

An aerial photograph of a bay and city skyline at sunset. The sky is a mix of orange, yellow, and blue. The city skyline is visible in the distance, with a bridge spanning the bay. The foreground shows a hillside with trees and a road.

Resilient Communities in an Unstable Climate

Adapting to Sea Level Rise
and Worsening Storm Events
in Planning Equitable Communities

Agenda

Introduction: Climate Change and Vulnerable Communities

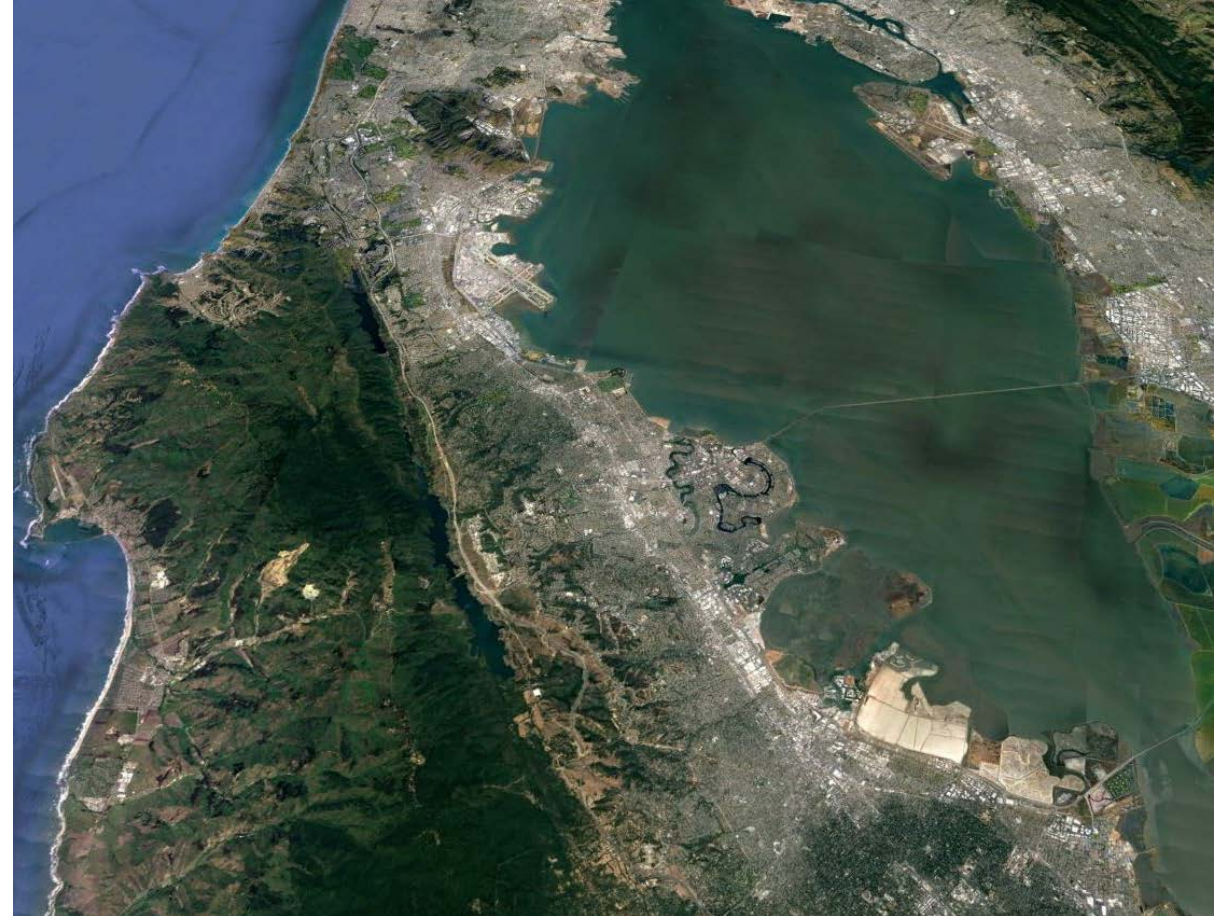
- Moderator: Cheryl Brown, Save The Bay

Panelists

- Ofelia Bello, Youth United For Community Action (YUCA)
- Richard Mullane, HASSELL
- Dave Pine, San Mateo County Supervisor

Panelist Q&A

Audience Discussion



An aerial photograph of a coastal city and bay. The city is built on a peninsula and extends into the bay. The water is a deep blue-green color. The surrounding land is a mix of green hills and urban development. The text "Who's in the room?" is overlaid in white at the top left. The logo "SAVE THE BAY" is in the bottom right corner.

Who's in the room?

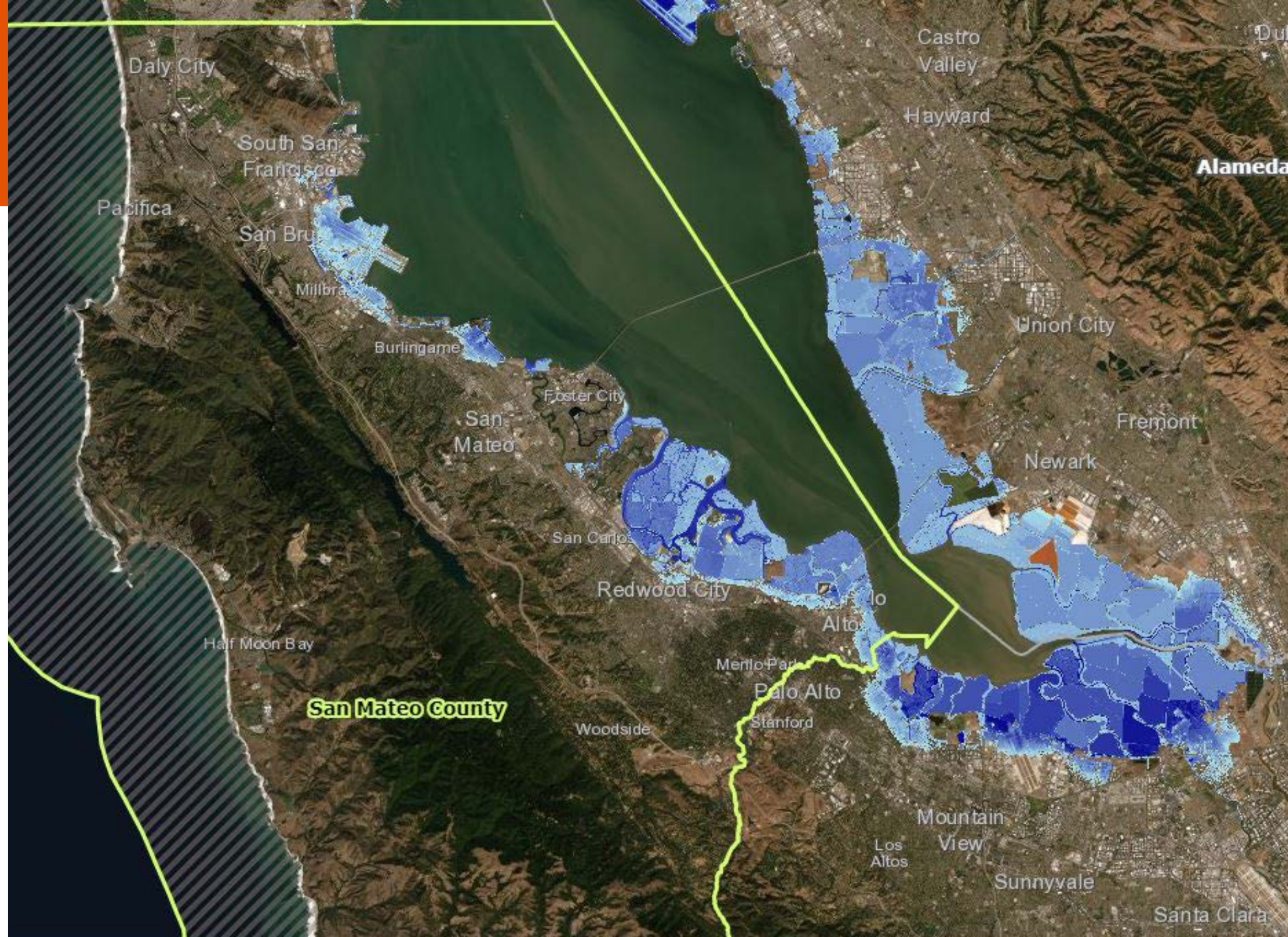
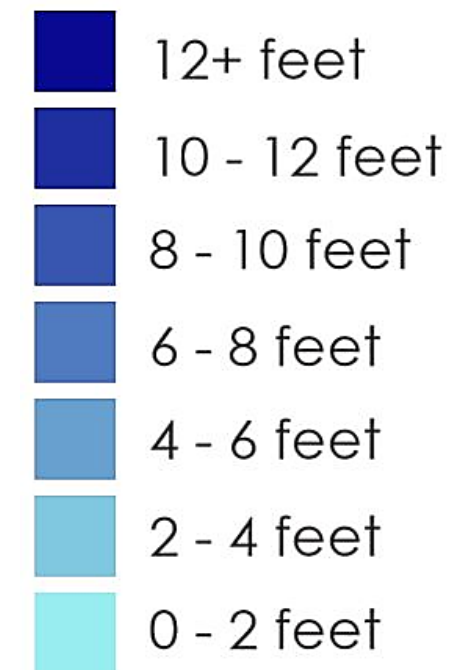
SAVE THE BAY

San Mateo County



Sea Level Rise in San Mateo County

30 year SLR projection with expected flooding during a 5 year storm event

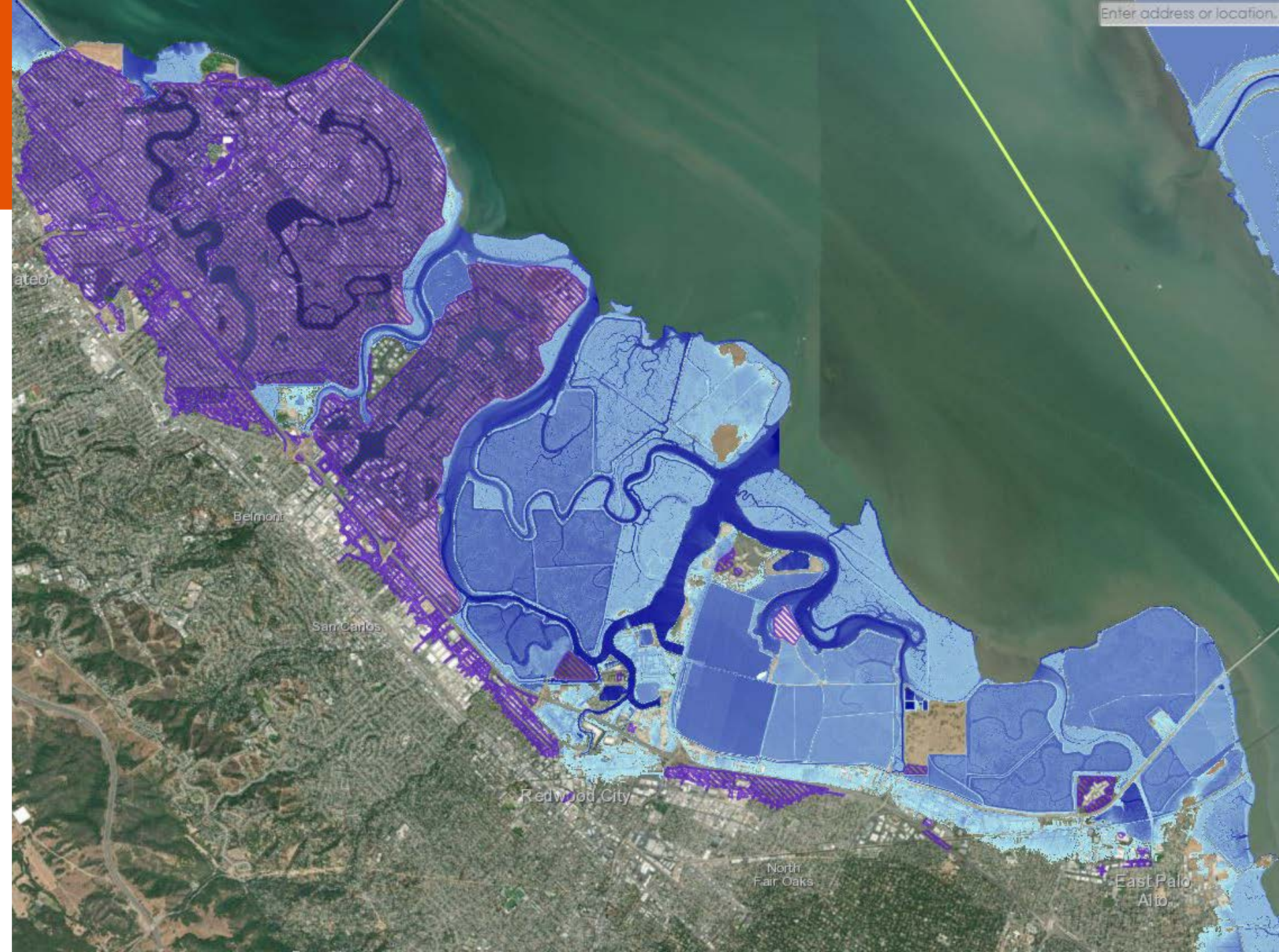


Inland Flooding

Purple areas show flooding and blue shows inundation from the Bay.




Most current upstream infrastructure has not been upgraded to handle expected high-intensity storms.

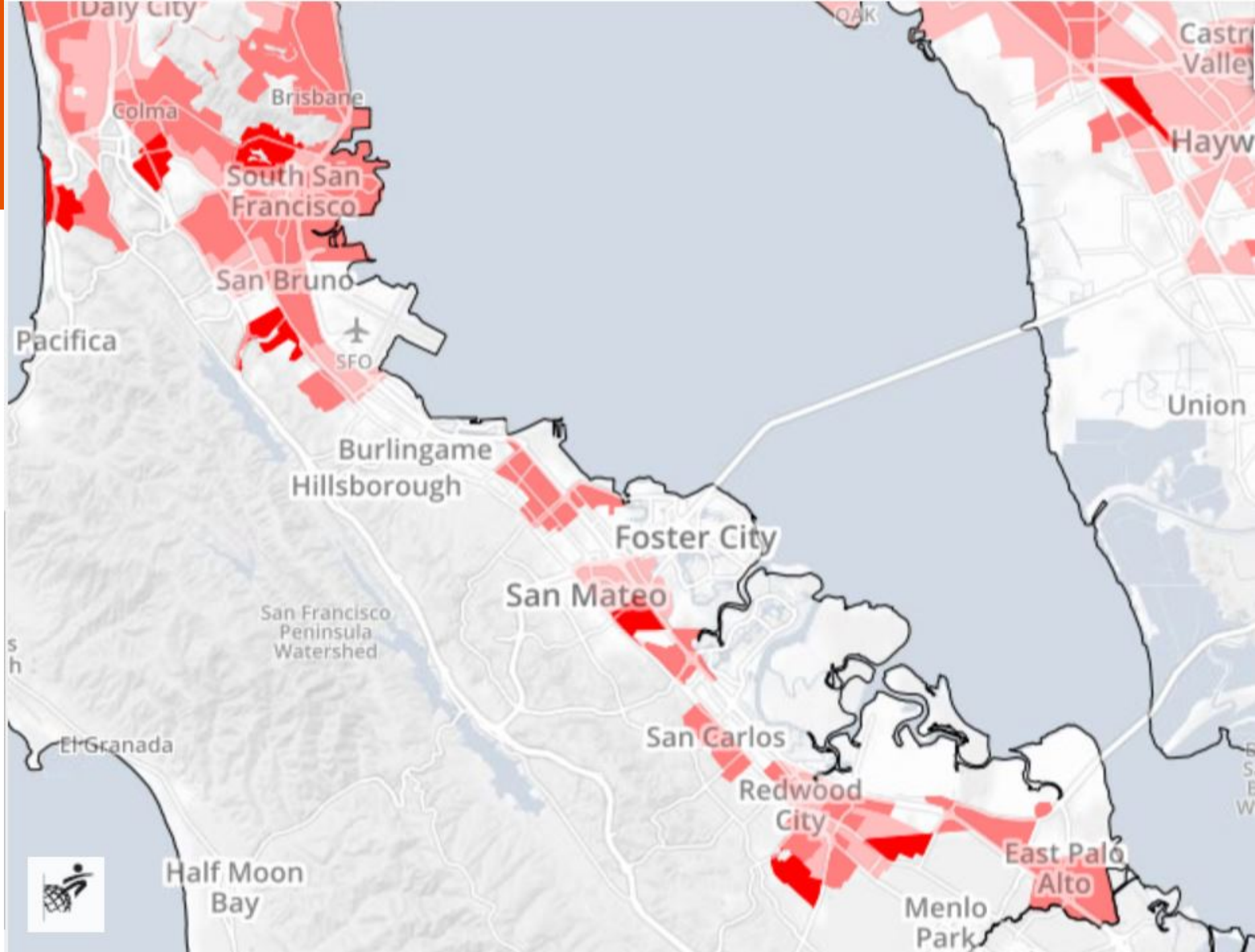
- 12+ feet
- 10 - 12 feet
- 8 - 10 feet
- 6 - 8 feet
- 4 - 6 feet
- 2 - 4 feet
- 0 - 2 feet
- Low-lying Area



Degree of Gentrification and Gentrification risk




Displacement Typologies

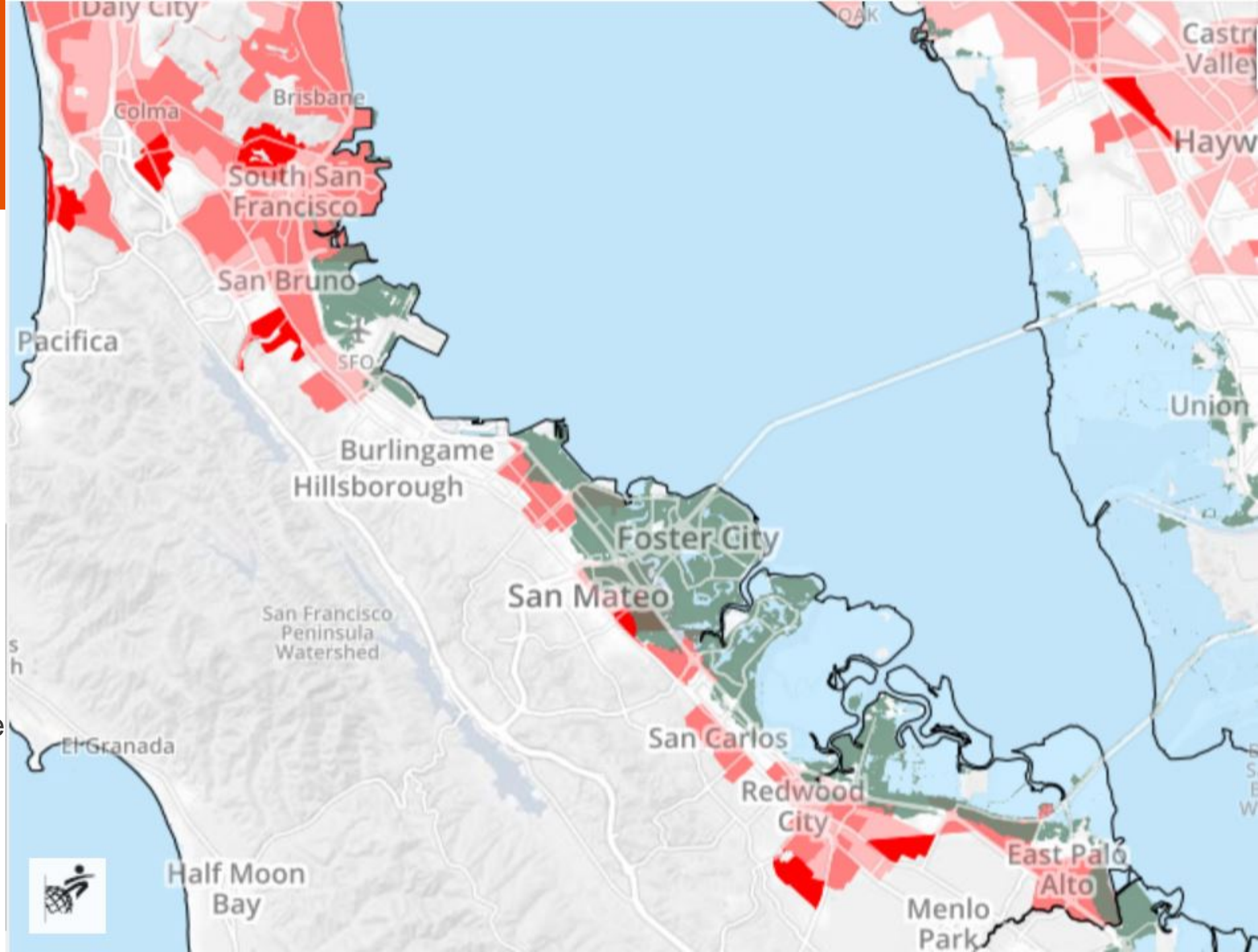
-  Advanced Gentrification
-  Ongoing Gentrification and/or Displacement
-  At Risk of Gentrification and/or Displacement



Likely Water-Related Hazard Zones

Displacement Typologies and 20 in. SLR + 100 Year Storm

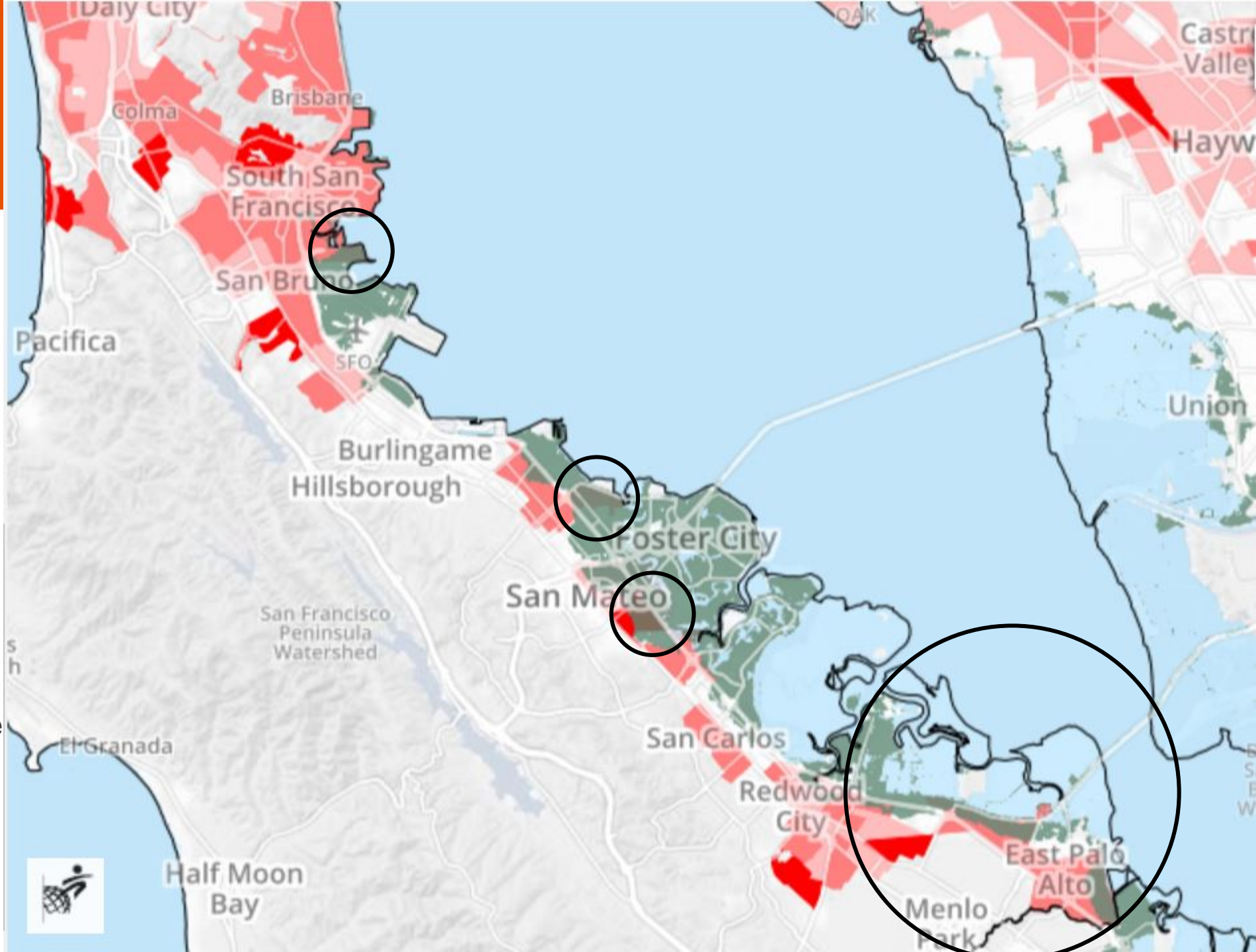
-  Advanced Gentrification
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-  Inundation of Natural or Semi-Natural Infrastructure
-  Inundation of Developed Infrastructure



Likely Water-Related Hazard Zones

Displacement Typologies and 20 in. SLR + 100 Year Storm

-  Advanced Gentrification
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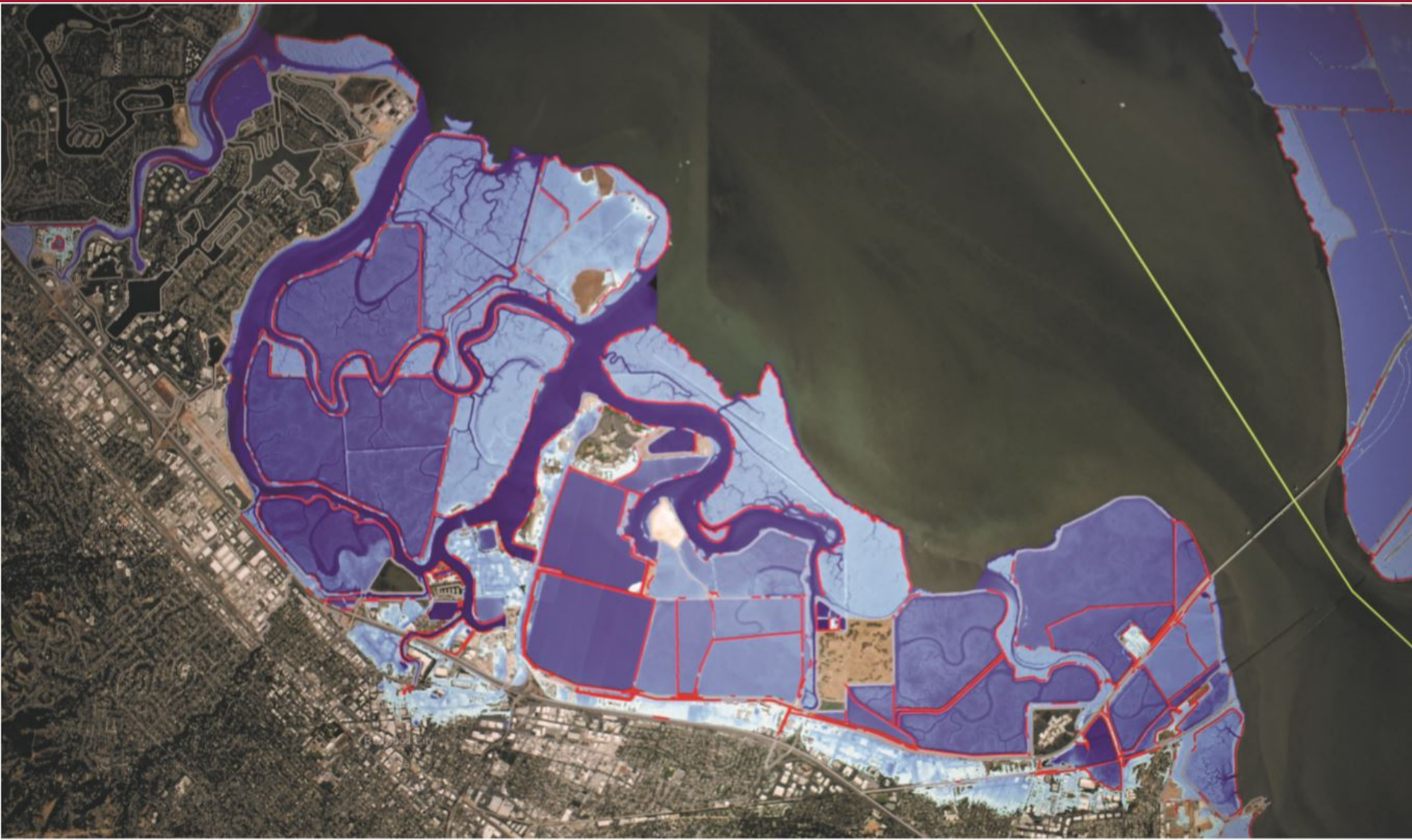


Redwood City – Case Study

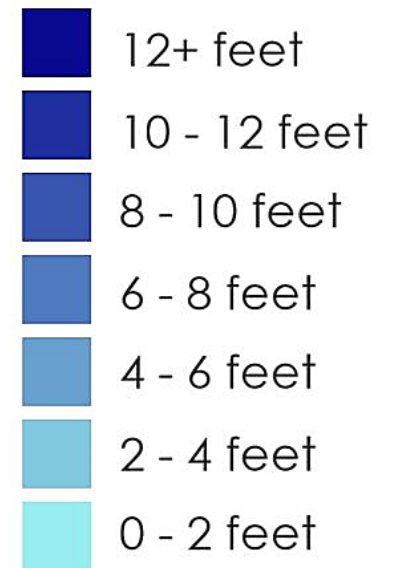


- Cargill Salt Ponds
- Not currently zoned for housing, but a proposal may be in the works

Redwood City Salt Ponds – 36" Sea Level Rise



30 year SLR projection with expected flooding during a 5 year storm event



Redwood City – Mobile Home Parks



- Providing crucial affordable housing
- Located directly behind Cargill
- Chronic flooding during storm events

Redwood City – What is and could be done

- Bayfront Canal and Atherton Channel Flood Management and Restoration Project
- Tide gate structure, trash capture device, and an underground canal diverting water to South Bay Salt Pond Restoration Project



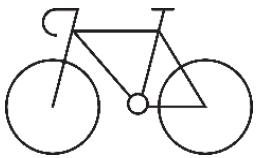
Restoration Sites in South San Mateo County



Bay Smart Ways for Communities to Develop



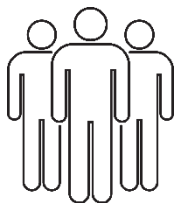
Protect waterways and enhance freshwater resources through green stormwater infrastructure, urban canopy, and sustainable landscaping practices.



Invest in bicycle, pedestrian, and public transit infrastructure to reduce roadway runoff, greenhouse gases, and particulate emissions.



Prevent displacement and enable access to the Bay shoreline.

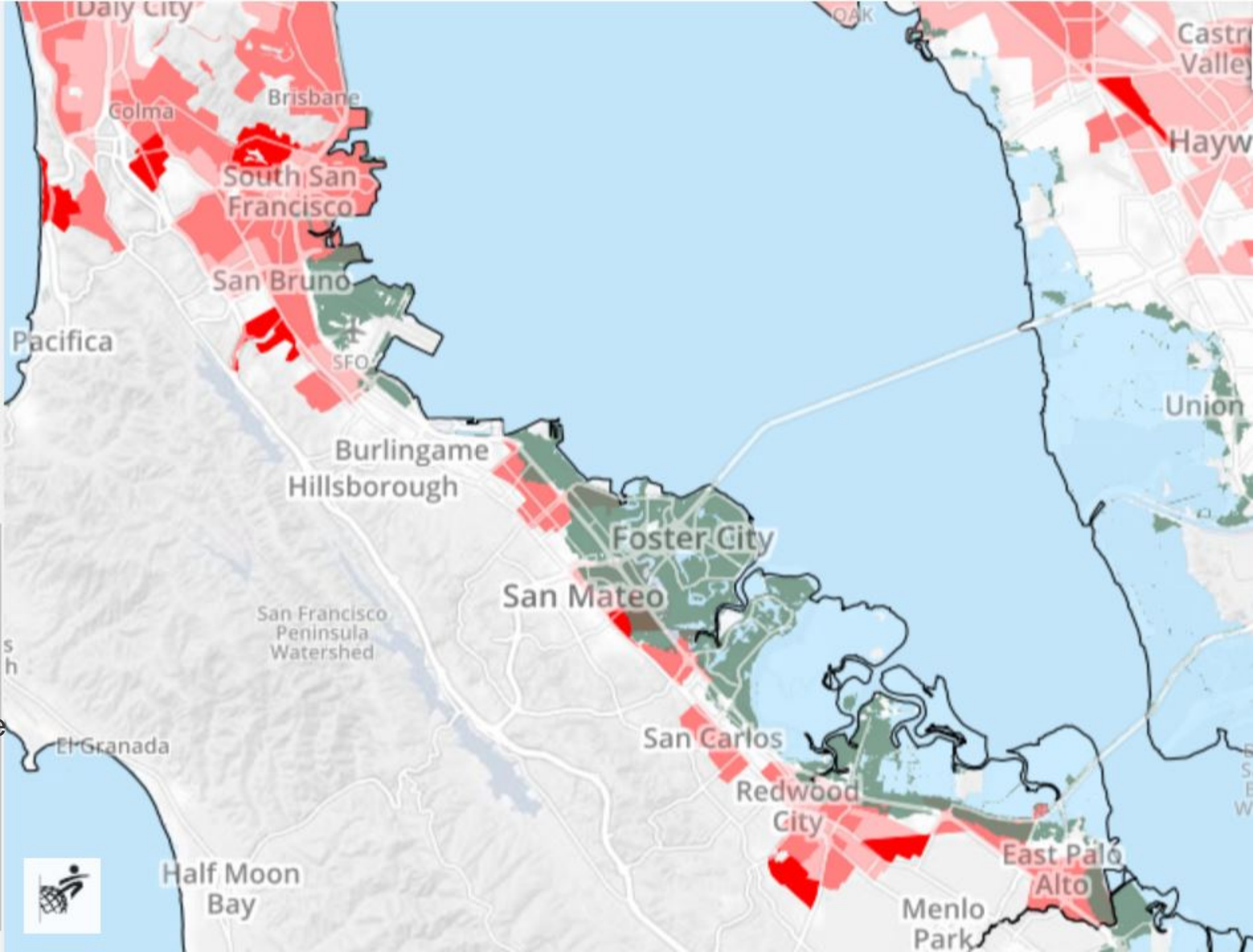


Promote environmental justice and facilitate equitable and inclusive infrastructure planning.

Panel:
Resilient
Communities in an
Unstable Climate

Displacement
Typologies and 20 in.
SLR + 100 Year Storm

- Advanced Gentrification
- Ongoing Gentrification and/or Displacement
- At Risk of Gentrification and/or Displacement
- Inundation of Natural or Semi-Natural Infrastructure
- Inundation of Developed Infrastructure



Maps courtesy of Bay Area Greenprint:
<https://www.bayareagreenprint.org/report/>

Ofelia Bello

Executive Director, Youth United for Community Action (YUCA)



YUCA Youth United for Community Action



Youth United for Community Action



Ofelia Bello
Executive Director

Mission

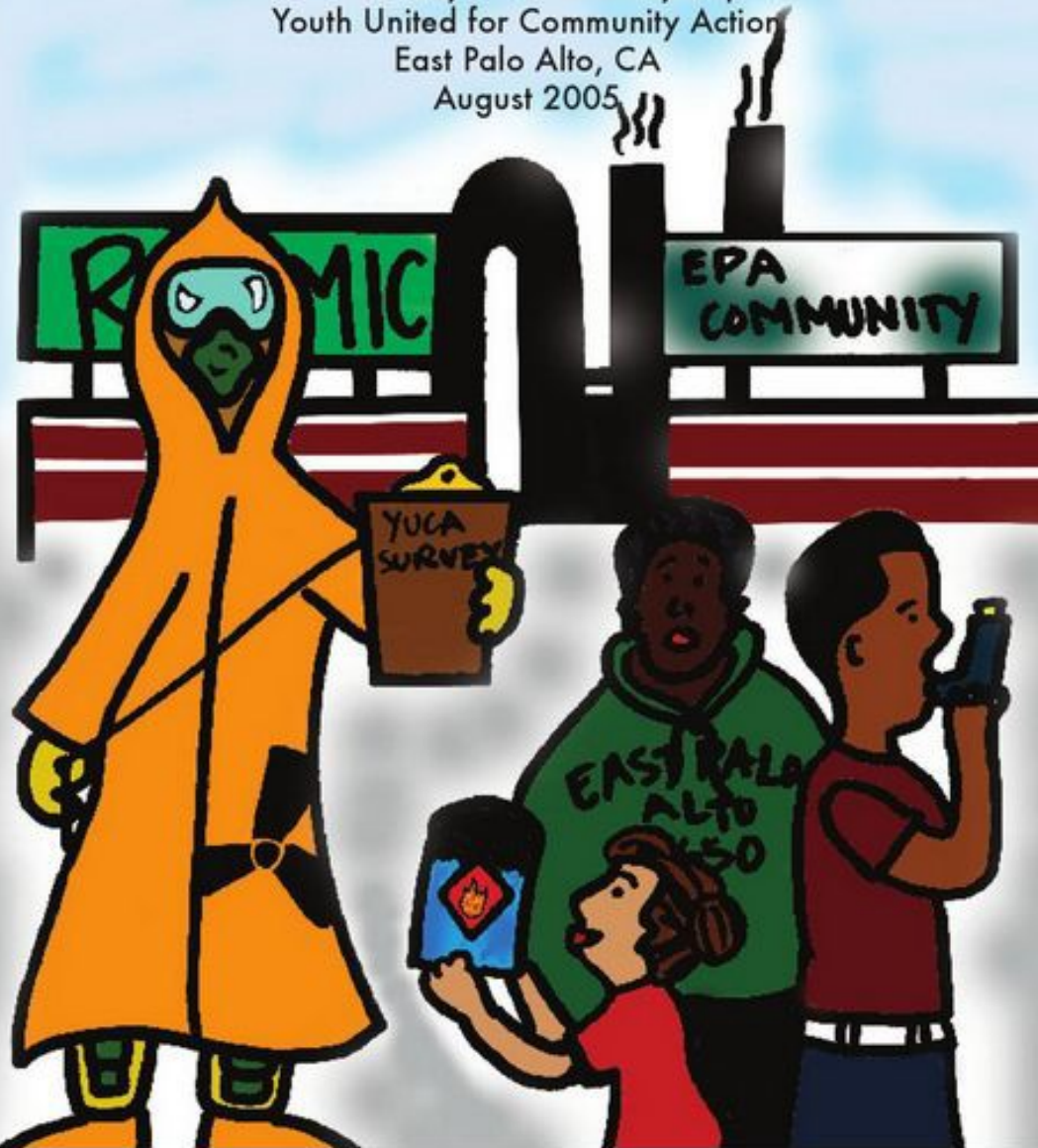


- Youth United for Community Action (YUCA), is a grassroots community organization *created, led, and run by young people of color*, primarily from low-income communities. YUCA provides a safe space for young people to empower ourselves and work on environmental and social justice issues to establish positive systemic change through grassroots community organizing.

You Think You Know...
But You Have No Idea

The Diary of Our Health

A Community Health Survey Report
Youth United for Community Action
East Palo Alto, CA
August 2005



Water & Sea Level Rise

Scope of work:

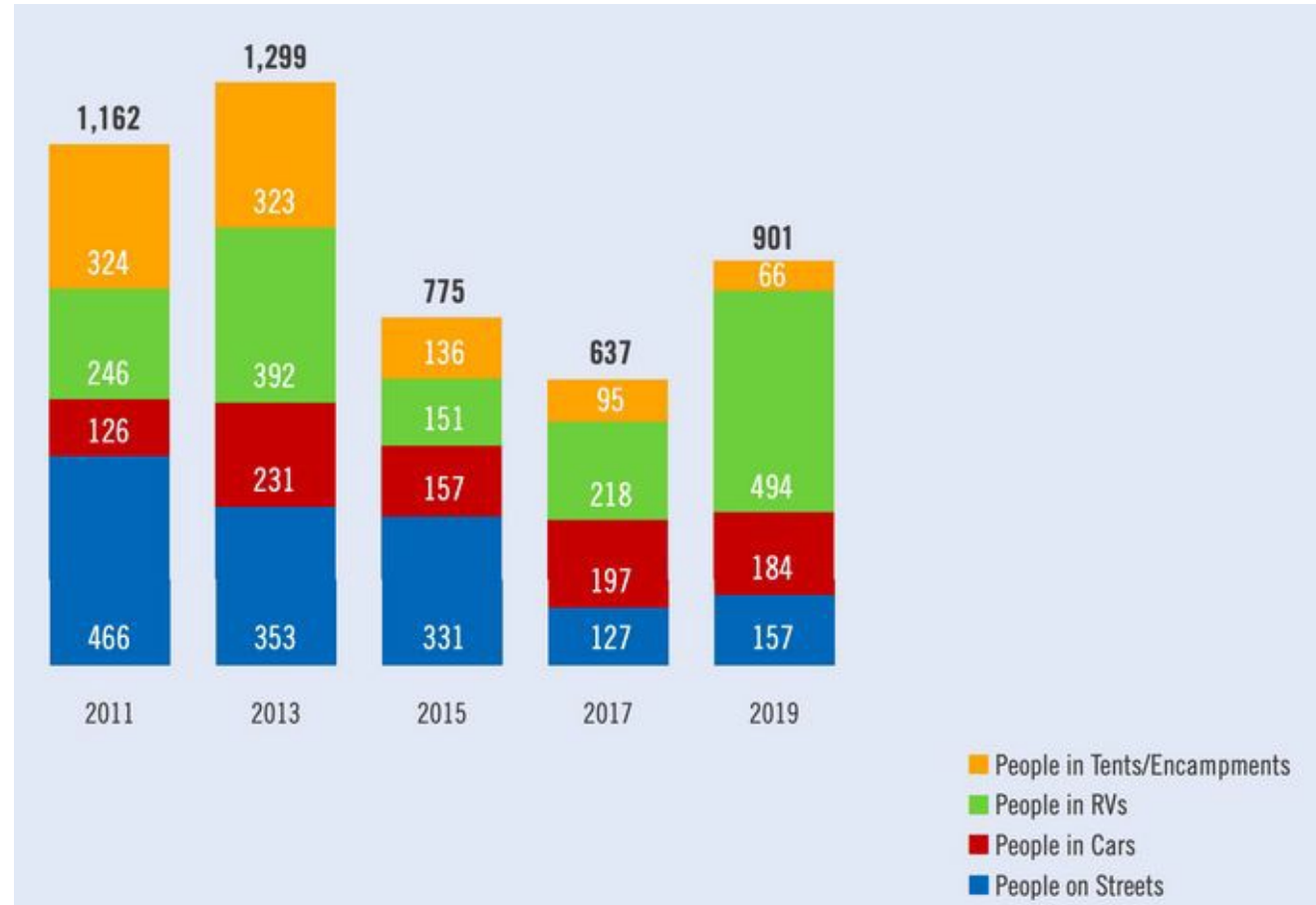
- Educate community on climate change & sea level rise
- Increase community capacity
- Identify community-based adaptation strategies



Water & Sea Level Rise

Findings:

- Topics of highest concern: housing instability, water quality, lack of income, access to healthcare
- Community desires more education



Uneven Ground: How unequal land use harms communities in southern San Mateo County, Kate Bradshaw (2019)

Connecting today to Climate Change

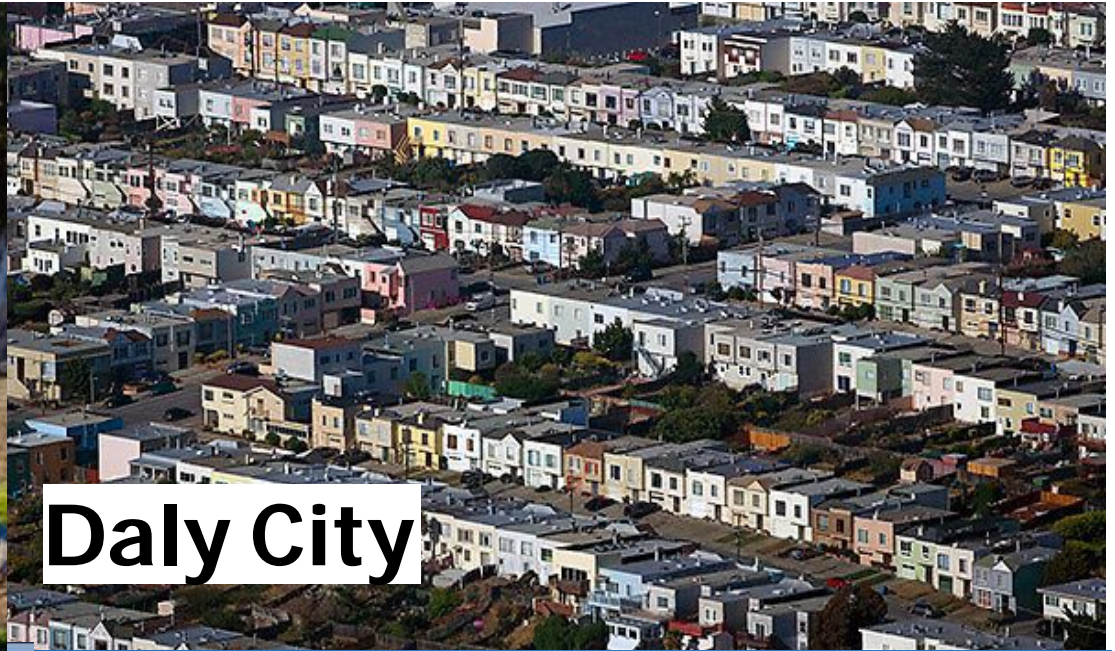
- Must connect to urgent quality of life issues
- For example:
- Extreme temperatures have implications for high utility bills and housing security
- Flooding/Sea Level Rise has implications for mold in homes, respiratory issues, displacement, cumbersome flood insurance



Application



Pescadero



Daly City



East Palo Alto



Foster City

Thank you

Contact information:

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ofeliabello@youthunited.net

<http://www.youthunited.net>

(650)321-9165





Richard Mullane

Principal, HASSELL

HASSELL

RESILIENT SOUTH CITY

**SOUTH SAN FRANCISCO,
SAN MATEO COUNTY**

Housing
Leadership Day

October 2019

Richard Mullane,
Principal, HASSELL

HASSELL⁺

RESILIENT
BAY AREA CHALLENGE **BY**
DESIGN



Our Team

The **HASSELL+** team understands water. We understand designing for water, living with water and **the immense social potential that waterfront places offer communities** when they are connected to them.



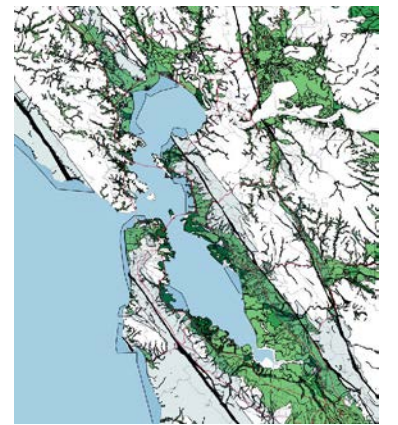
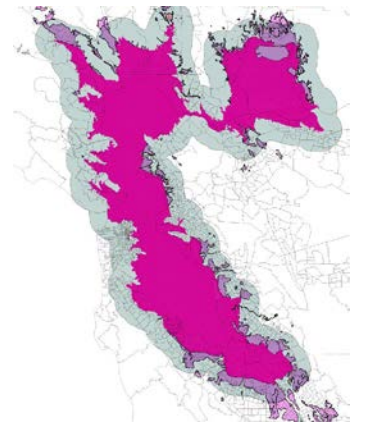
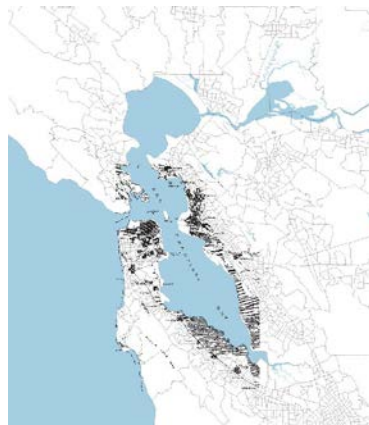
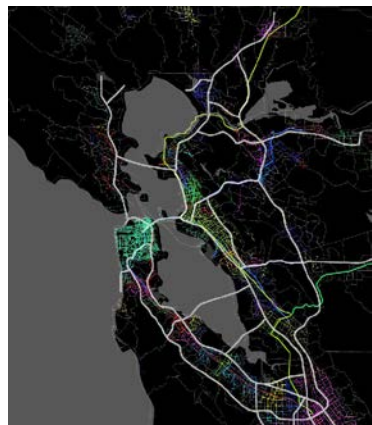
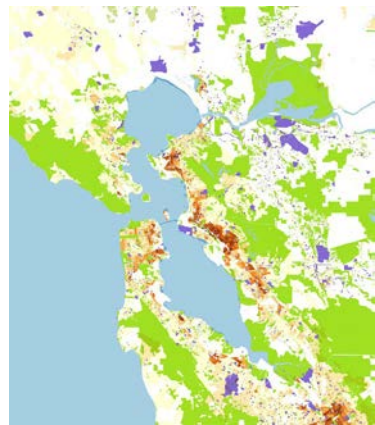
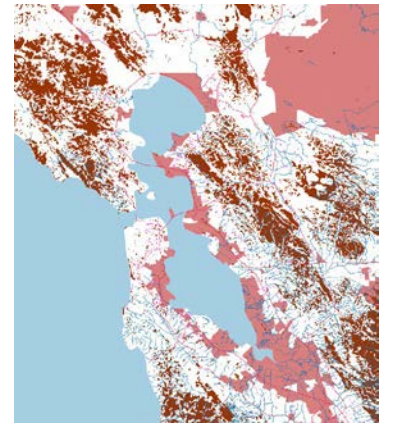
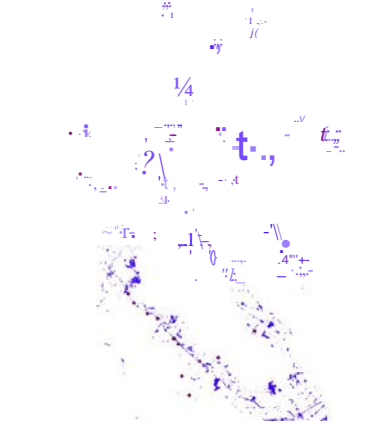
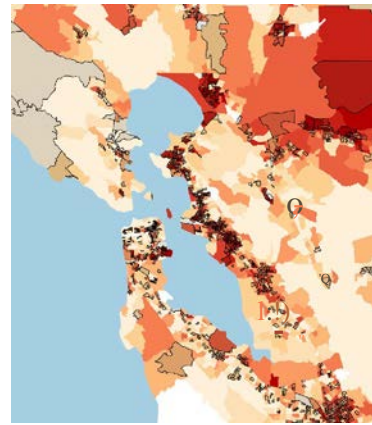
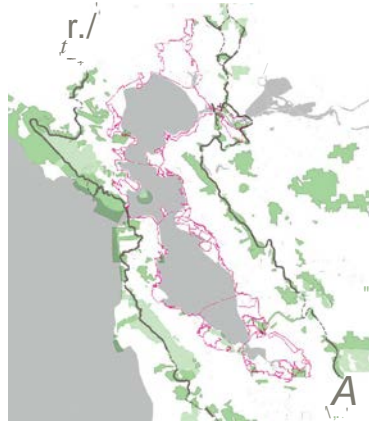
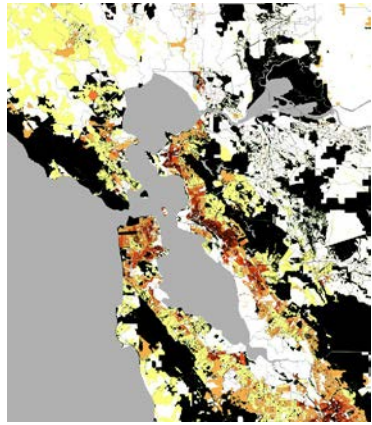
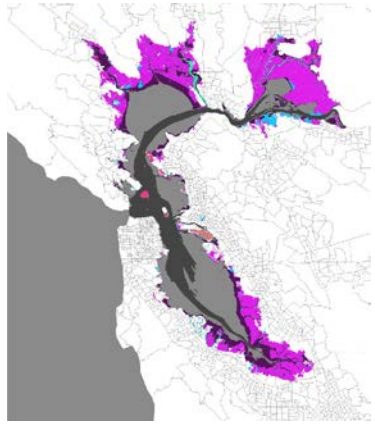
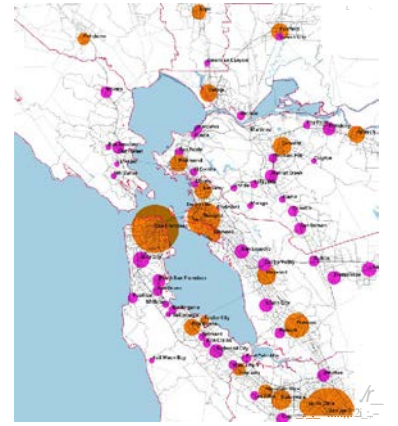
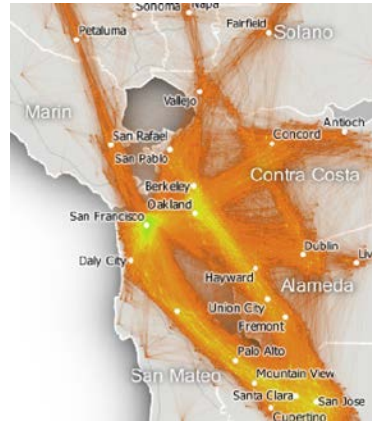
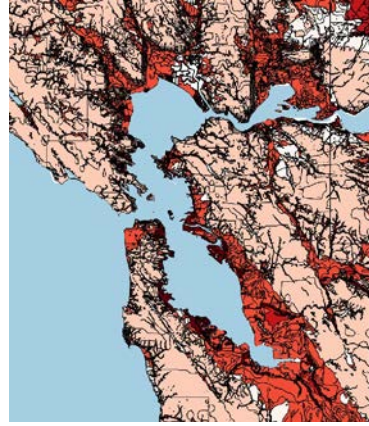
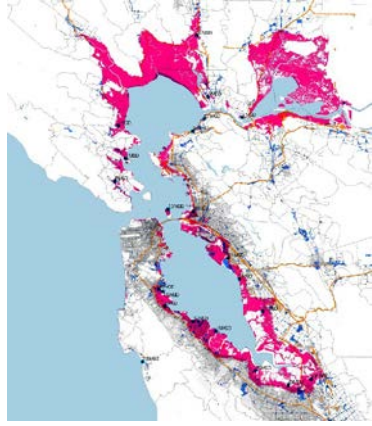
The Challenge

A year-long **collaborative design challenge** bringing together local residents, public officials and local, national and international experts to develop **innovative community-based solutions** that will strengthen our region's resilience to **sea level rise, severe storms, flooding and earthquakes**





HASSELL





304

WHAT

WOULD

YOU DO TO

BECOME

RESILIENT

SOUTH CITY STOREFRONT

HASSELL



SOUTH CITY ENGAGEMENT



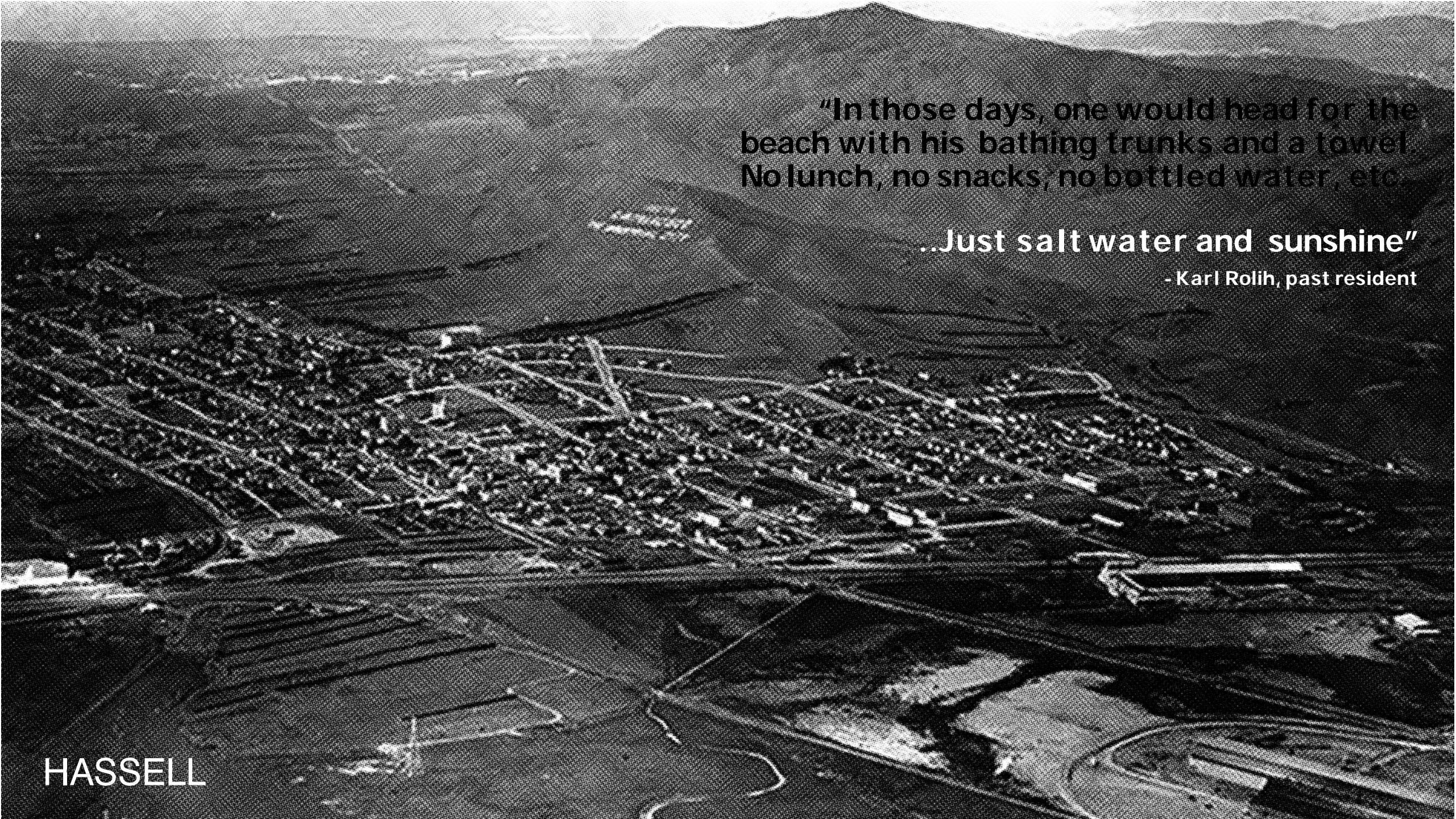
STAKEHOLDERS & ENGAGEMENT

CITY OF SOUTH SAN FRANCISCO
MAYOR & COUNCILMEMBERS
CITY MANAGER'S OFFICE
DEP. ECONOMIC DEVELOPMENT
DEP. PLANNING
DEP. PARKS & RECREATION
DEP. PUBLIC WORKS
SAN MATEO COUNTY
SUPERVISOR PINE'S OFFICE

COUNTY FLOOD DISTRICT
OFFICE OF SUSTAINABILITY
SAMTRANS
SAN FRANCISCO AIRPORT
SOUTH SAN FRANCISCO WATER
QUALITY CONTROL PLANT
COLMA CREEK ADVISORY COMMITTEE
CITY OF SAN BRUNO
DEP. PUBLIC WORKS

CALIFORNIA COASTAL CONSERVANCY
CALIFORNIA DEPARTMENT OF TRANSPORT
WATER EMERGENCY TRANSIT AUTHORITY
SAN FRANCISCO ESTUARY INSTITUTE
THE SIERRA CLUB
GENENTECH(ESTATES & SUSTAINABILITY)



An aerial, black and white photograph of a coastal town. The town is built on a hillside, with numerous buildings and streets visible. A beach is located in the foreground, and mountains are visible in the background. The image has a grainy, halftone texture.

"In those days, one would head for the beach with his bathing trunks and a towel. No lunch, no snacks, no bottled water, etc.

..Just salt water and sunshine"

- Karl Rolih, past resident

HASSELL

**ANALYSIS:
HISTORIC HYDROLOGY 1896**



HASSELL

ANALYSIS: FEMA FLOOD ZONE



Resilient South City is in South San Francisco, California
Published by Richard Mullane · 2018 · 12

Have you seen flooding in South City over the years? We want to know the problem spots! This image was taken at Grand Ave/Airport Blvd (11 December 2014)

5,924 people reached

Boost Again

Wendy Sincal-Smith · if the water gets to the height of this mock photo then those neighborhoods I mentioned above will be in very serious trouble.
Like · Reply · Message · 1w · Edited

Nancy Kellee · I remember in the late 50's or early 60's my Dad worked on Linden when it flooded real bad and he and a coworker were going up and down Linden in a row boat.
Like · Reply · Message · 1w

Resilient South City · Incredible! Do you have any photos of when this happened? We are always looking for photos and stories about the creek from back in the day!
Like · Reply · Commented on by Jimmy Gonzalez · 1w · 2d · View more replies

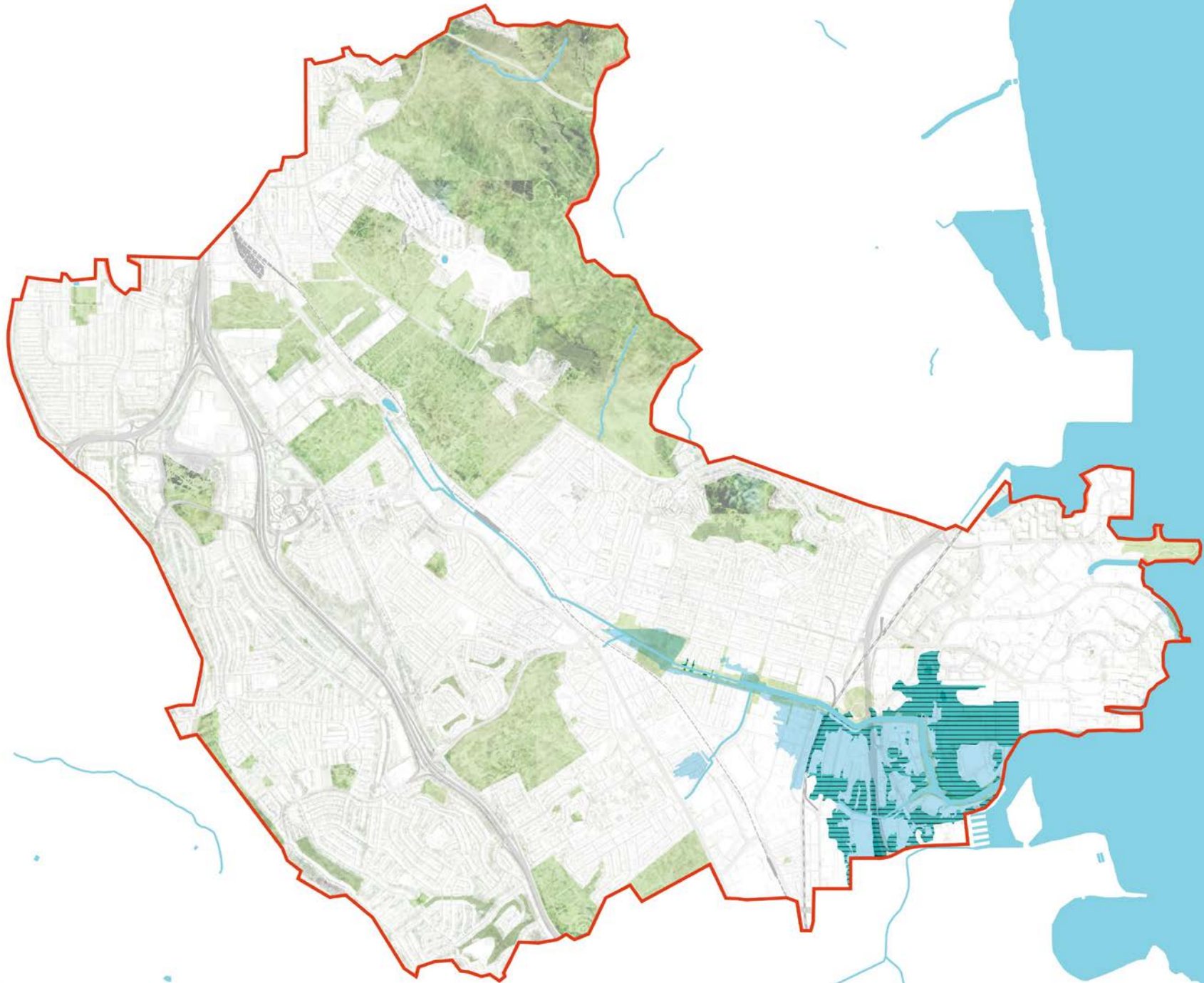
Sal Lopez · Man that's a trip looks so real. You never know what can happen. I remember when it flooded a couple years back the entrances of the freeway on airport we couldn't leave.
Like · Reply · Message · 6d

Aaron Marks · Get us off Karel Kulebi!
Like · Reply · Message · 6d

Alfonso Munilla San Francisco · is seeking millions to repair the seawall along the Embarcadero... if I was you, I'd be getting in line for possible funds.
Like · Reply · Message · 4d

Write a comment

HASSELL

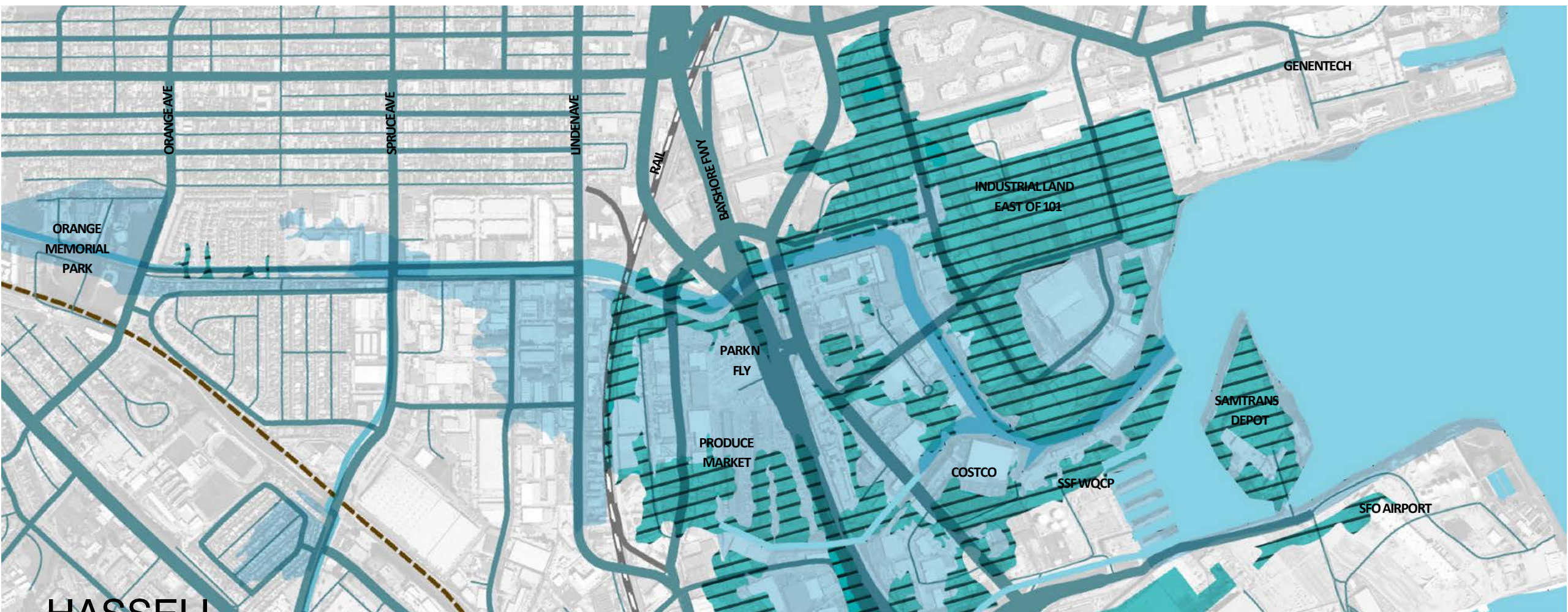


COLMA CREEK

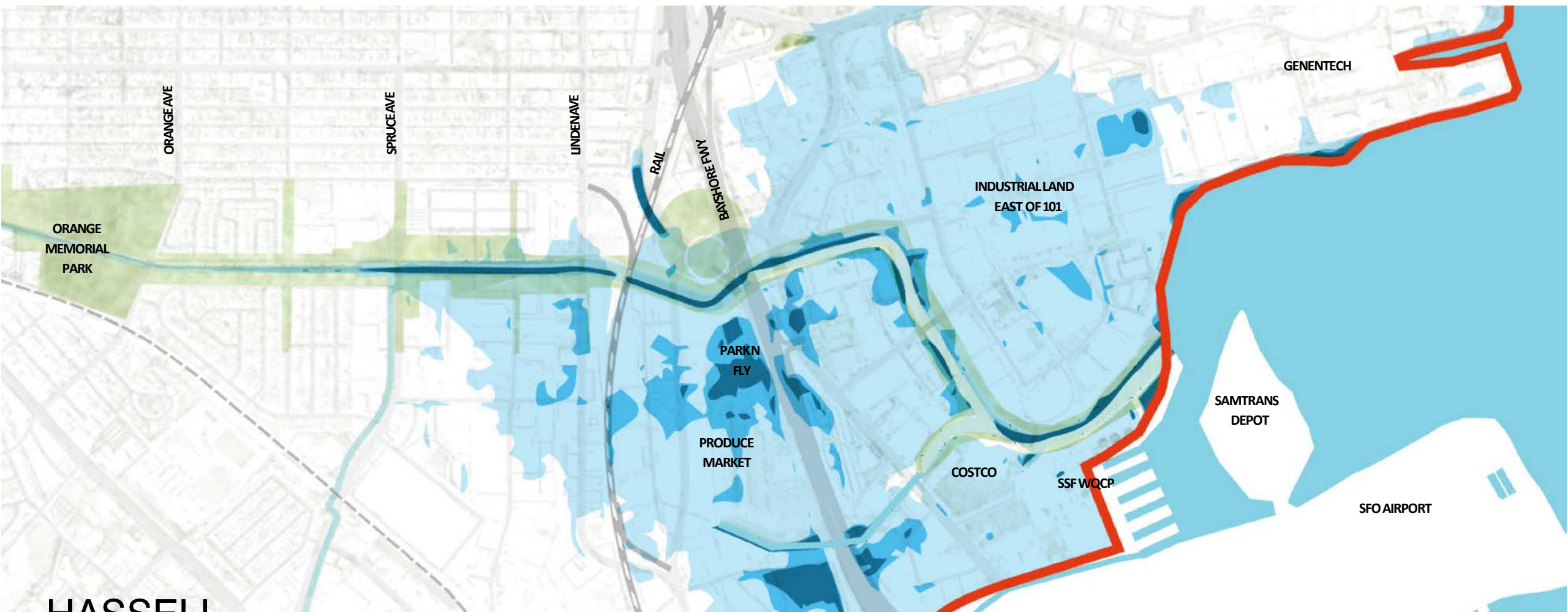


HASSELL

ANALYSIS: COLMA CREEK FEMA FLOOD ZONE

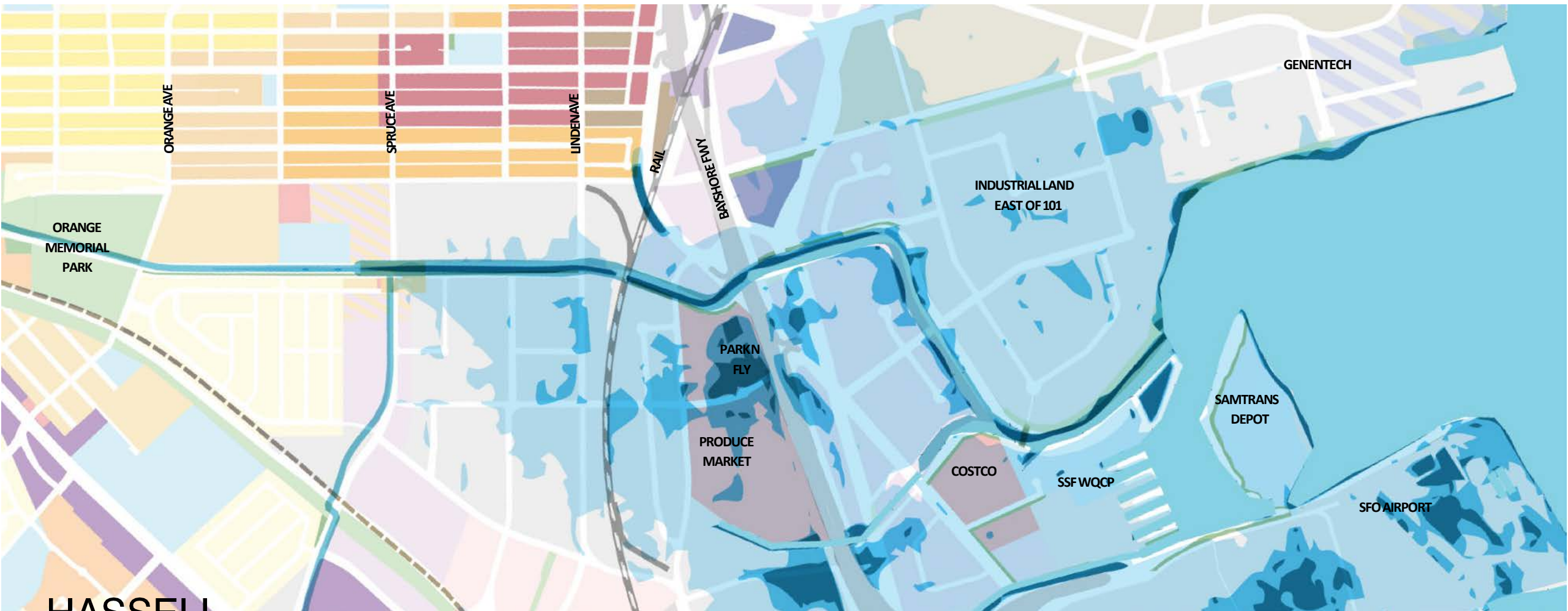


ANALYSIS: 60" SEA-LEVEL RISE + 100YR EVENT



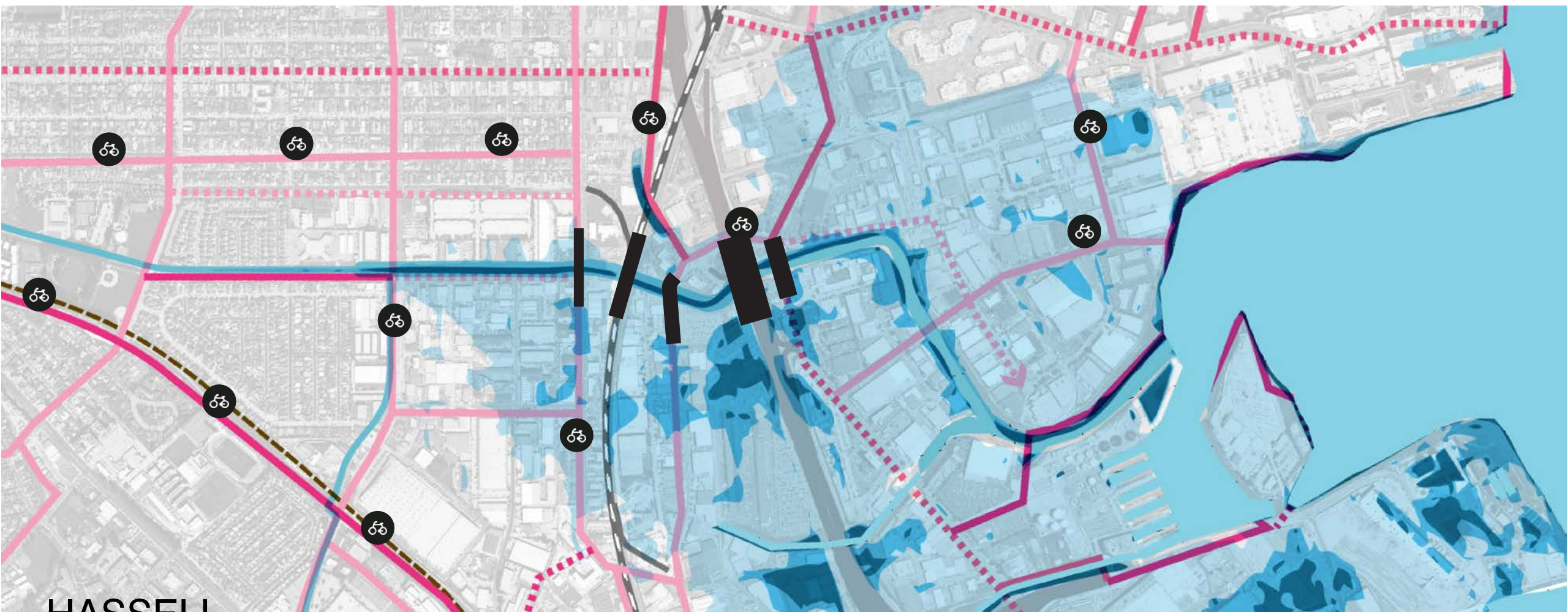
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ANALYSIS - COLMA CREEK: LAND USE AT RISK



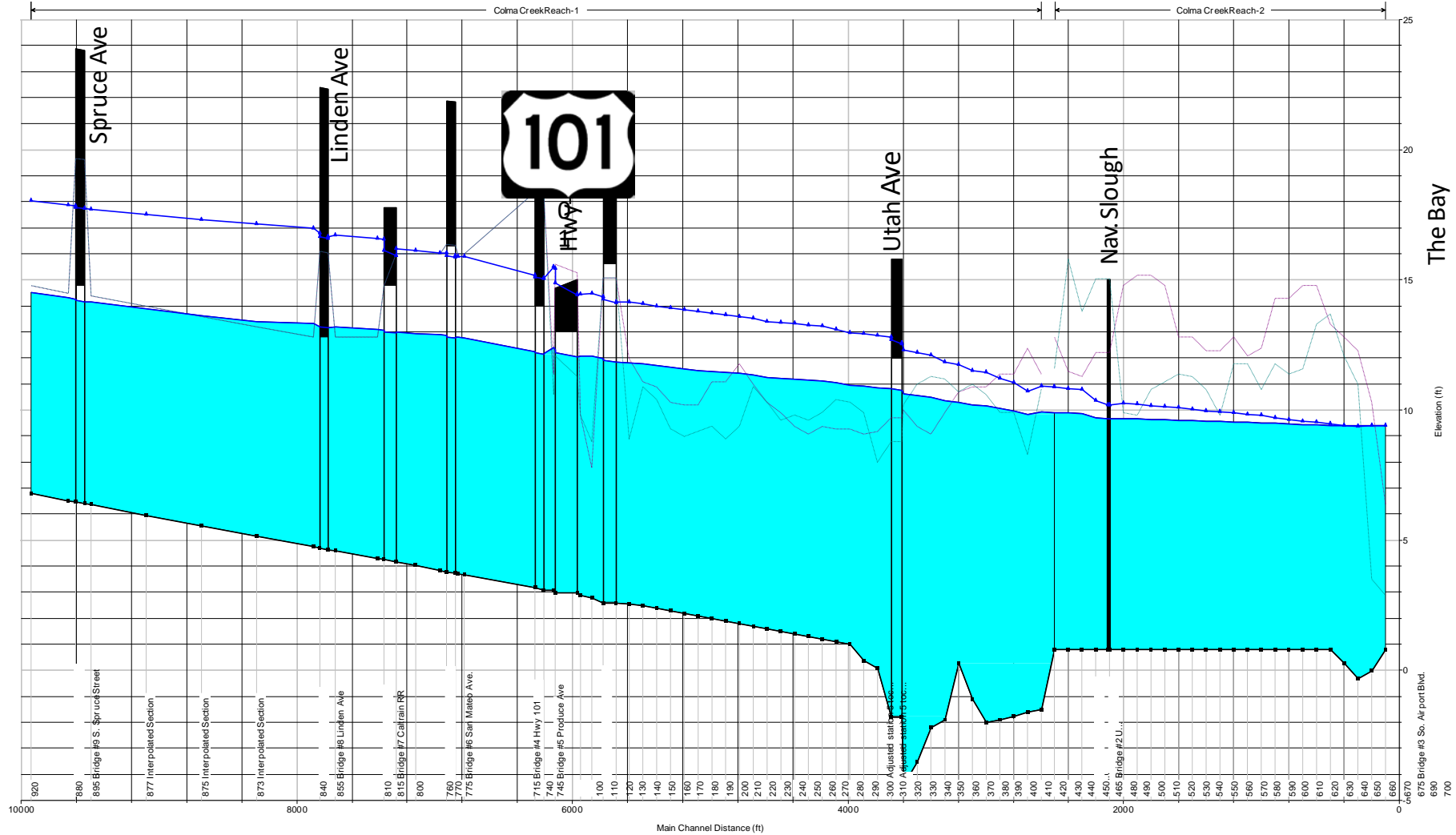
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ANALYSIS - COLMA CREEK: POOR ACCESS TO WATERFRONT

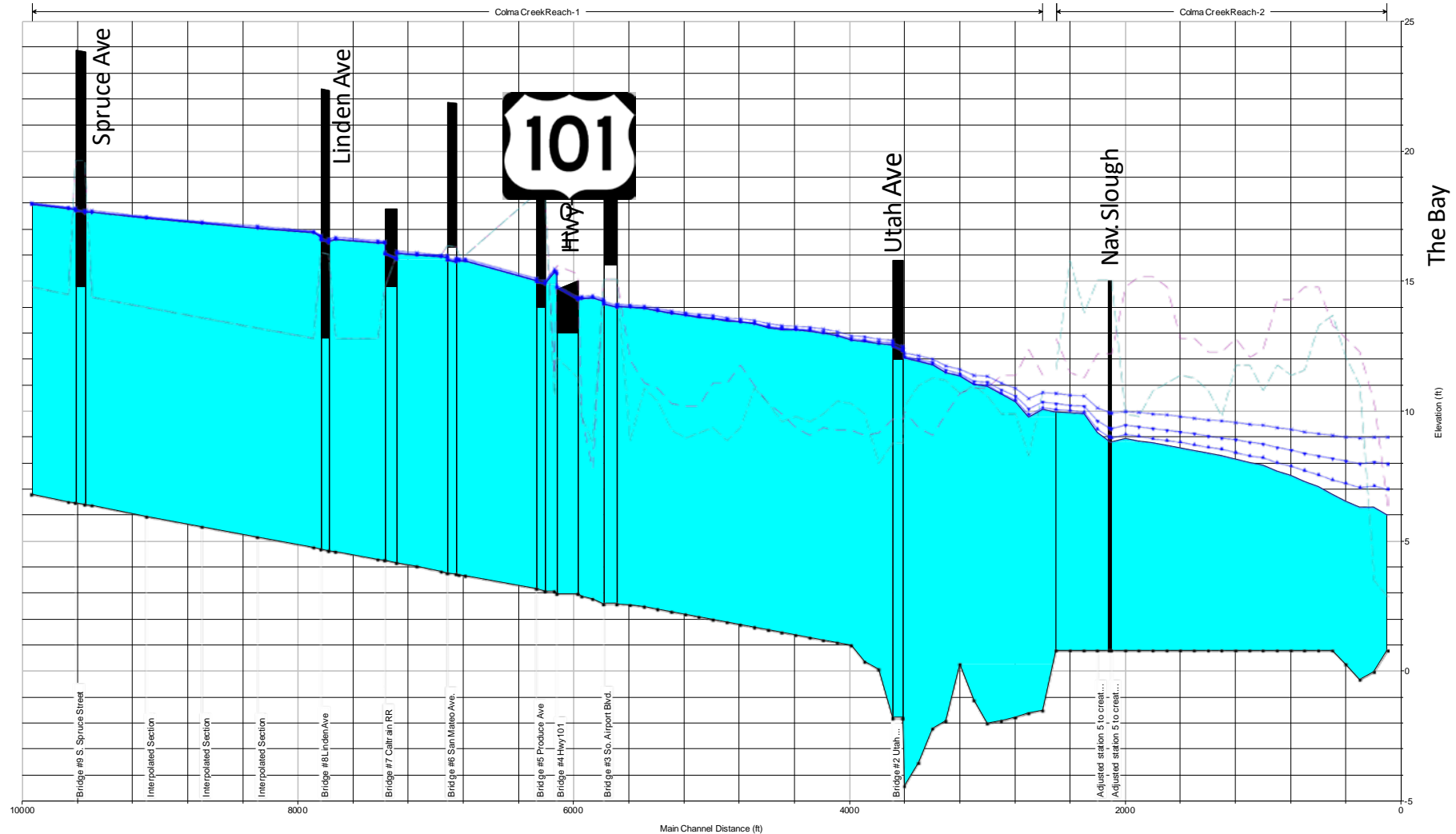


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ANALYSIS - COLMA CREEK: CREEK FLOW MODEL - 10YR EVENT (100 YR DOTTED)



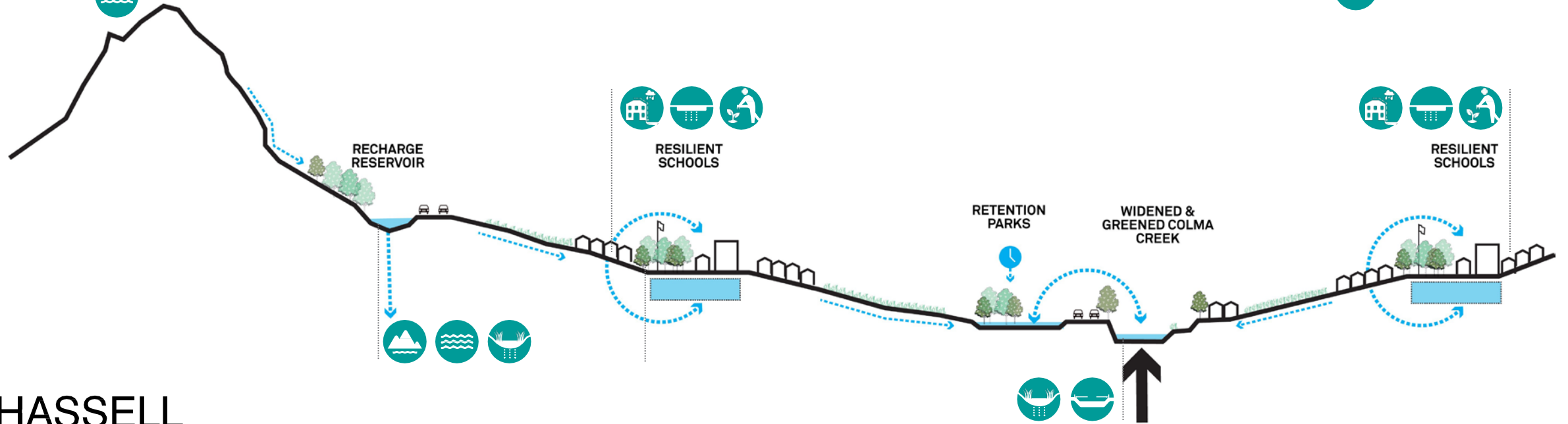
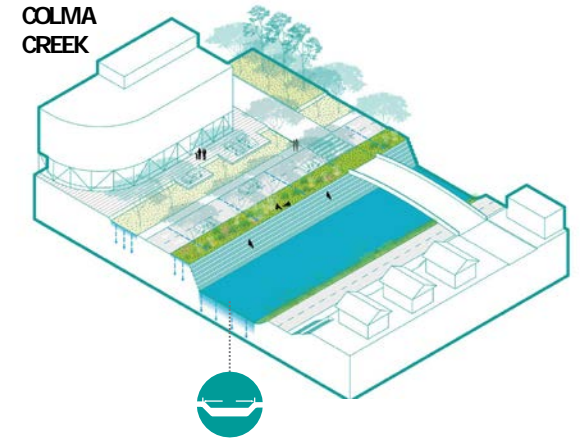
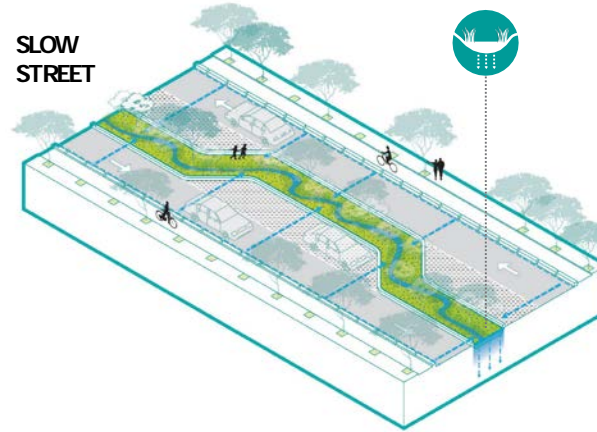
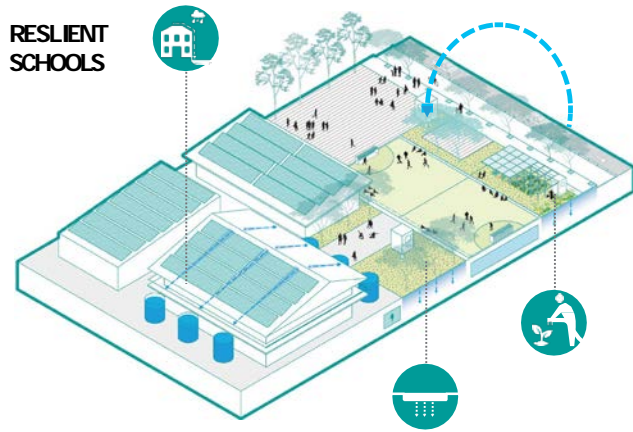
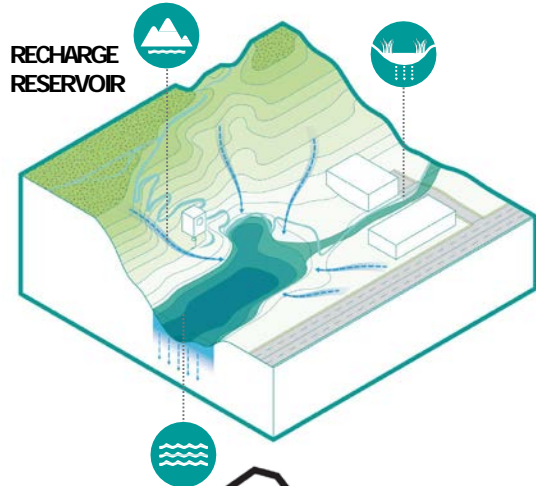
ANALYSIS - COLMA CREEK: CREEK FLOW MODEL - 100YR EVENT+SLR



"COLLECT & CONNECT" RESILIENT SOUTH CITY



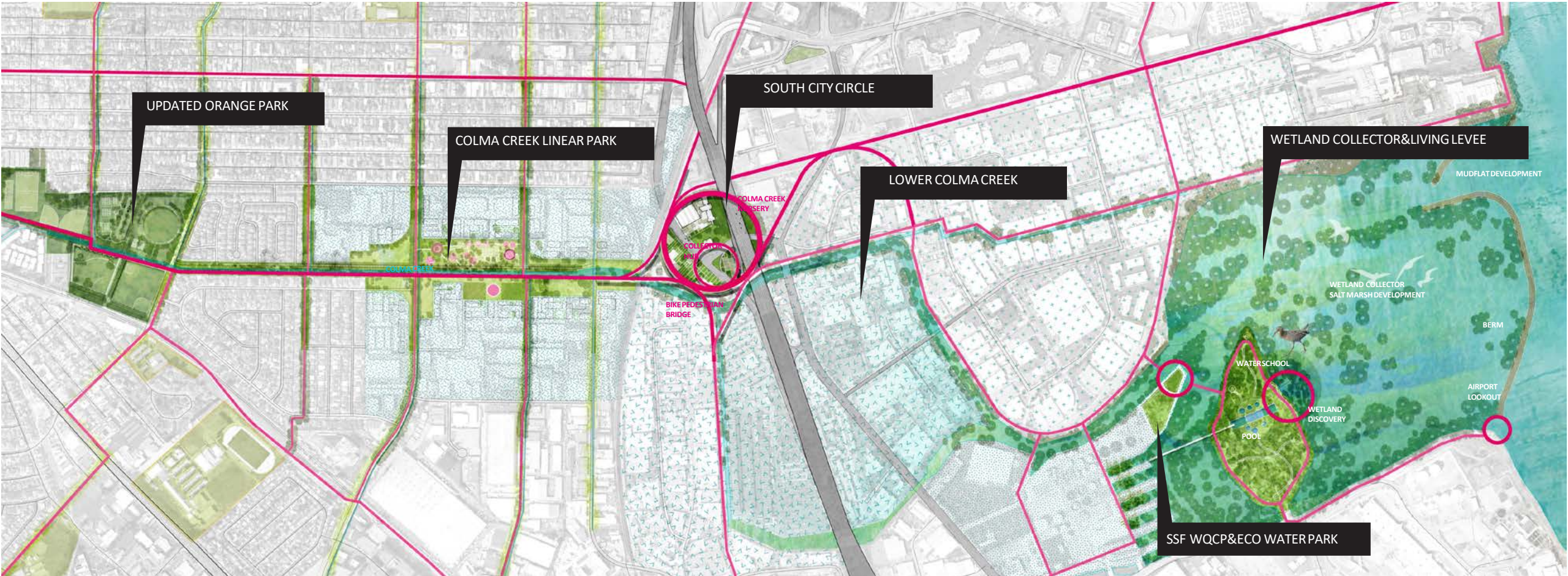
WATER





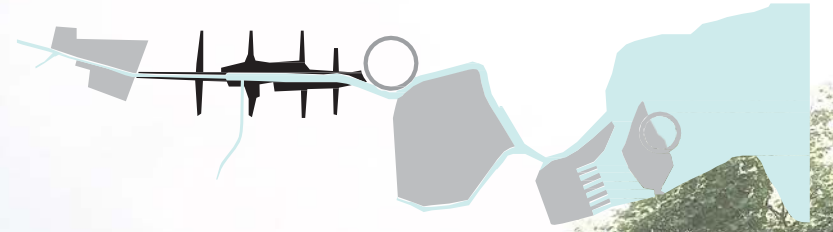


COLMA CREEK MASTER PLAN



HASSELL

"COLLECT & CONNECT" **NEW COLMA CREEK & CREEK-SIDE PARKS**



**"COLLECT & CONNECT"
SOUTH CITY CIRCLE**



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**"COLLECT & CONNECT"
SOUTH CITY CIRCLE**

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THE BAY POOL

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COLMA CREEK



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ONGOING ENGAGEMENT



ONGOING ENGAGEMENT



RESILIENT
SOUTH
CITY

HASSELL⁺

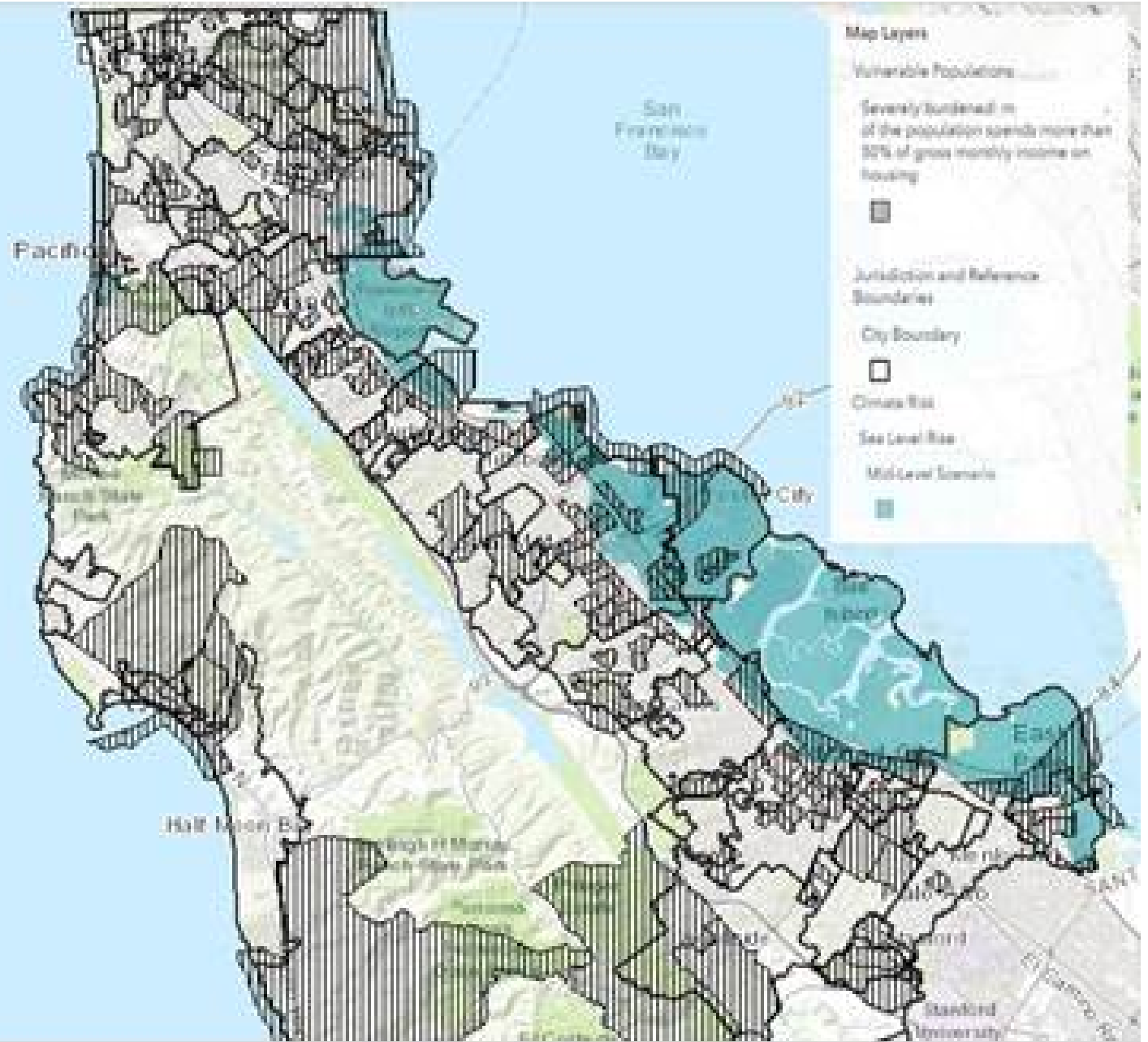


Dave Pine

San Mateo County Supervisor




Vulnerable Populations and Sea Level Rise



Q & A

Displacement Typologies and 20 in. SLR + 100 Year Storm

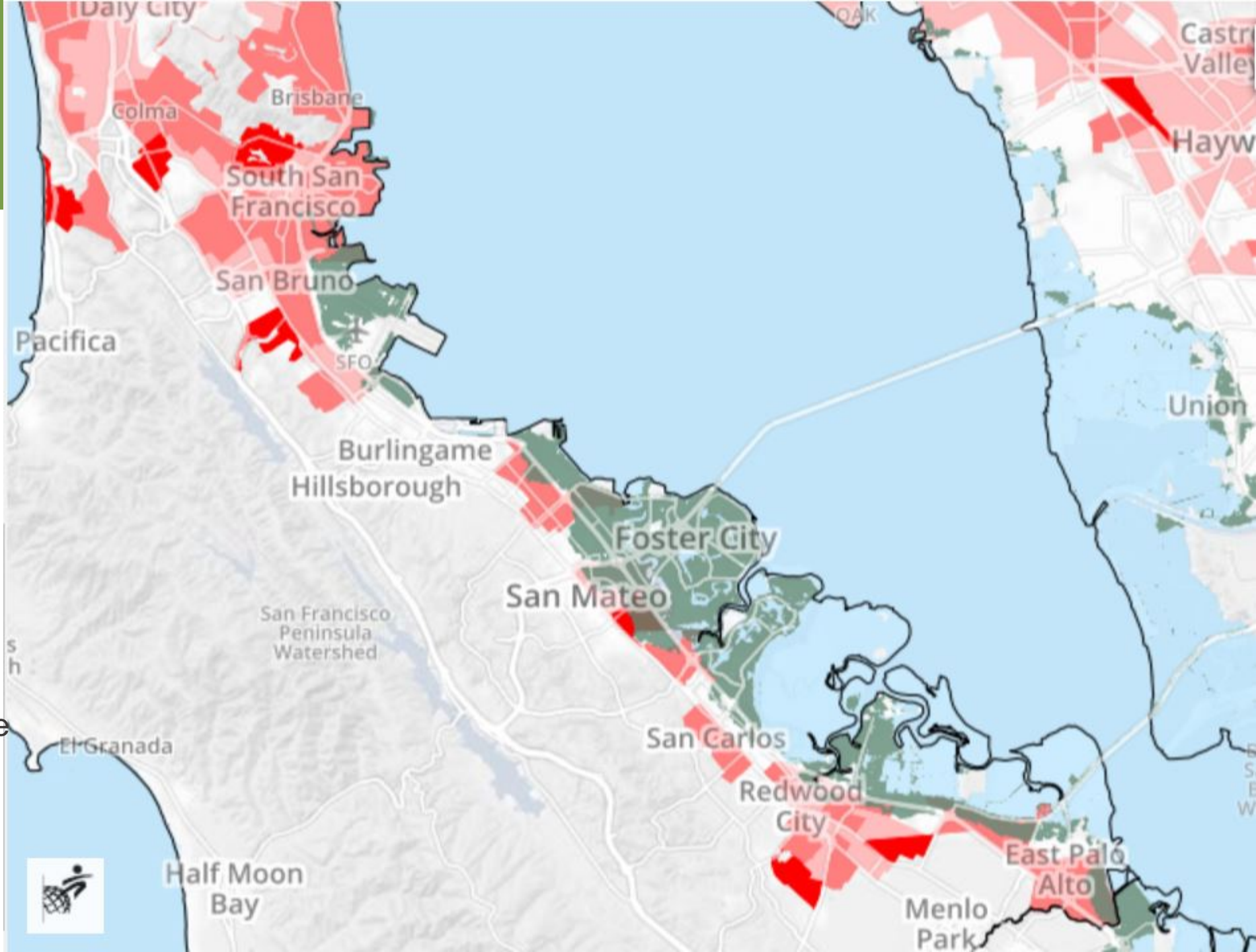
 Advanced Gentrification

 Ongoing Gentrification and/or Displacement

 At Risk of Gentrification and/or Displacement

 Inundation of Natural or Semi-Natural Infrastructure

 Inundation of Developed Infrastructure



Discussion

What tensions do we need to work through in order to protect communities from displacement, to address threats of increasing flooding and meet our needs for more affordable housing now?

SAVE THE BAY



Resilient Communities in an Unstable Climate

Cheryl Brown, Political Director
cbrown@saveSFbay.org
www.saveSFbay.org

Mapping Gentrification and Displacement in SMC

