-kind framework to measure shared climate risk to sewer, water, and stormwater infrastructure in the San Bruno watershed.**





**Next Scheduled Board meeting**

**October 28, 2024 at 4:00 PM**