

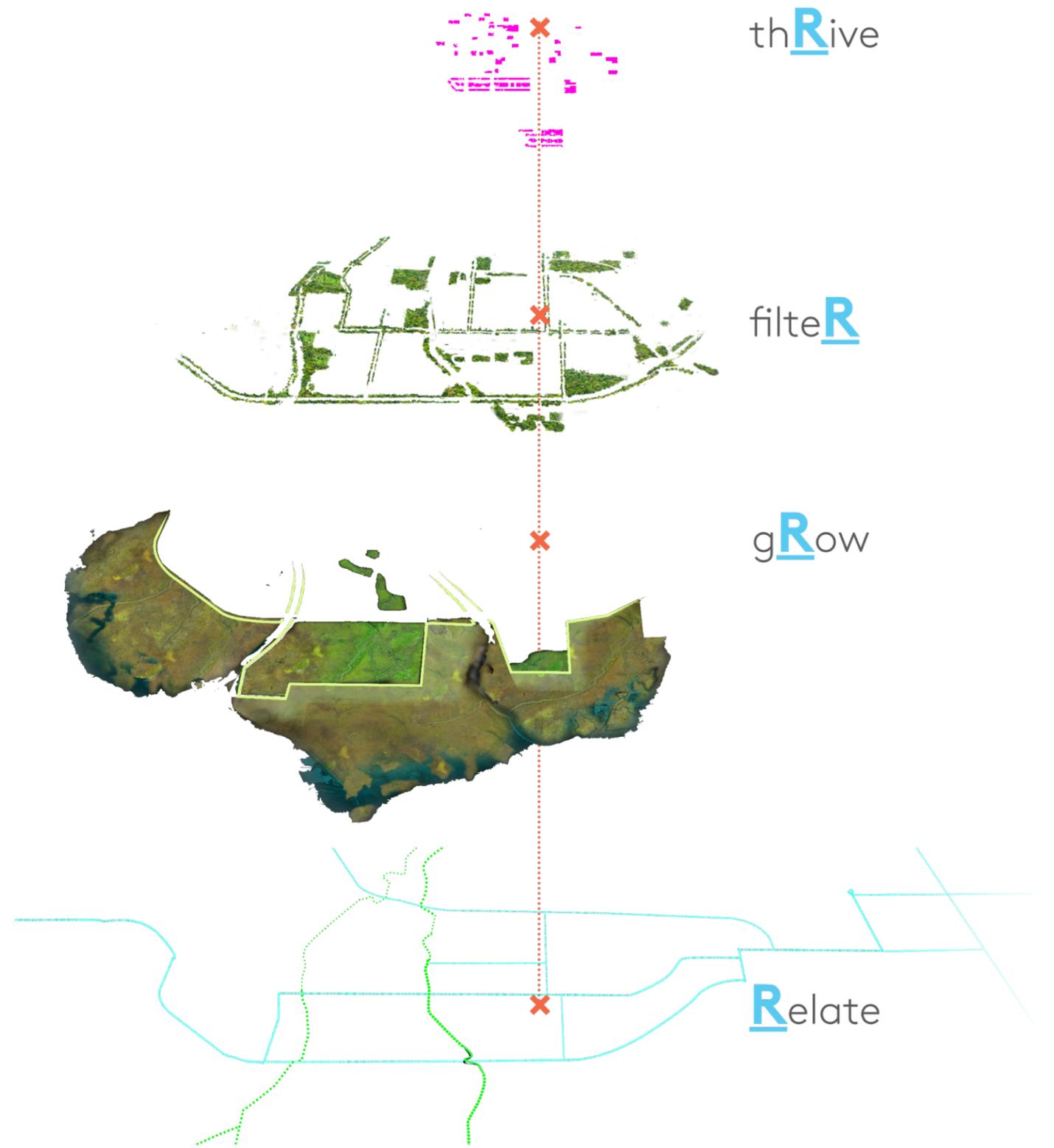


HOW CAN SEA LEVEL RISE INFRASTRUCTURE INVESTMENTS BE USED AS A SOCIAL JUSTICE TOOL?



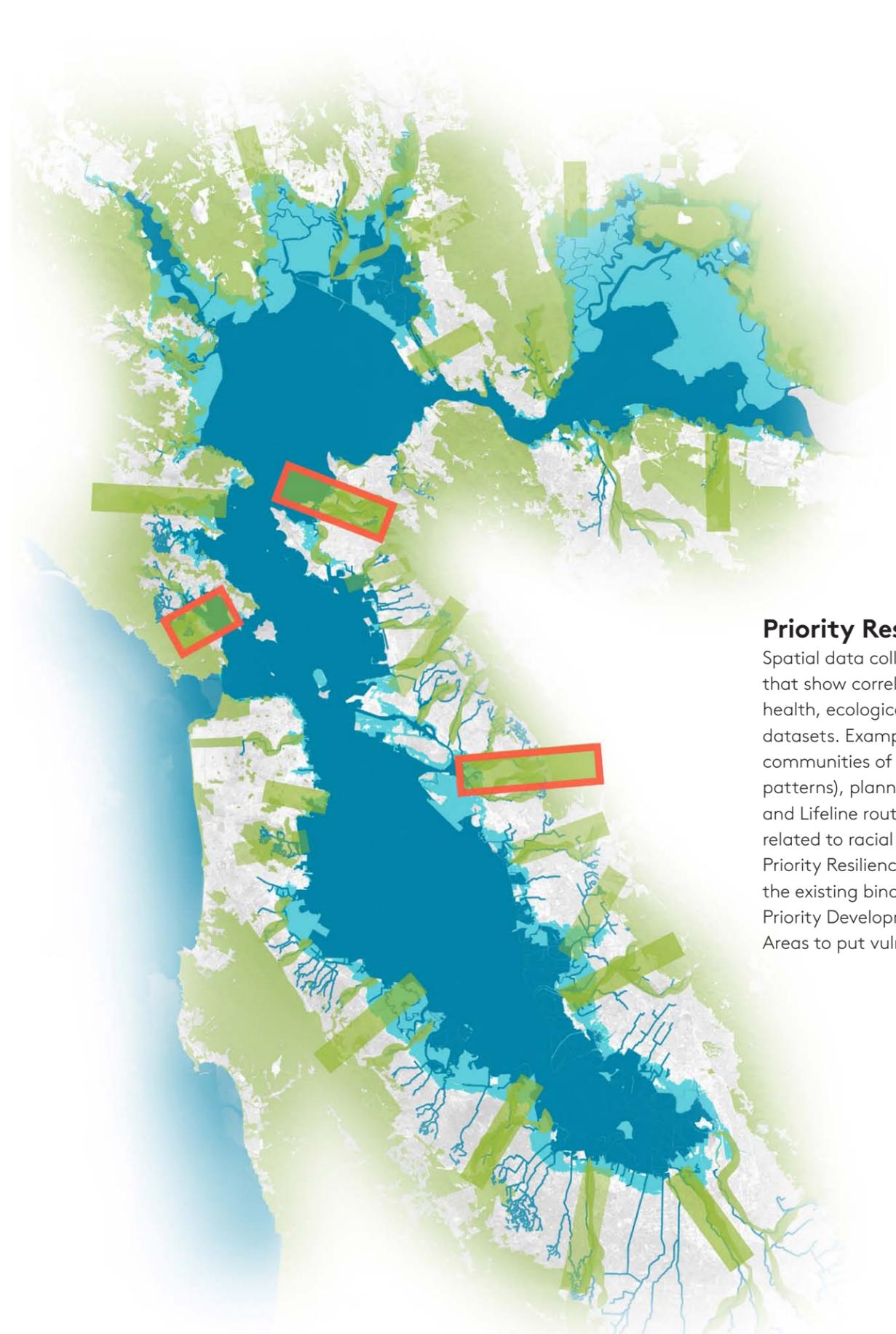
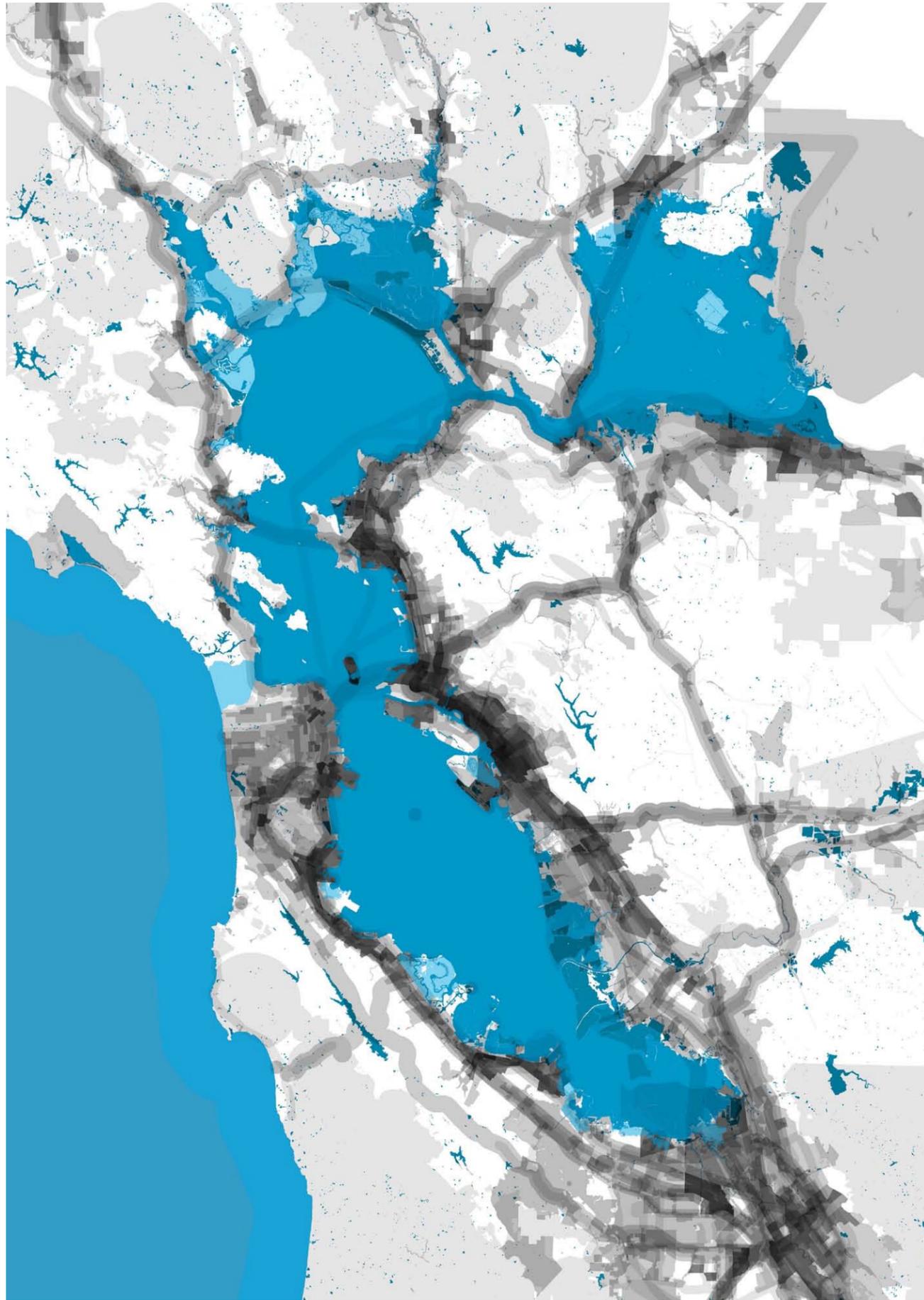
The Resilient by Design Challenge

Part of the Rockefeller Foundation's 100 Resilient Cities program, the Challenge enlisted ten international design teams to work with ten communities in the nine counties that touch the San Francisco Bay to identify implementable solutions for sea level rise issues. This proposal was developed with people from North Richmond.



Design Integration with Immediate Needs

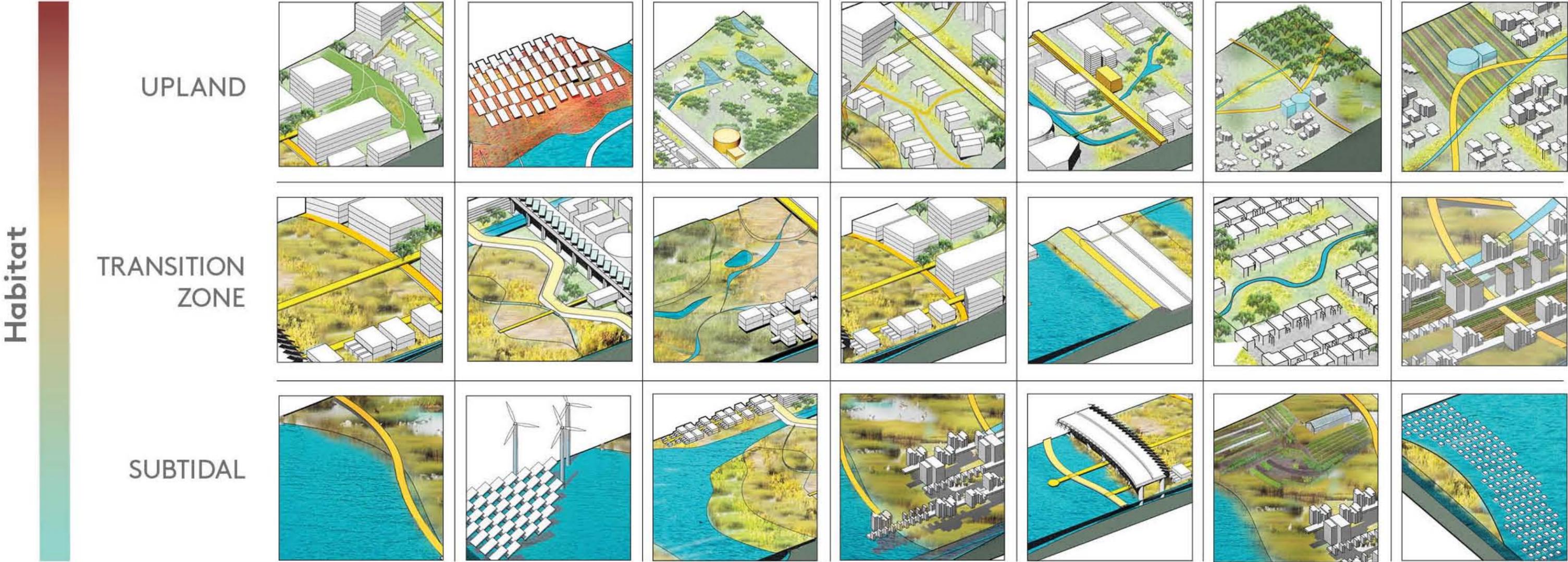
The four design proposals, called OuR:Home, combine to leverage sea level rise investments as a social justice tool.



Priority Resilience Areas

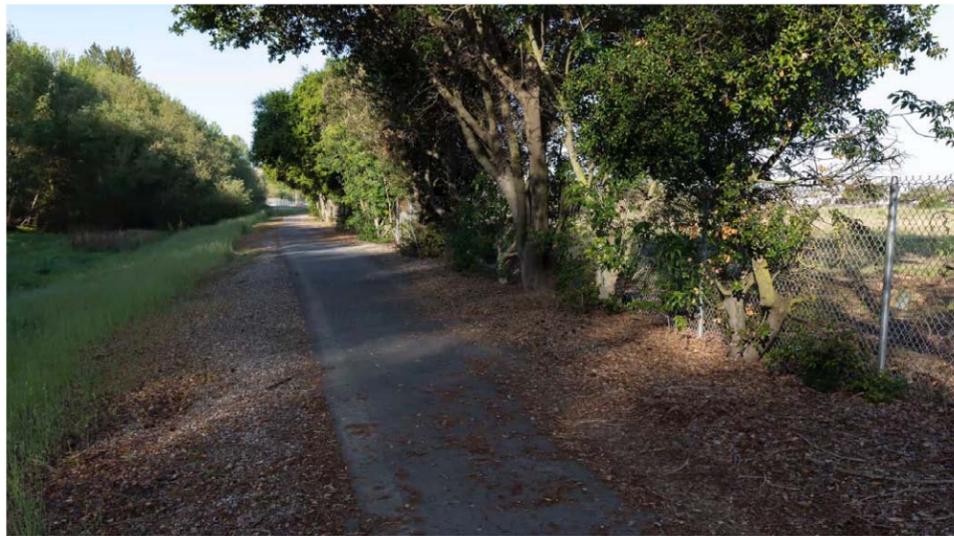
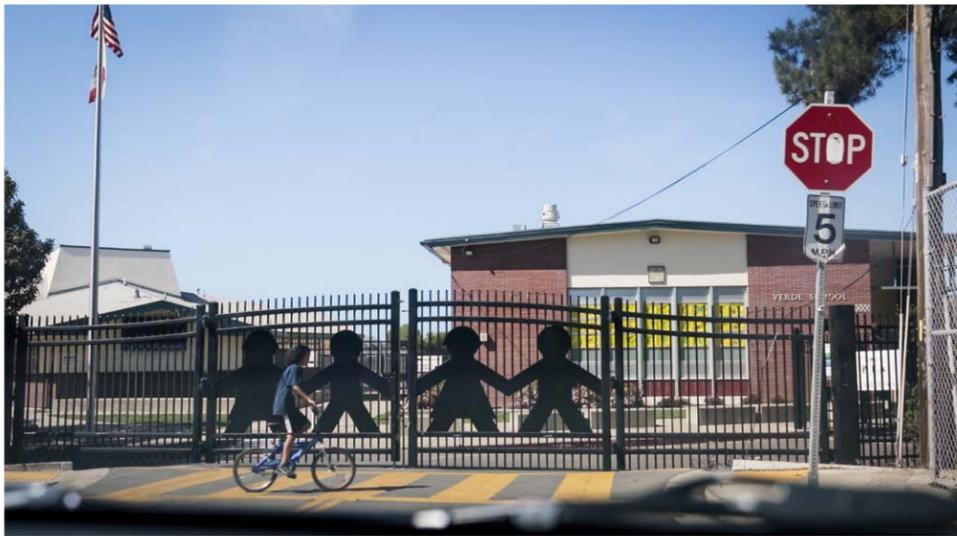
Spatial data collection focused on datasets that show correlations between social, health, ecological, infrastructure and historic datasets. Examples include CalEnviroScreen's communities of concern (displacement patterns), planned infrastructure investments and Lifeline routes and historic documentation related to racial history and historic ecology. Priority Resilience Areas (on right) restructure the existing binary regional funding system of Priority Development and Priority Conservation Areas to put vulnerable population first.

Habitation



Phase One: Habitat and Habitation

Prolific design iteration focused on human systems and the upland to sub-tidal habitat system. This provided a structure for evaluating holistic design options in the early stages of design.



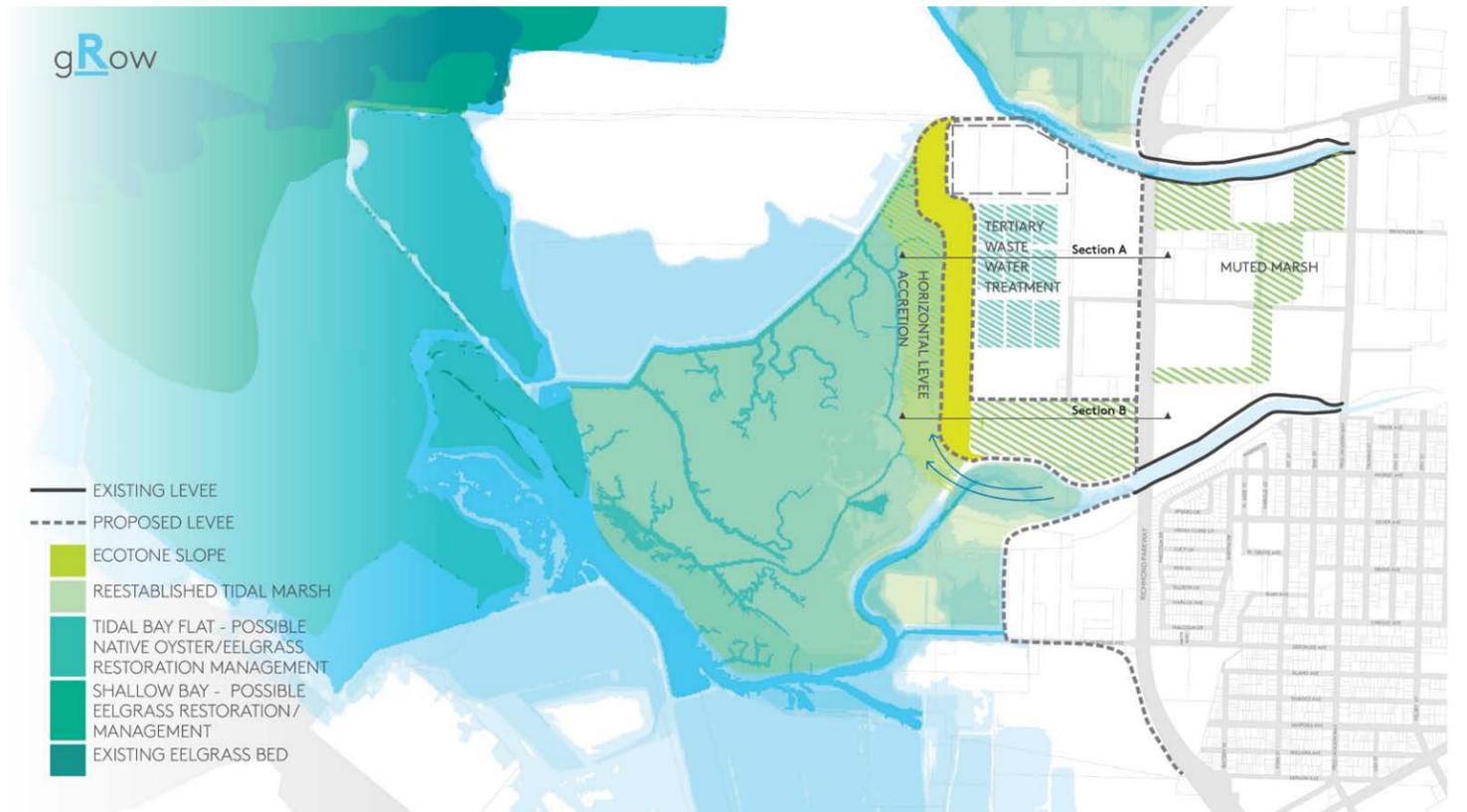
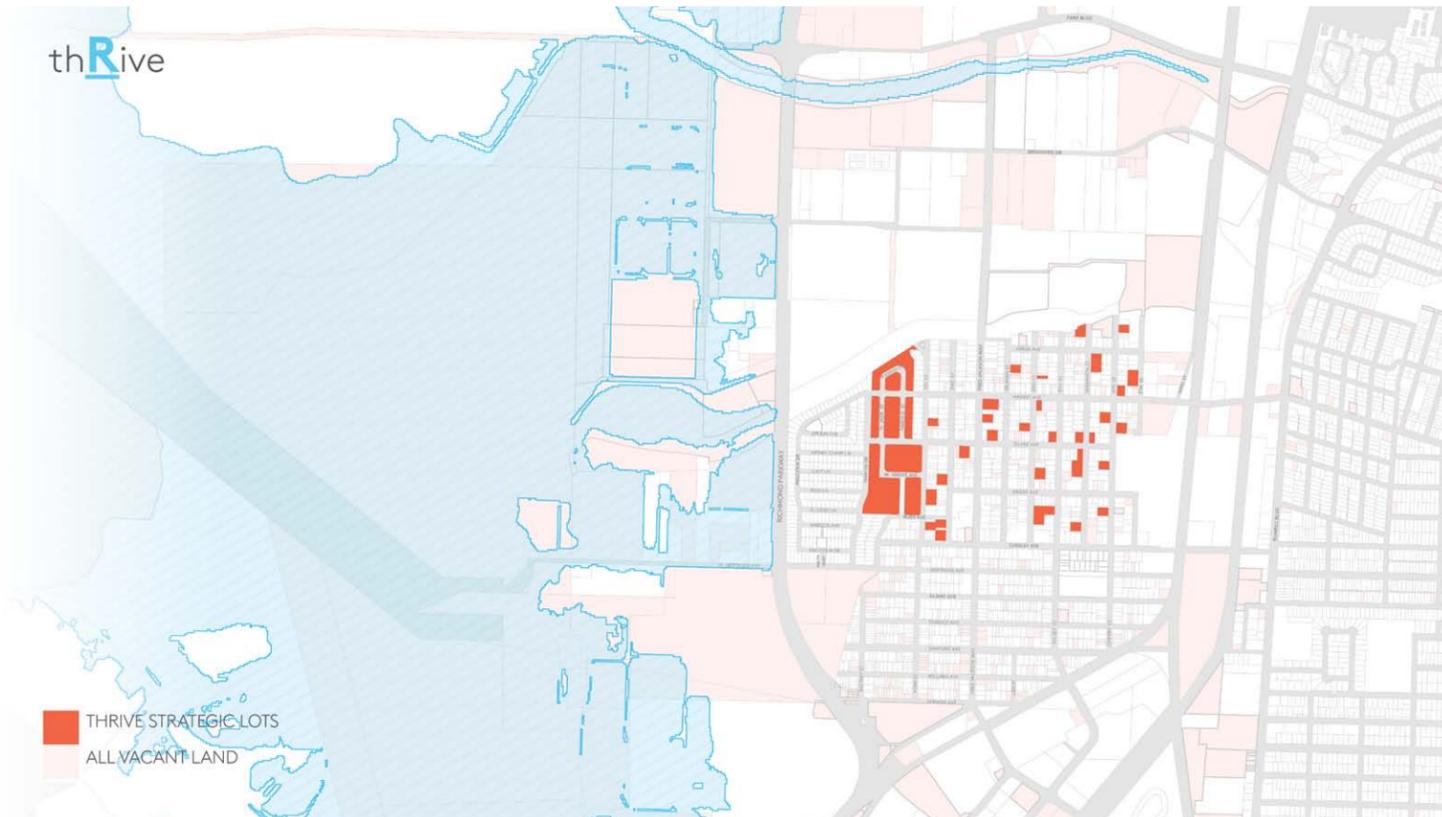
Phase Two: Getting to Know the Community

North Richmond is a fence-line community—forced to share an unhealthy environment with Chevron, diesel truck routes and railroads through historic redlining practices in the 1940's.



Community Outreach Rooted in Immediate Needs

Multiple strategies were used to create a process rooted in making design relevant to the daily life of residents. Community liaisons worked with the design team to establish a paid community advisory board, train community leaders in asset mapping, and develop an art installation to help visualize sea level rise.



Thrive, Filter, Grow, Relate

Four proposals were based on community identified needs and neighborhood characteristics—the use of vacant lots for people to **thrive** through home ownership, using greenbelts to **filter** air quality, ensuring marsh habitat can **grow** and connecting people so they can safely **relate** to the shore.



OuR:HOME

Traditional economic models have not served North Richmond well. A multiple benefit, community driven model linked equity solutions for building wealth, leadership and advocacy to the design proposals.



Thrive: Paths to Home Ownership

Sea level rise strategies include paths to home ownership—establishing financial stability and a wider range of choices to use to adapt to change.



Filter: Turning Around Health and Wellness

North Richmond residents have the highest asthma rates in the County. Using vacant lots and greenbelt zones to filter air quality with massive tree planting can leverage existing monitoring systems and help turn conditions around.



Relate: Safe Route to Shore

North Richmond is physically isolated and seeks to create identity and connection to “our nature” with a pedestrian overpass that in addition to connecting to the shore, will also serve the popular, local flea market that fills the void in neighborhood retail.



Grow: Restoring Marsh

A horizontal levee is a shallow slope that reduces wave action, protects infrastructure, creates a transition zone for the marsh to move up slope as waters rise and a place for people to walk and ride along the shore.



Grow: Marsh Trails

The North Richmond shoreline is one of the richest ecological areas around the Bay. The strategy here is for a 'muted marsh' controlled by tidal gates. Wetlands restoration can co-exist with planned industrial centers. Future levees and marshlands can be designed to allow policy change in the future.



Relate: Wildcat Creek Trail

Residents want to picnic along the creek and safely get to the shore. Verde School elementary students use the existing trail as an outdoor classroom.



Relate: Floating Trails

Ultimately, buoyant and boat building technologies will evolve to allow people to adapt in place. This floating trail connects multiple neighborhoods to existing open space at Point Molate. Oyster friendly piers and canoe trail shelters were developed with state and county public agencies to support both habitat and people using the changing shoreline.