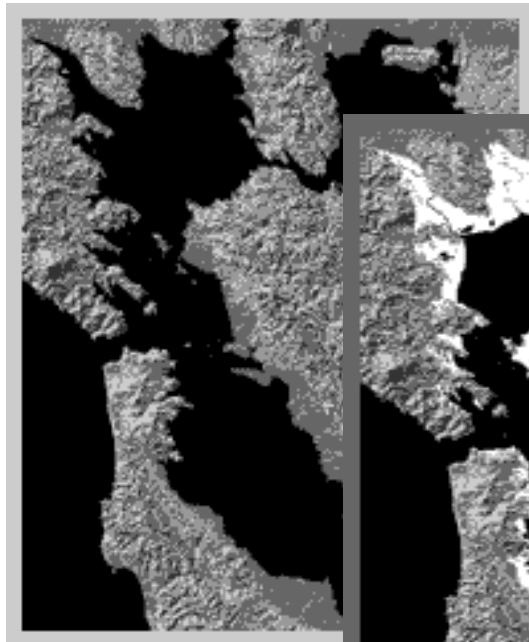




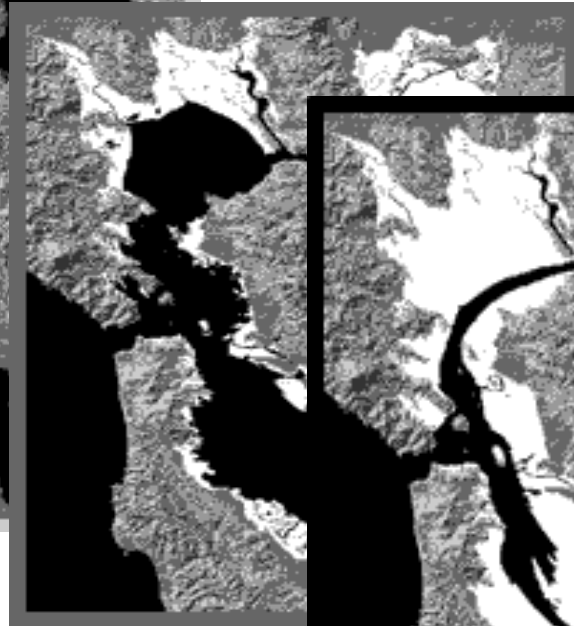
Accelerating Resiliency in a Rising Bay

Jessica Fain, Director of Planning
San Francisco Bay Conservation and
Development Commission

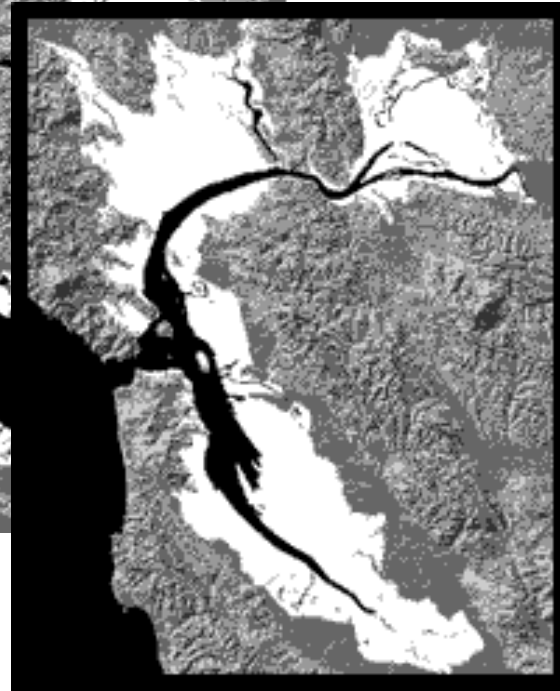
BCDC was established to protect a shrinking Bay



1849



1965

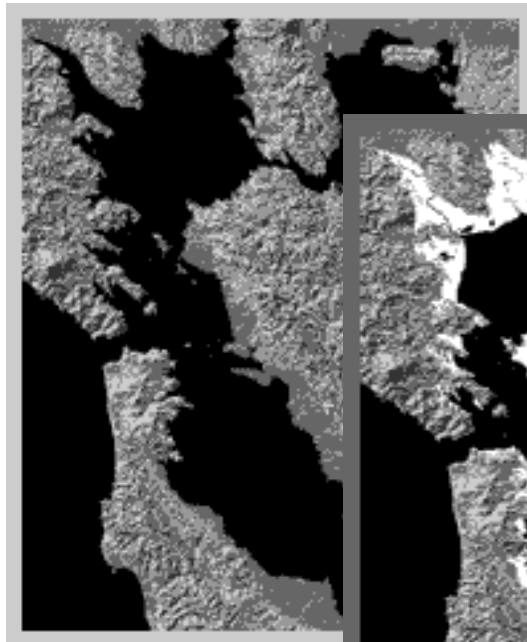


2020

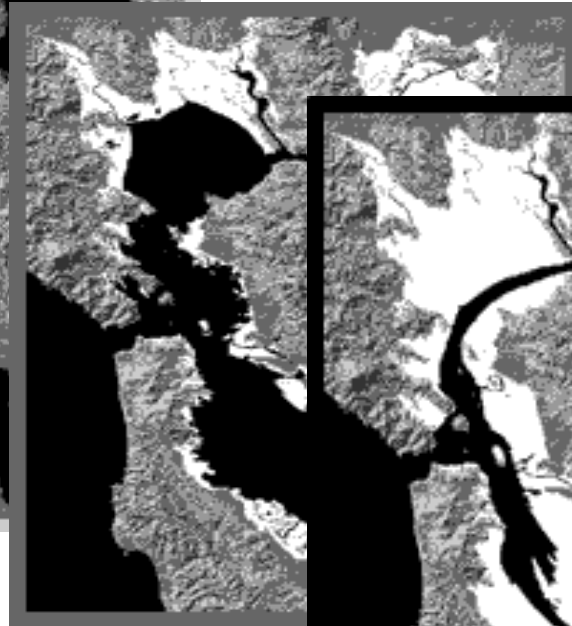




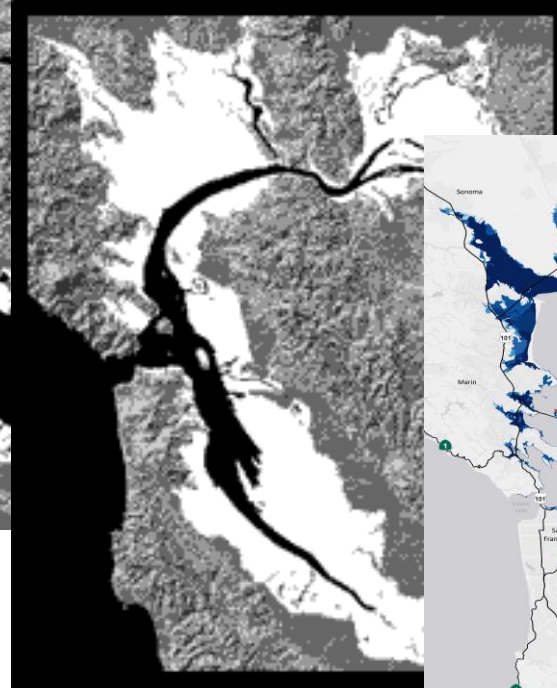
But now... a growing Bay



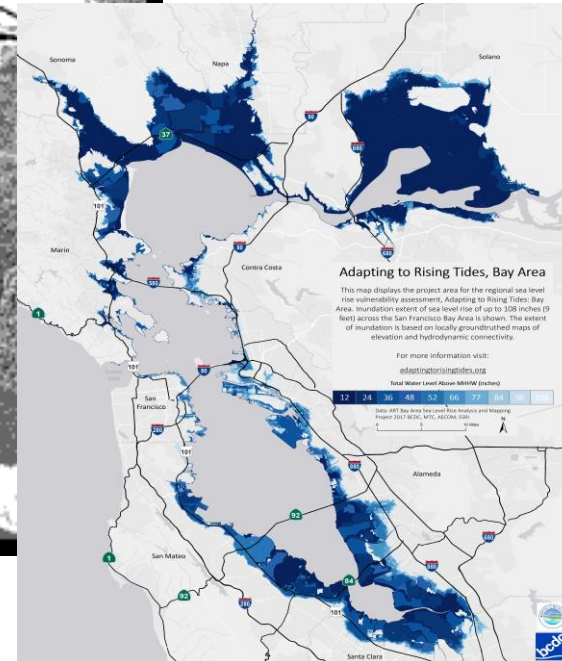
1849



1965

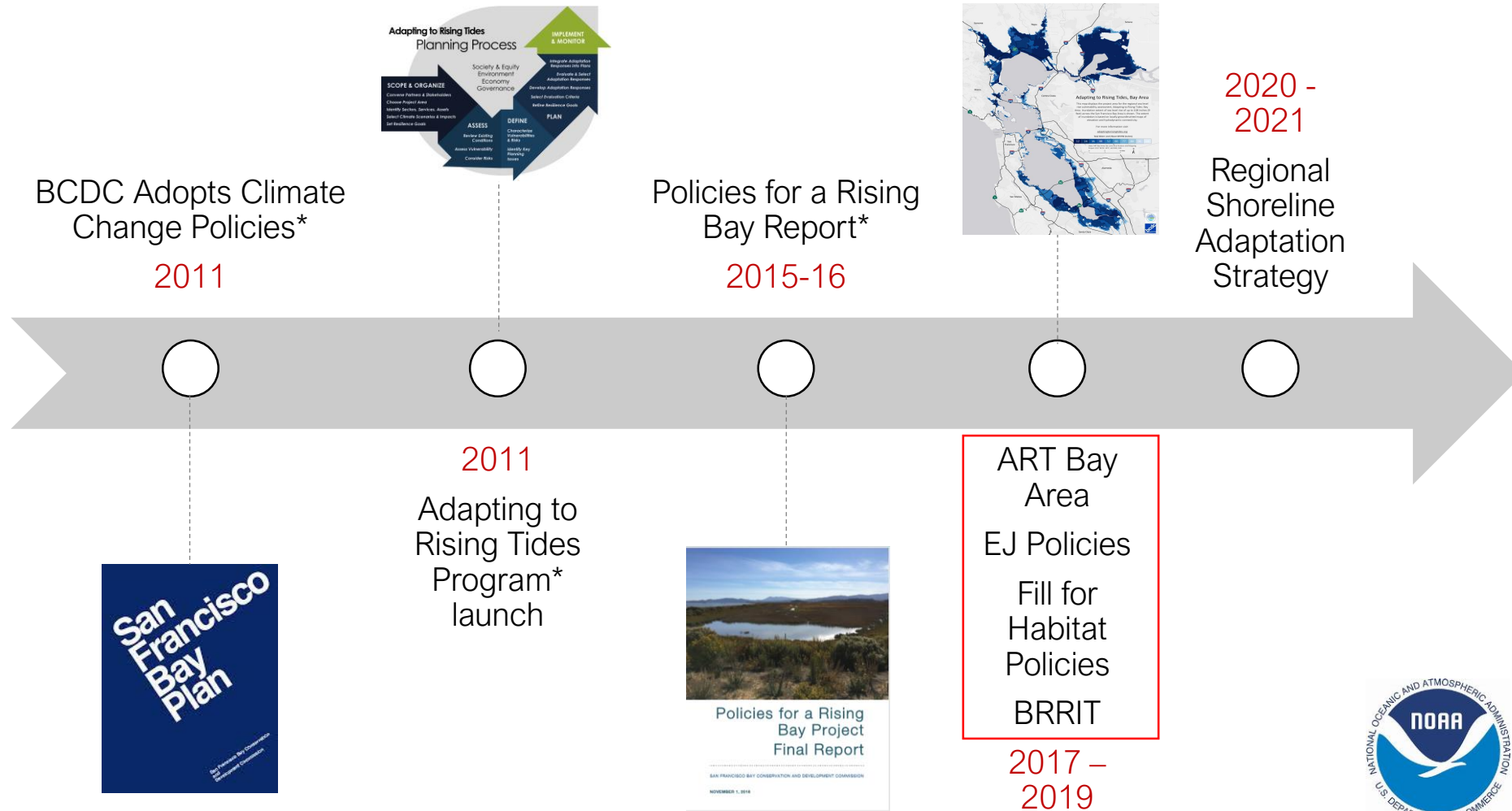


2020



2100?

Sea Level Rise Evolution at BCDC



* Supported by NOAA Coastal Zone Management program

Sea Level Rise Evolution Bay-wide





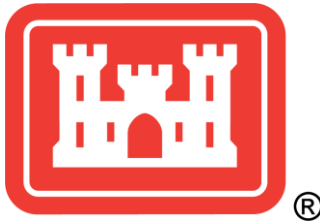
Measure AA Funding Allocated to Restoration Projects in the San Francisco Bay

April 10, 2018, Santa Rosa, CA - Today, the Governing Board of the San Francisco Bay Restoration Authority, the local agency responsible for allocating funding raised by Measure AA, approved nearly \$18 million in grants for wetland restoration in the Bay.



\$25 million per year for 20 years.

Bay Restoration Regulatory Integration Team (BRRIT)



Bay Plan Amendment #1: Fill for Habitat Restoration



King Tide at Mariners Point, San Mateo.
(source: California King Tides Project)

More Fill May Be Necessary to Adapt



Thin layer placement of dredged sediment
(source: <https://usfwsnortheast.wordpress.com/2017/08/16/a-bottom-up-boost-for-coastal-habitat/>)

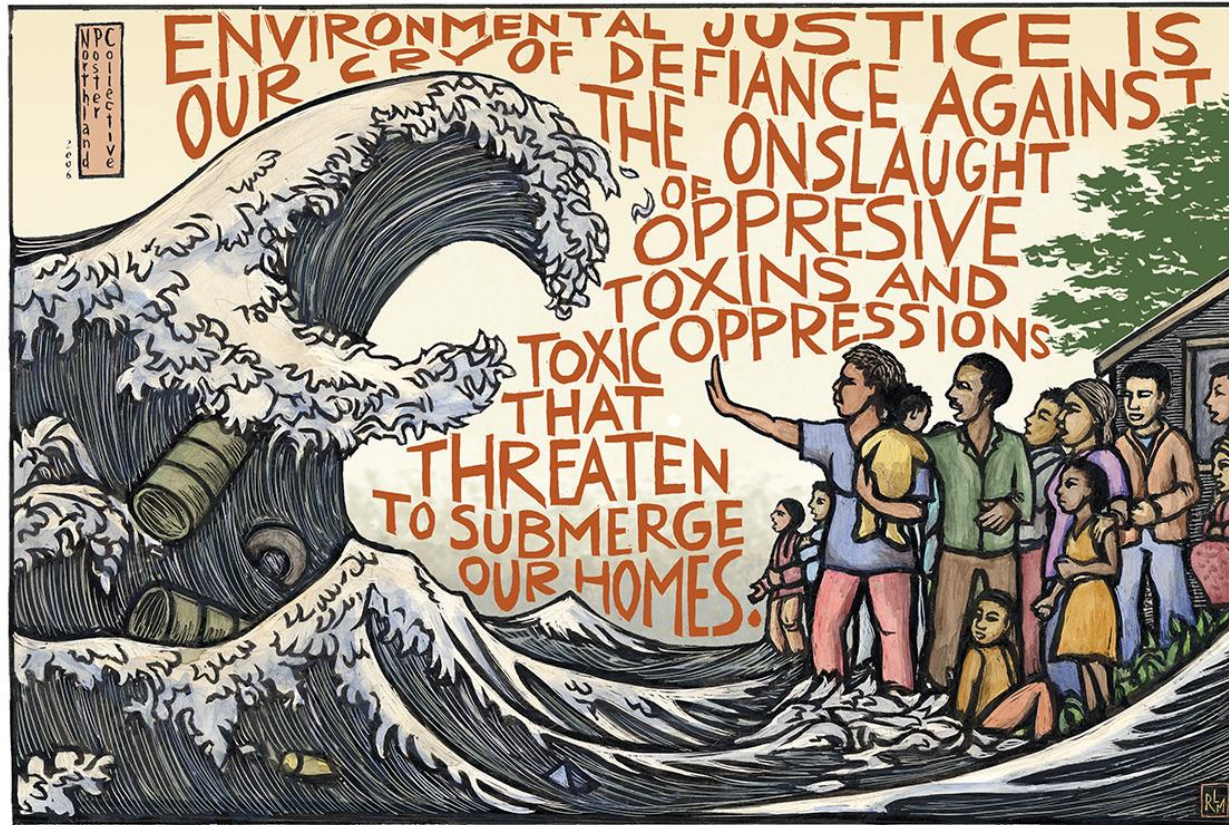


Oro Loma horizontal levee.
(source: <https://oroloma.org/horizontal-levee-is-thriving/>)

APPROVED! 10/3/19
In effect early 2020

Contact: Megan.hall@bcdcc.ca.gov

Bay Plan Amendment #2: Environmental Justice + Social Equity



(source: Ricardo Levins Morales Art Studio)

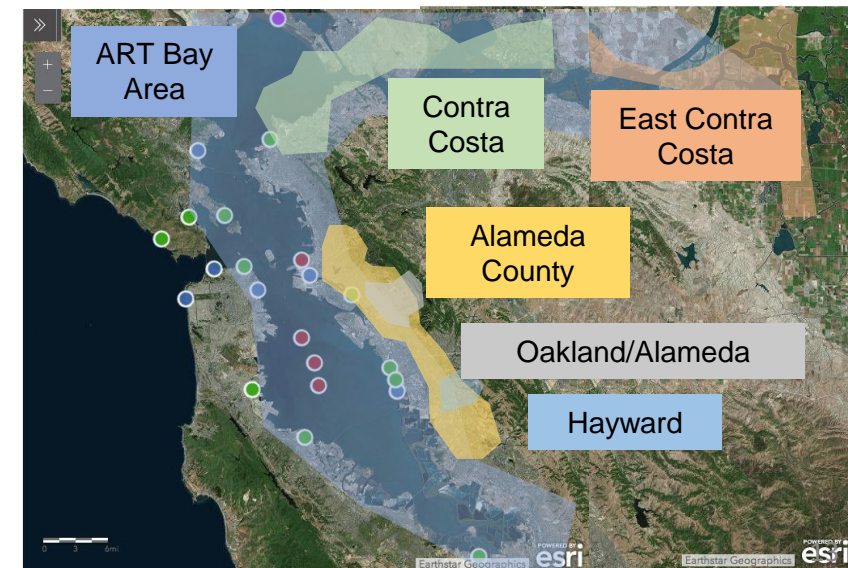
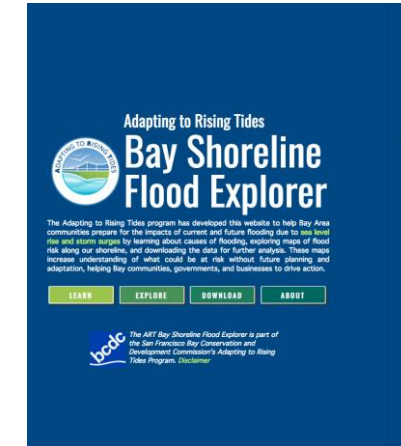
APPROVED! 10/17/19
In effect early 2020

Contact: Clesi.bennett@bcdcc.ca.gov

Adapting to Rising Tides

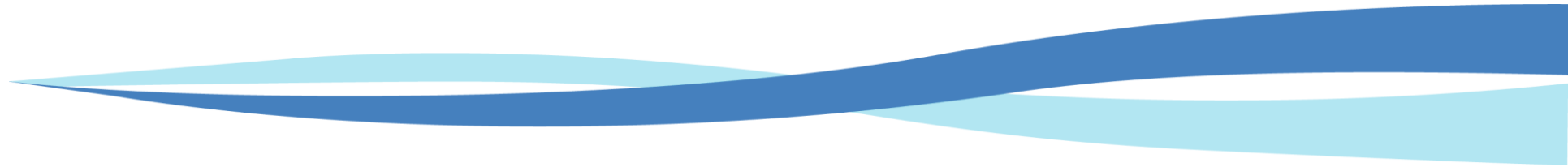


- **How-To Guides:** for developing SLR vulnerability assessments and adaptation plans using a detailed, replicable, stakeholder-driven process
- **Projects:** Our team members both conduct and support ART projects all around the Bay
- **Data and maps:** We develop and identify best available data, information, and SLR maps. We staff a digital “Help Desk”
- **Research:** We identify challenging issues or regional priorities that need further assessment



Sneak Peak: Early 2020 Release

Adapting to Rising Tides



Bay Area



Metropolitan
Transportation
Commission



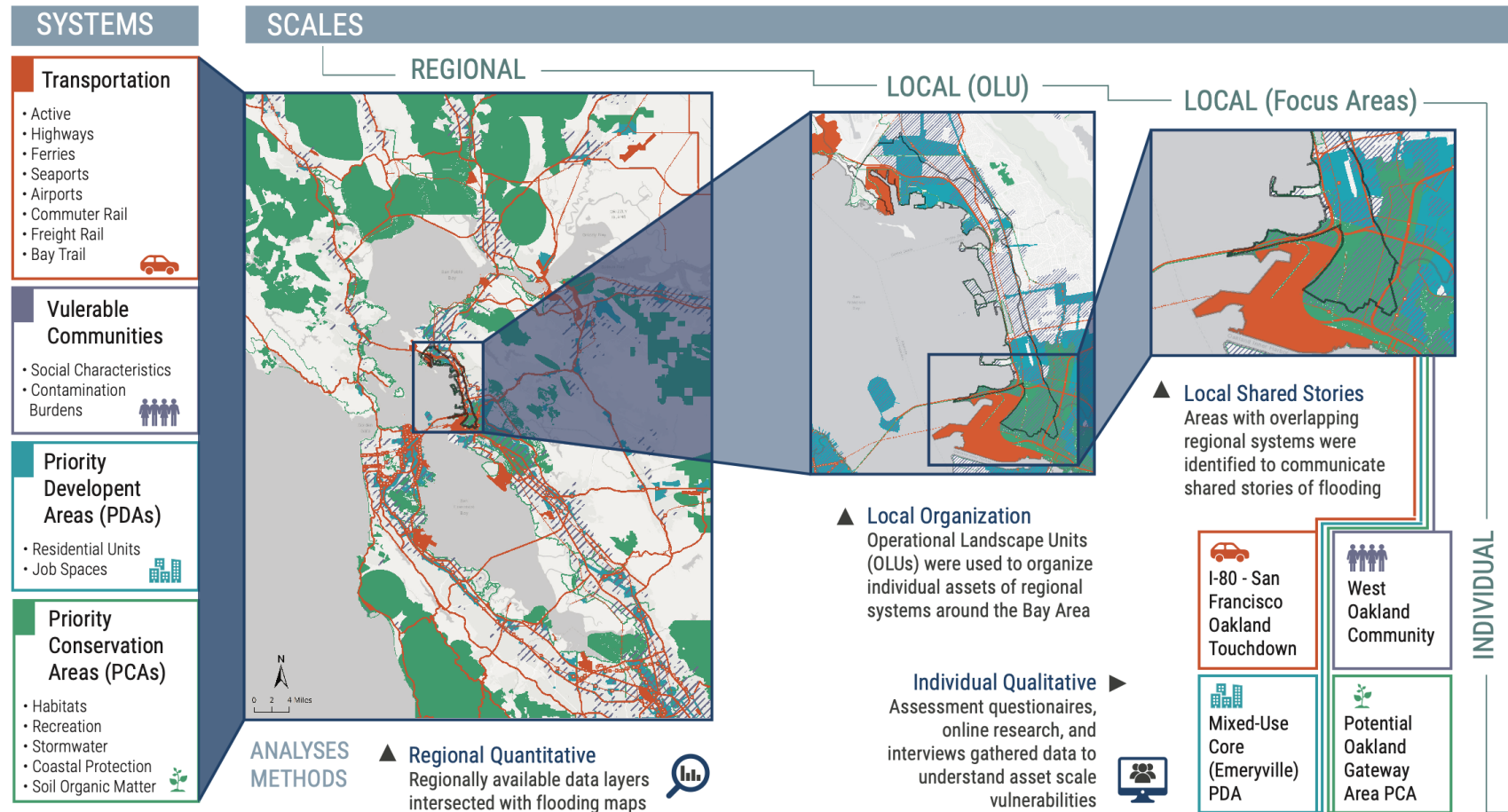
Bay Area
**Regional
Collaborative**

ART Bay Area Systems and Scales



ART BAY AREA ASSESSMENT: SYSTEMS AND SCALES OF ANALYSIS

This visualization depicts the ART Bay Area process of scaling up and scaling down the analysis: A quantitative analysis of the four regional systems was done on a regional scale, while qualitative assessments provided individual-scale details that were integrated at the Local Focus Area scale to communicate shared vulnerabilities, and organized across the region by the Local Operational Landscape Unit, a planning unit of "nature's jurisdictions."





All high-consequence
transportation assets
that get wet at 36" TWL

Pacific Ocean



All high-consequence
transportation assets +
Priority Conservation
Areas
that get wet at 36" TWL

Pacific Ocean



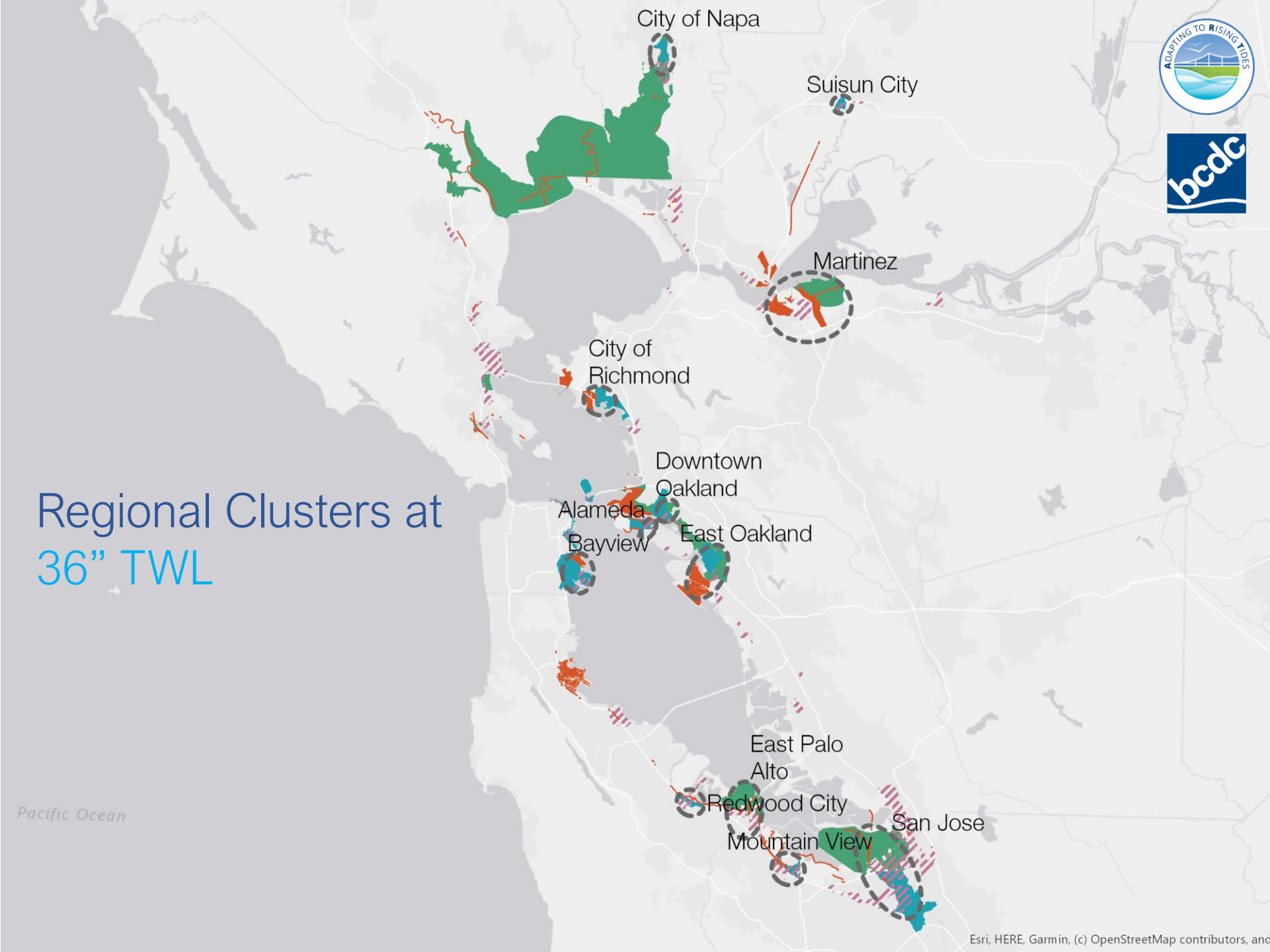
All high-consequence
transportation assets +
Priority Conservation
Areas + Priority
Development Areas
that get wet at 36" TWL

Pacific Ocean

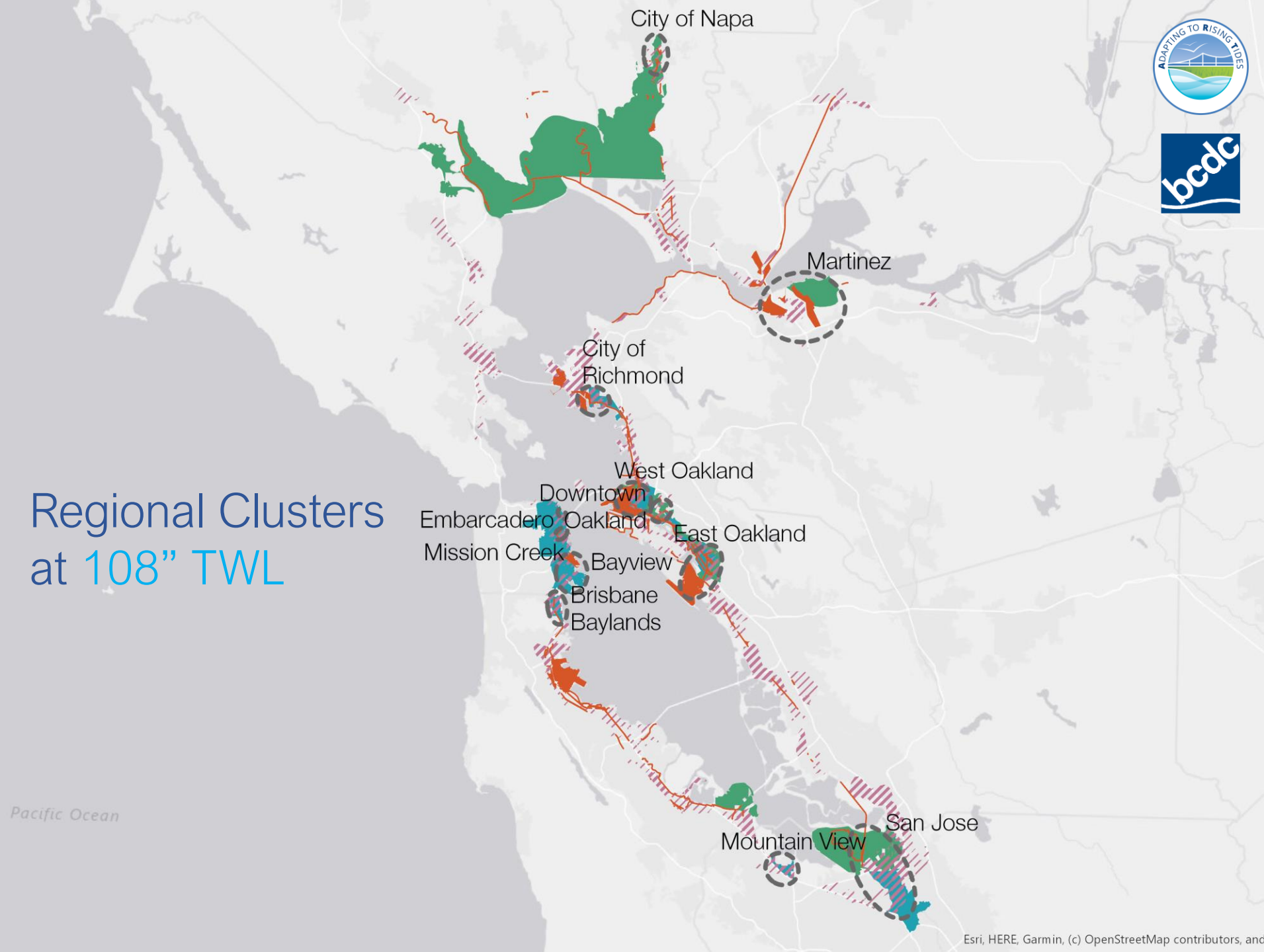


All high-consequence
transportation assets +
Priority Conservation
Areas + Priority
Development Areas +
Vulnerable Communities
that get wet at 36" TWL

Regional Clusters at 36" TWL



Regional Clusters at 108" TWL



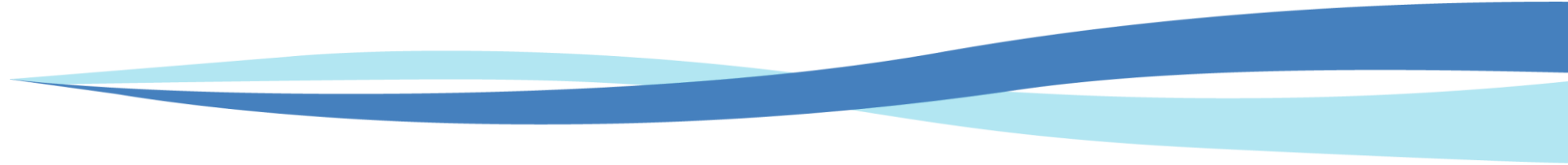
Regional Key Planning Issues



1. Local and Regional Transportation System Connection Hubs Flood Together
2. Sea Level Rise Decision-Making is Complicated by Ownership, Governance, Management, and Regulatory Issues
3. Interconnected Local and Regional Emergency and Critical Service Functions are at Risk
4. Contamination Complicates and Exacerbates Flooding Issues
5. Sea Level Rise will Amplify Existing Housing Displacement Concerns
6. Future Development Areas can be Critical Tools for Resilience
7. Sea Level Rise will Put Pressure on the Relationship Between Regional Recreation and Habitat
8. Nearshore Habitats and the Ecosystem Services they Provide are Sensitive to Sea Level Rise Early On

... leading to 80+ adaptation responses!

Where Do We Go From Here?



1. Being proactive, not reactive
2. Solving crises together: *We can talk and chew gum!*
3. Coordinating *regionally* for equitable adaptation and resilience



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and Development Commission
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