North Richmond Shoreline Horizontal Levee Project Update

February 26, 2021

- Andrew Clough, Deputy General Manager, West County Wastewater
- Josh Bradt, SFBRA Project Manager

Presentation Overview

- Review Project Setting & Goals
- Provide Project Status Update
- Discuss Collaborative Approach
- Review Recent History of Community Participation


Benicia
Richmond
Martinez
Walnut Creek
Oakland
Hayward

China Camp (5.5 miles)
Point San Pedro (3.05 miles)

Burdell Mountain (16.14 miles)

Point Pinole (2.6 miles)

WILDCAT MARSH & LANDFILL LOOP TRAIL

The story of this portion of the Bay Trail is one based on the very essence of today's meaning of "green." Non-existent until now, the trail incorporates fantastic views of San Pablo Bay, Wildcat and San Pablo Creeks with remarkable examples of industrial water conservation and reuse, resource recovery, electrical generation, recycling and recreation.

Make sure to visit the many interpretive exhibits along the trail which tell the story of this formerly little-known part of Contra Costa County's shoreline.

What to bring on the trail:

- Water
- Snack or picnic lunch
- Binoculars
- Birding book
- Camera

For school tour information call recyclemore 510-215-3125.

Mount Tamalpais West Ridge (11.45 miles)
Point San Pablo (1.85 miles)

San Pablo Ridge (1.5 miles)

SAN PABLO BAY

SAN PABLO CREEK MARSH

San Pablo Creek

Viewshed

Picnic Area

Concrete Crusher

Compost

Power Generator

Garbage Mountain
(158' elevation)

Green Waste

Transfer Station

Construction & Demolition

Retention Pond

Upper Trail

Landfill Loop Trail

Landfill Loop Trail Head

Solar Panels

Wastewater Treatment Plant

PARR BLVD

PITTSBURG AVE

RICHMOND PARKWAY

To Sacramento

To I-580

San Pablo Creek

Wildcat Marsh Trail

WILDCAT MARSH

Wildcat Creek

Wildcat Creek Trail

San Rafael

Wildcat Creek Trail Head

Map Legend

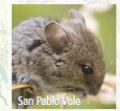
Bay Trail suitable for walking, biking, roller skating & wheelchair access	
Bay Trail of compacted aggregate	
Distance markers and mileage between two markers	
Future Bay Trail	
Connector Trail	
Parking	Drinking Water
Picnic area	Restrooms

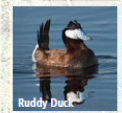
Who Lives Here?

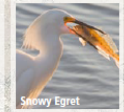
This new land form has attracted flora and fauna characteristic of the Bay Area shorelines.

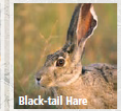
Salt tolerant plants as well as marshbirds, shorebirds and raptors co-exist with mammals along the shoreline.


Pickleweed


San Pablo Vole


Ruddy Duck


Snowy Egret


Black-tail Hare

NORTH

0 .1 .2 Kilometers approximate

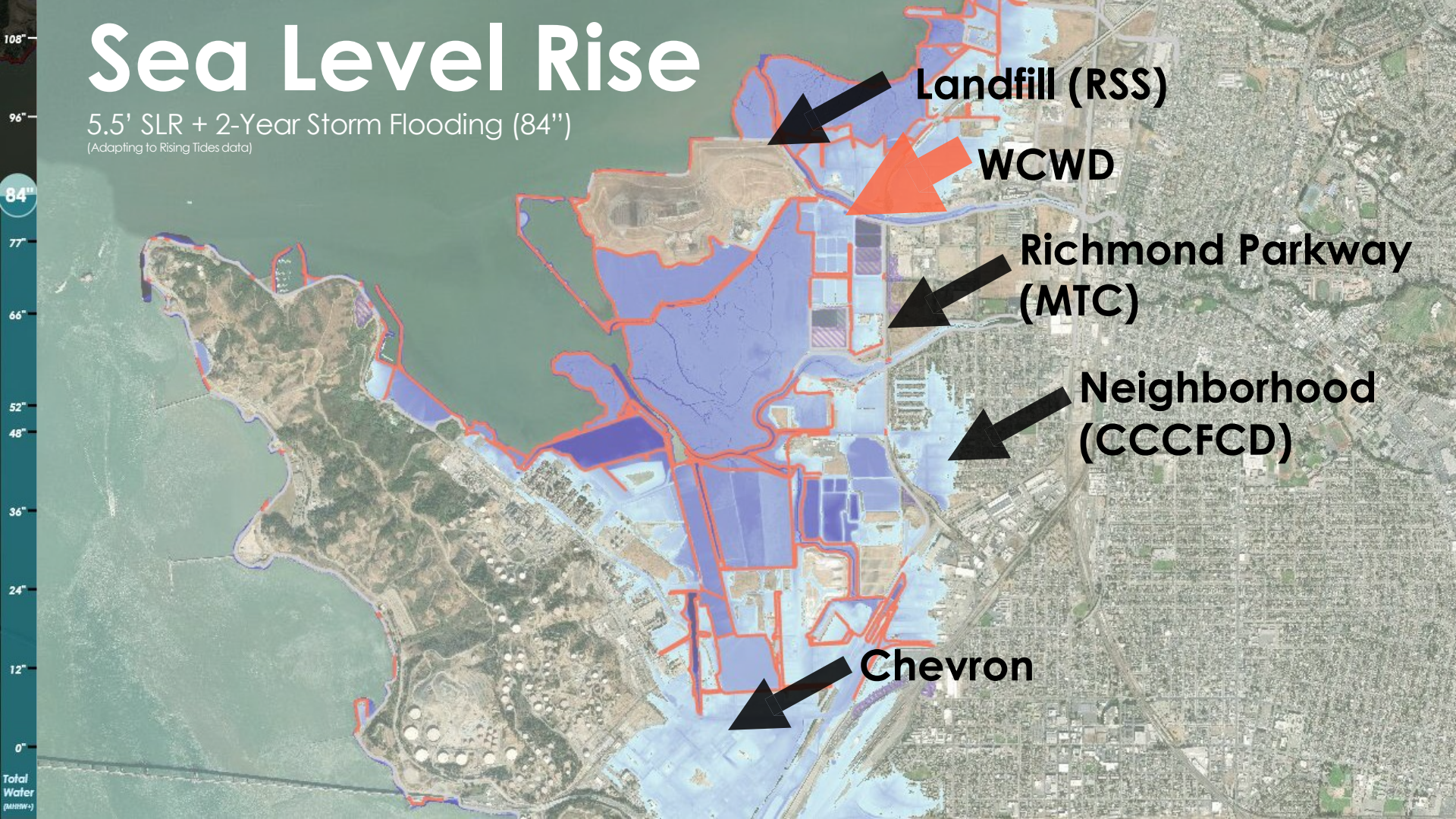
0 .1 .2 Miles approximate


Sea Level Now
0' SLR @ MHHW
(Adapting to Rising Tides data)
WCWD
108"
96"
84"
77"
66"
52"
48"
36"
24"
12"
0"
Total Water
(MHHW+)

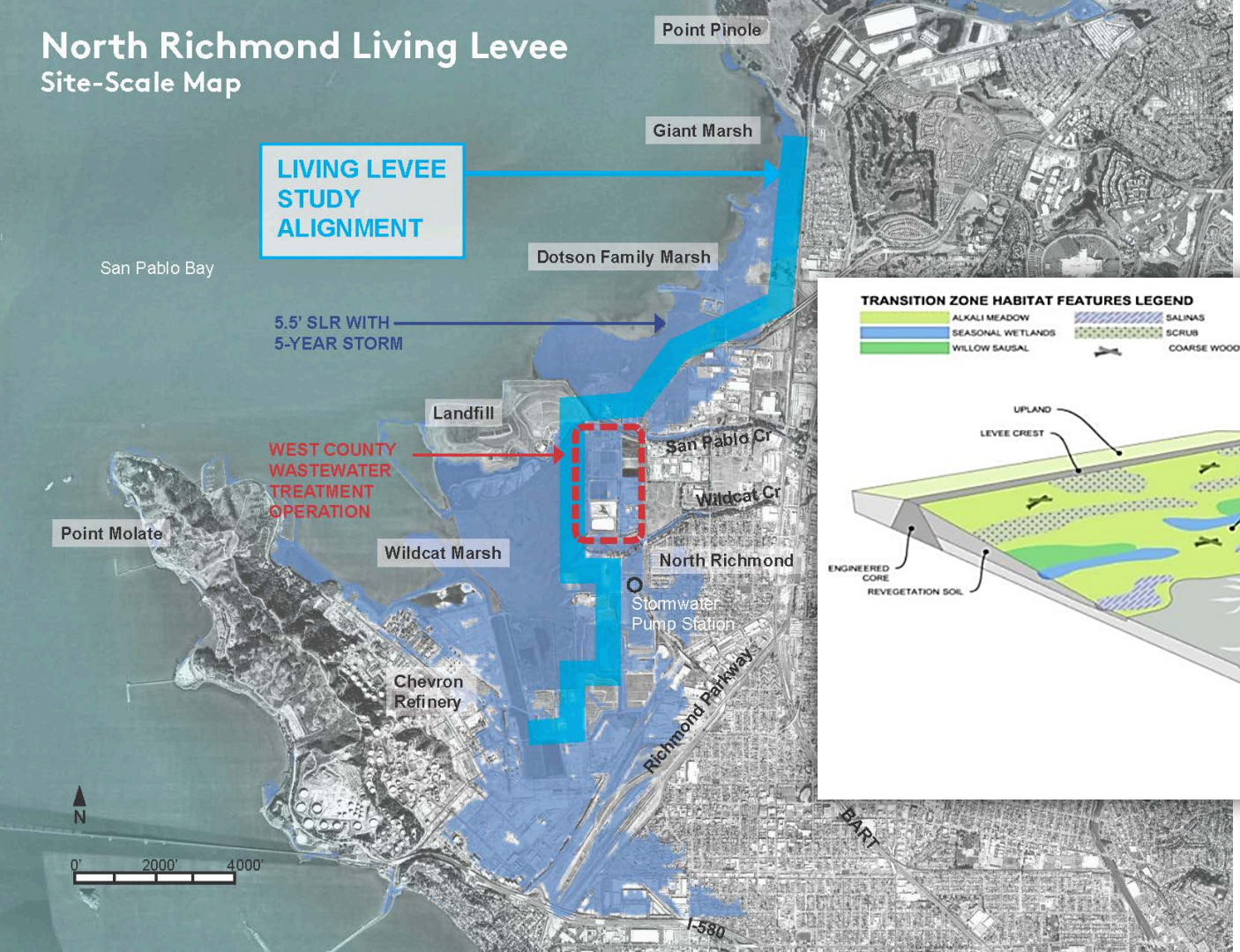
Sea Level Rise

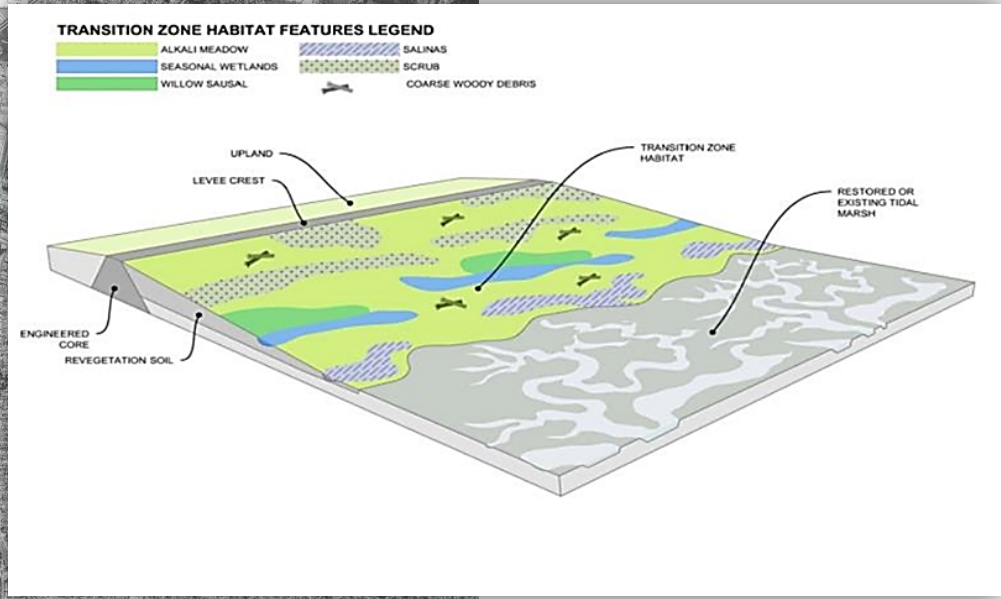
5.5' SLR + 2-Year Storm Flooding (84")

(Adapting to Rising Tides data)



North Richmond Living Levee
Site-Scale Map



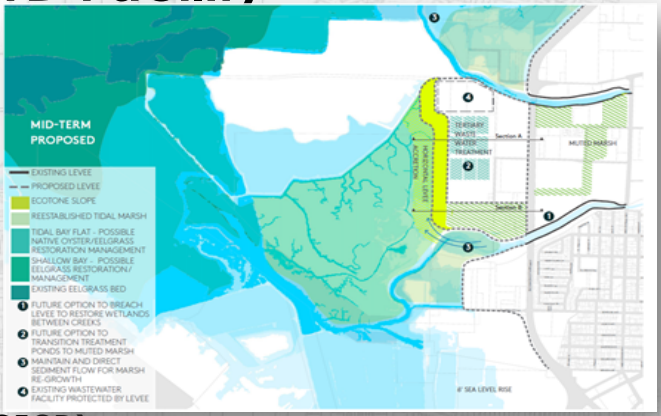


Landfill (RSS)

~.65 Mile

~300’

WCWD Facility



Pump Station (CCCFCD)

Pump
Outfall

SF Bay Restoration Authority Project Status

- Grant Executed
- Work Plan Submitted
- Request for Proposals
- In-kind Contributions from WCWD/Stakeholders
- Stakeholder Charter

Community Participation in Shoreline & Watershed Planning

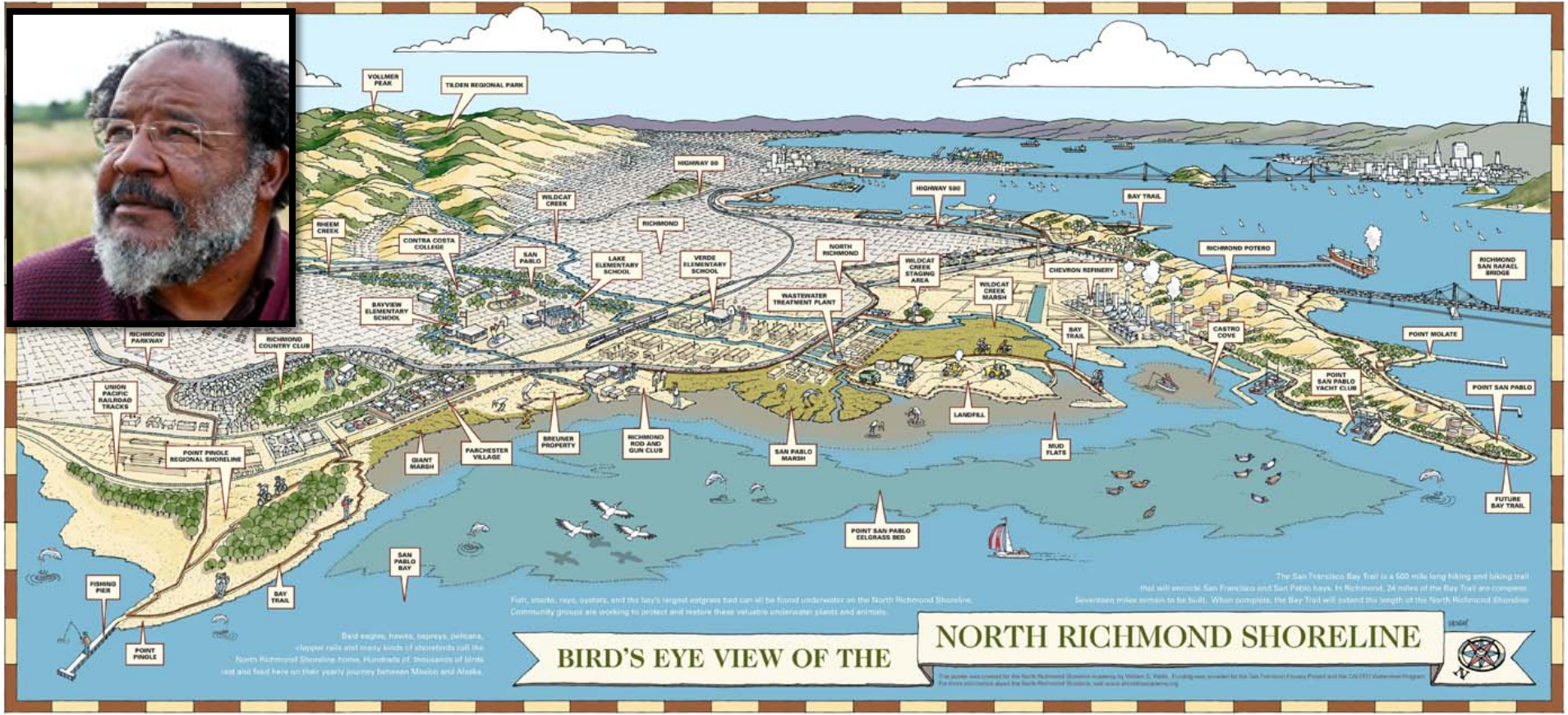
WILDCAT-SAN PABLO CREEKS WATERSHED COUNCIL

Friday, February 7, 1986 Volume 8, Number 18

After the Flood: The Salvation of Wildcat Creek

CITYSIDE

North Richmond Shoreline Open Space Alliance




Dotson
Family
Marsh
Restoration and improvemen
were funded in part by
Measures
CC and WW
Thank you
East Bay
Dotson
Family
Marsh
DEDICATION

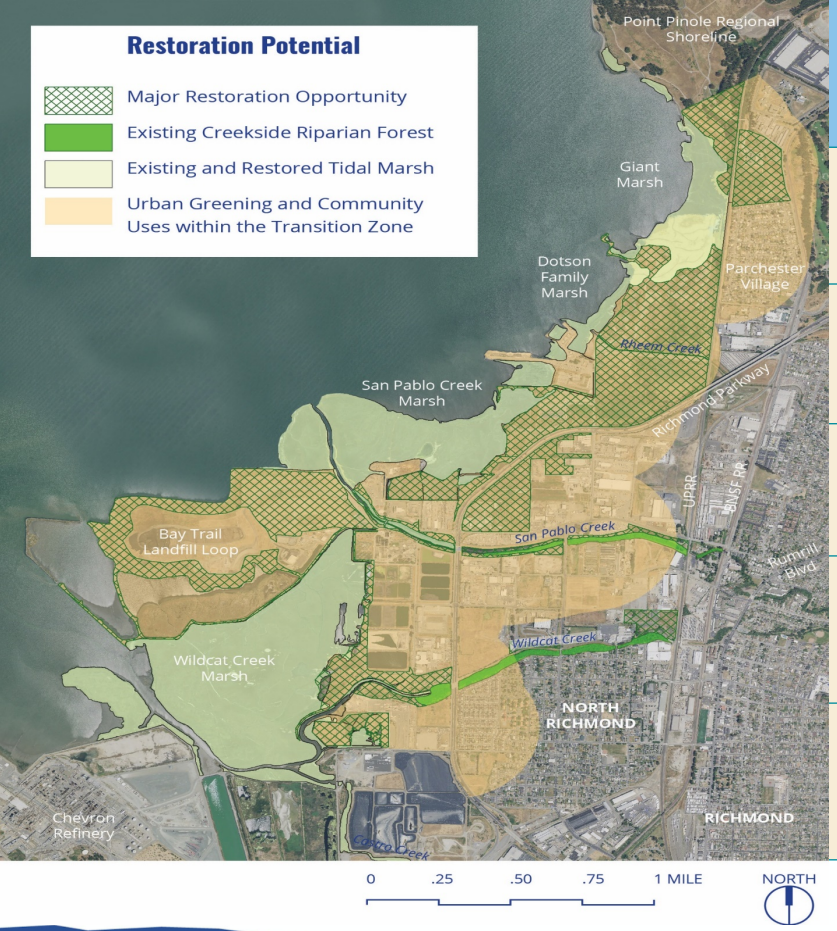
Regional Transition Zone Mapping & Community Adaptation Strategy Pilot Project, 2016-17

- **Phase 1:** Develop upland transition zone mapping methodology

- **Phase 2:** Apply methodology locally & partner with a vulnerable community to create a vision for sea level rise resiliency focusing on opportunities

North Richmond Community Shoreline Vision Project

- Community stakeholder meetings
- Informational interviews with public agencies, community-based organizations, and service providers
- 284 Resident Surveys



North Richmond Shoreline Vision Strategies and Actions

Strategy #1: Protect and Conserve Open Space

Strategy #2: Improve & increase shoreline public access and understanding

Strategy #3: Dynamic shoreline uses with compatible community needs

Strategy #4: Restore & enhance a diversity of habitats and living resources

Strategy #5: Build capacity for equity, environment, and economic development among stakeholders

Near Term Opportunities

As we adapt to sea level rise in the Transition Zone, there are a number of near-term implementable actions and specific projects outlined in the Vision that are already in various planning stages but have further project development needs (such as community input, funding, final design documents, permits) to advance to implementation.

1 Horizontal levee and Interpretive Center at West County Wastewater District

Explore planning, design, and construction of nature-based shoreline infrastructure, and an associated Environmental Center supporting environmental education and public outreach programs. The effort is looking at placing a horizontal levee at Wildcat Marsh, adjacent to the Bay Trail, in partnership with the District and SFEP.

2 Interpretive Center at Point Pinole Regional Shoreline

Engage the public through a new 9,000 sf visitor center that will serve as the primary point of contact for park visitors, with interpretive and educational functions, community facilities, and a regional recreational resource center for the Park District. Site developments include multiple interpretative gathering areas, an amphitheater, trail links, bus drop off, and parking.

3 Bay Trail Gap closures and Richmond Parkway Overpass on Wildcat Creek Trail

Improve access through closing 2.1 miles of Bay Trail gaps on the northern shoreline including: Parkway/Wildcat Marsh Trail on south side of San Pablo Creek; Parkway/ Goodrick Avenue; Goodrick Avenue; and Atlas Road/Richmond border.

4 Giant Marsh Living Shorelines

Enhance living resources, including the multi-habitat San Francisco Bay Living Shorelines Project (LSP). The project integrates subtidal habitat restoration of native oyster and native eelgrass beds with designs that test the use of natural structures to buffer and protect adjacent tidal wetland sites, as well as areas of the San Francisco Bay shoreline that are vulnerable to sea level rise and shoreline erosion.

5 Develop and construct renewable energy pilot projects

Generate renewable energy, through a special district that is exploring producing renewable energy in the area. Goals of the project are for the special district to become more carbon neutral and test out a new method of green energy production. The pilot project would use green waste from the area to produce renewable energy at the Green Waste Recycle Yard.

6 Wildcat Creek Fish Ladder Improvements

Realign portions of the environmental low-flow channel of Wildcat Creek (downstream of Verde Elementary School), improve function of the sediment basin, and replace dysfunctional fish ladder immediately upstream of sediment basin.

7 Fred Jackson First Mile, Last Mile Green Street / Watershed Connections Project

Provide urban greening through the North Richmond Watershed Connection, which will serve to create a healthy, walkable, green connection between the San Pablo and Wildcat Creeks in North Richmond. The project will implement coordinated urban greening elements on streets, parks, creek trails, and an urban farm to enhance the health of the creeks and watershed while improving the community's access to their environment.

8 Rheem Creek Realignment though Dotson Family Marsh

Realign and restore about 1/2 mile of Rheem Creek, and connect it with restored Dotson Family marsh to create improved aquatic habitat through the marsh.

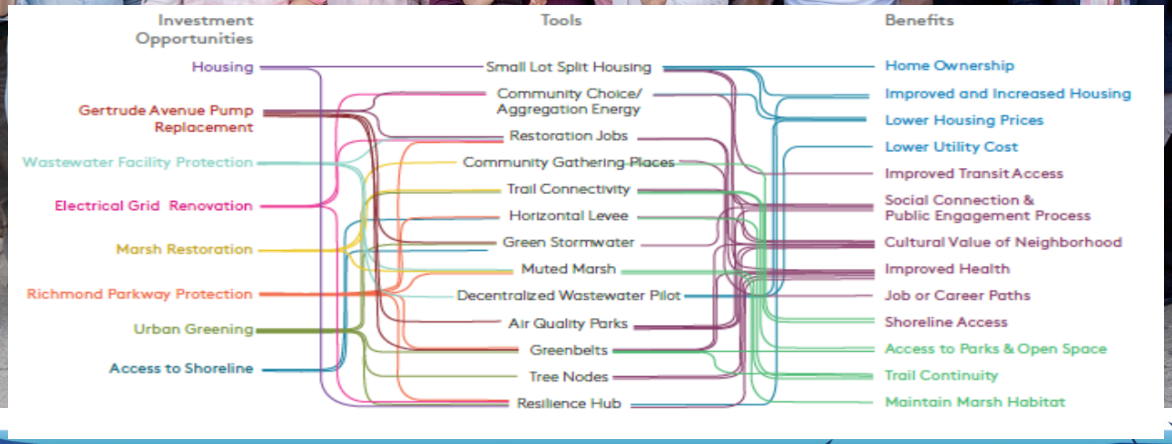
Resilient by Design

Goal: ***connect international expertise with local communities to inspire innovative designs and collaboration***

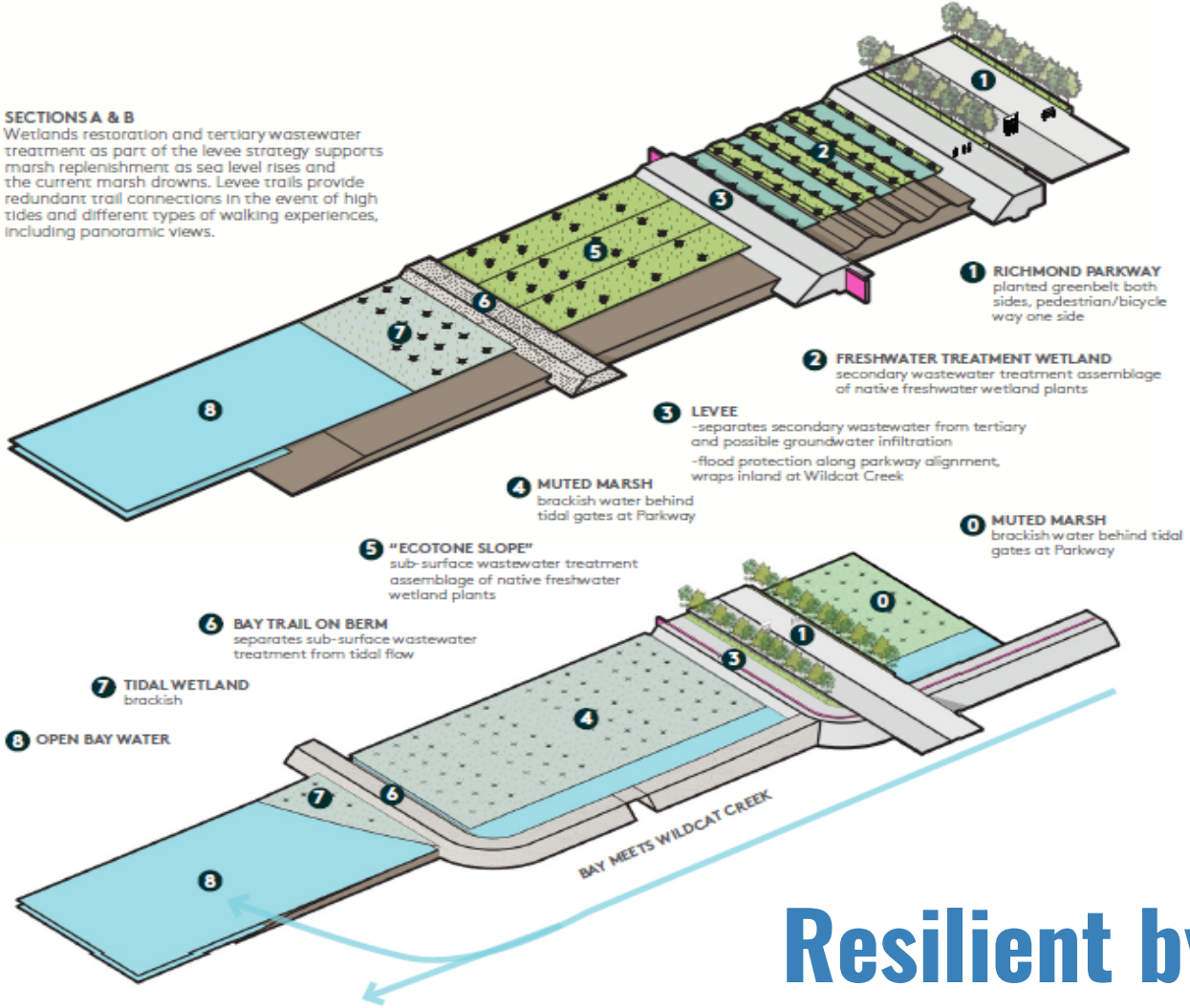
Process ***(2017-2018)***:

- Public call for vulnerable sites
- Design Team selection
- Collaborative Research Phase
- Assign Teams to sites
- Collaborative Design Phase
- Final Designs

The Home Team (Mithun) with Community Advisory Board



Resilient by Design



Resilient by Design


Bay Trail

- Meets monthly since September 2019.
- Reach shared understanding of desired benefits, alignment, and extent of potential horizontal levee system.
- Position Horizontal Levee Conceptual Design for external funding opportunities.
- Provide information, support, and guidance to WCW Project Management Team throughout conceptual design process

North Richmond Horizontal Levee Stakeholder Group

THANKS!

Any questions?