

North Richmond Shoreline Horizontal Levee Project Update

February 26, 2021

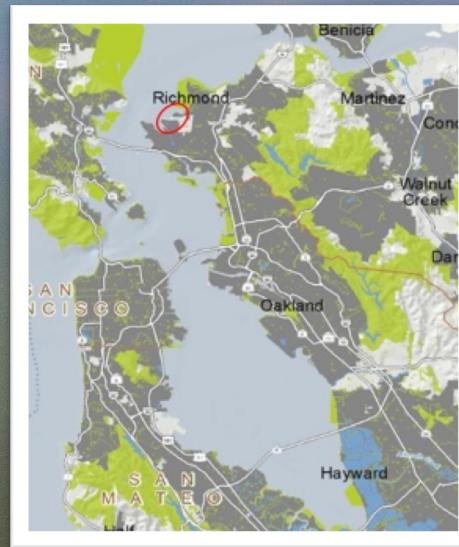


- ❖ Andrew Clough, Deputy General Manager,
West County Wastewater
- ❖ Josh Bradt, SFBRA Project Manager

Presentation Overview

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







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.

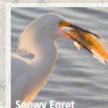
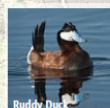
Map Legend

	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.



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 (11.16 miles)
Point San Pedro (3.05 miles)

San Pablo Ridge (11.16 miles)



0 1 2 Kilometers approximate
0 1 2 Miles approximate

Sea Level Now

0' SLR @ MHHW

(Adapting to Rising Tides data)



WCWD

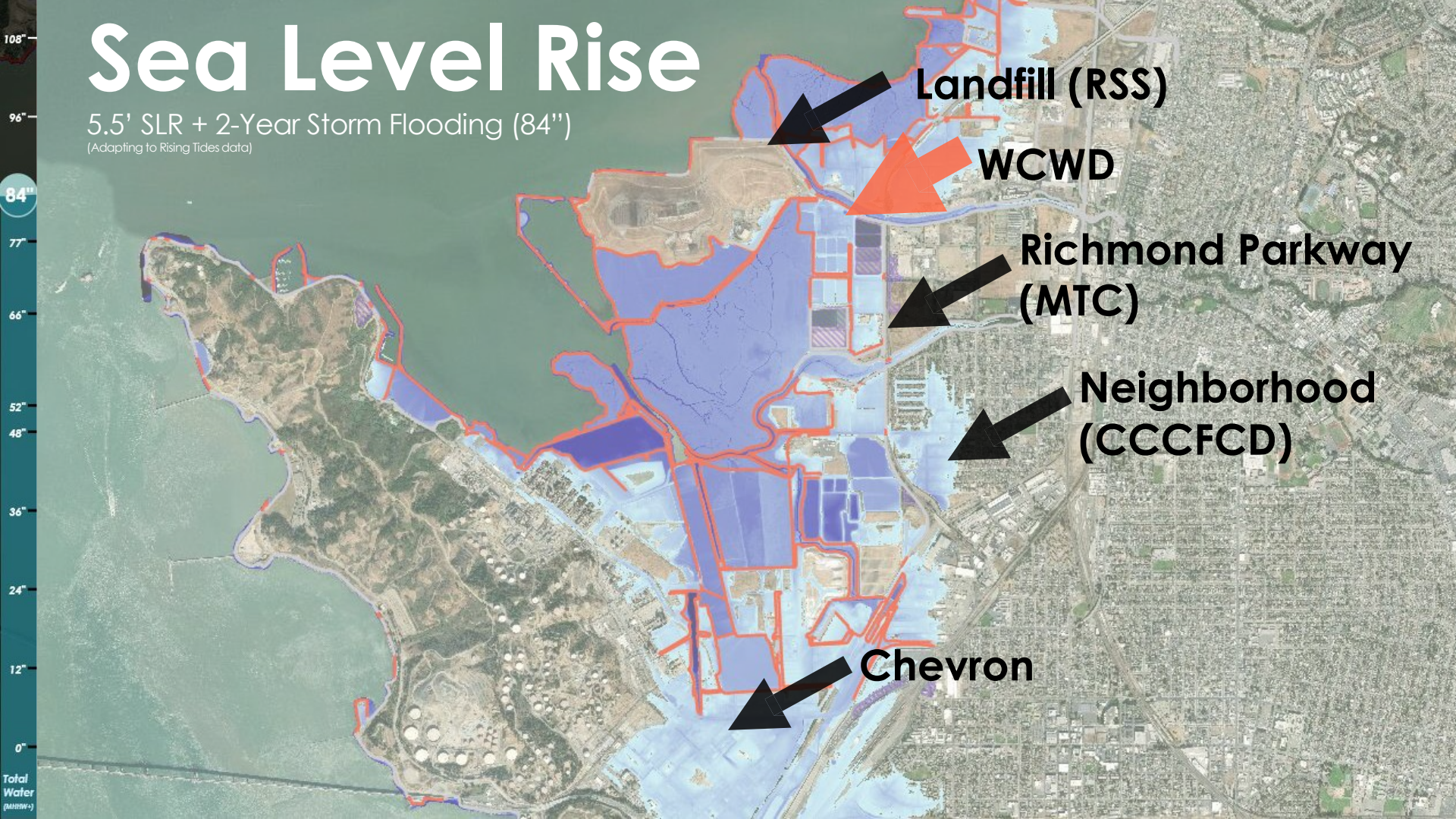
0"

Total Water
(MHHW+)

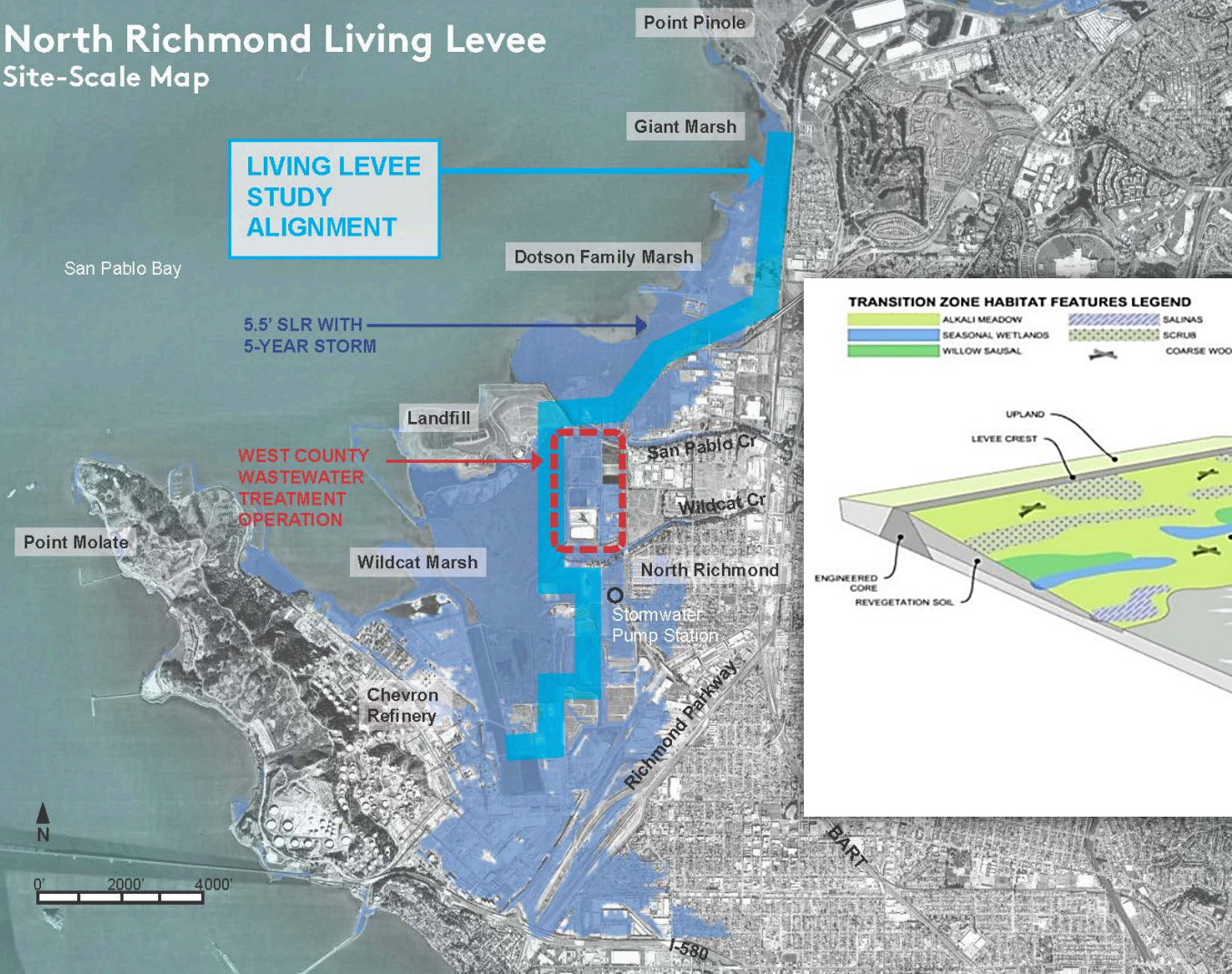
Sea Level Rise

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

(Adapting to Rising Tides data)

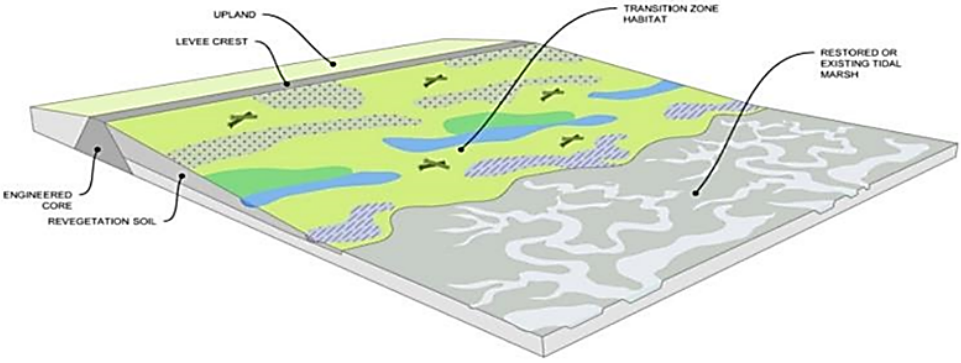


North Richmond Living Levee Site-Scale Map



TRANSITION ZONE HABITAT FEATURES LEGEND

ALKALI MEADOW	SALINAS
SEASONAL WETLANDS	SCRUB
WILLOW SAUSAL	COARSE WOODY DEBRIS



Landfill (RSS)

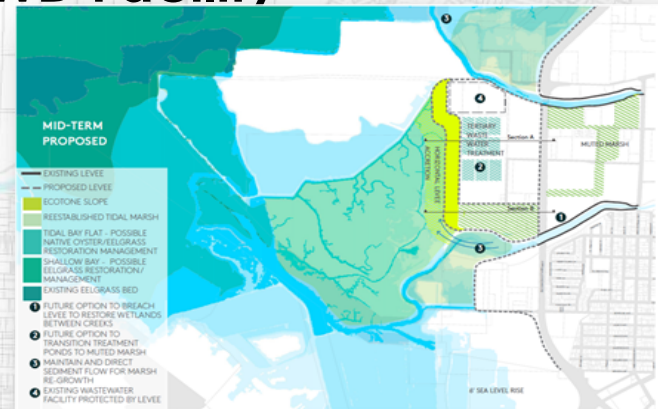
WCWD Facility

~.65 Mile

~300'

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**



A stylized blue-toned illustration of a landscape. In the background, a suspension bridge with two tall towers and a single main cable spans across the scene. Two birds are shown in flight above the bridge. The middle ground features a body of water. The foreground is filled with dark blue, pointed shapes representing reeds or grass. The text 'Community Participation in Shoreline & Watershed Planning' is written in white, bold, sans-serif font across the middle of the image, partially overlapping the water and the foreground reeds.

Community Participation in Shoreline & Watershed Planning



WILDCAT-SAN PABLO CREEKS WATERSHED COUNCIL



Friday, February 7, 1986 - Volume 6, Number 10

After the Flood: The Salvation of Wildcat Creek

By Martin Tarr

In June of 1984, writer David Davidson filed in these pages a first report on the fate of one of the East Bay's last relatively natural streams. Titled on Wildcat Creek - *Exposure*, June 1, 1984, from a vantage high on the Berkeley hills, Wildcat Creek made its way through a variety of environments ranging from redwood stands to urban sprawl before reaching the Bay, above the huge Chevron refinery near the community of North Richmond. That the creek had largely eroded artificial channels and massive concrete flood control structures to view Davidson reported. As to 90 percent natural had interested many citizens, including Alan La Pointe and Ann Riley of the then Bay Area Urban Creeks Council, as well as individuals from the East Bay Regional Parks, who

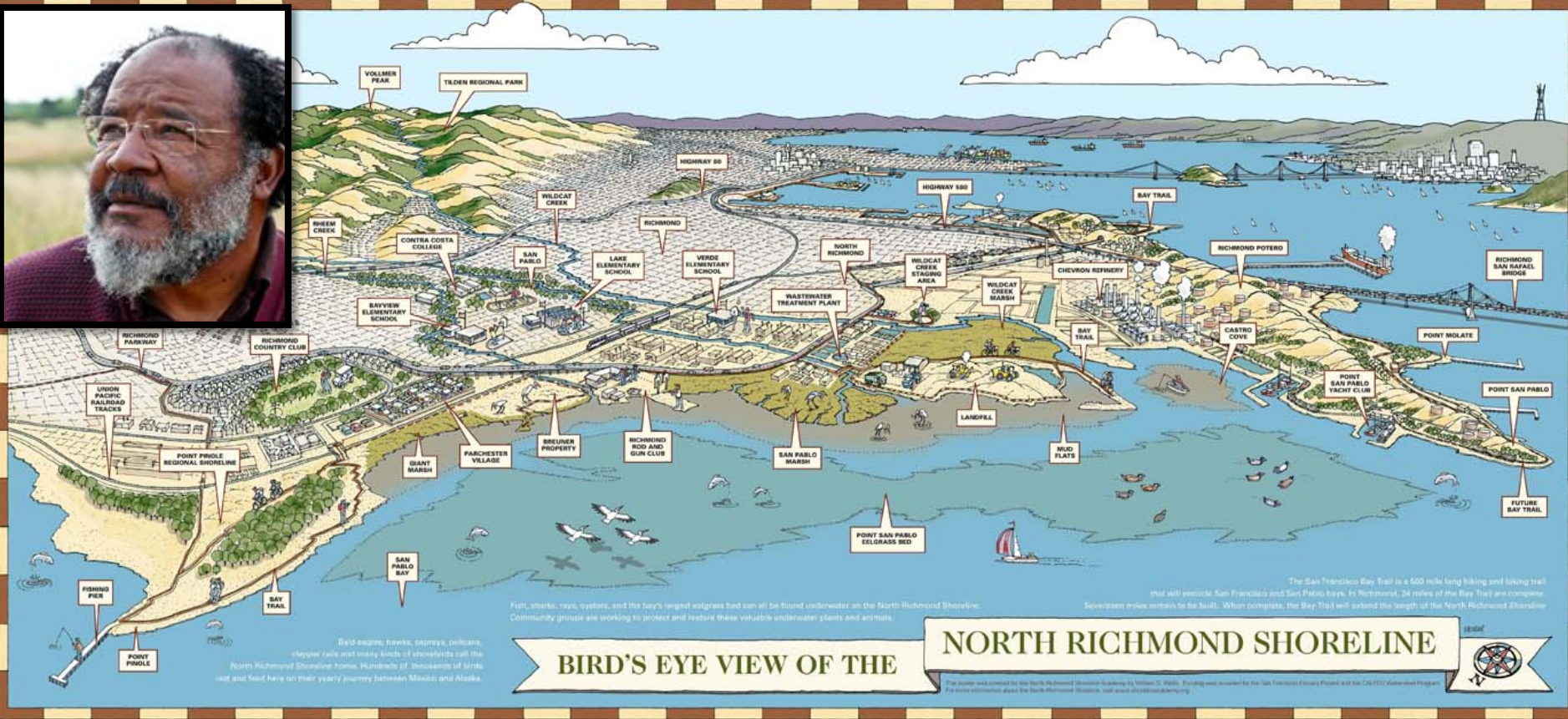
CITYSIDE



is. This is all you're going to get, take it or leave it. I told him. Forget you, sucker, you don't know who you're talking to. People here have been waiting for some kind of flood control for more than twenty years. If this weren't a low-income area, we'd never have had to wait this long. He thought he could just push us around. We want a project that's environmentally sound, and one that is an aesthetic improvement for the neighborhood. Ann Riley and Alan La Pointe of the Urban Creeks Council came to my husband's house then before - and so we started working together. We helped each other.

Working together, the BENC and the Urban Creeks Council put together an alternative proposal, one that provided for flood control, a creekside trail, better engineering, cleaning of the creek, and the restoration of marshes and creekside habitats. They set

North Richmond Shoreline Open Space Alliance



Fish, sharks, rays, octopuses, and the Bay's largest otterpots had can all be found underwater on the North Richmond Shoreline. Community groups are working to protect and restore these valuable underwater plants and animals.

Bird eagles, hawks, ospreys, pelicans, cormorants and many kinds of shorebirds call the North Richmond Shoreline home. Hundreds of thousands of birds rest and feed here on their yearly journey between Mexico and Alaska.

The San Francisco Bay Trail is a 500 mile long hiking and biking trail that will encircle San Francisco and San Pablo bays. In Richmond, 24 miles of the Bay Trail are complete. Seventeen miles remain to be built. When complete, the Bay Trail will extend the length of the North Richmond Shoreline.

BIRD'S EYE VIEW OF THE

NORTH RICHMOND SHORELINE

This poster was created for the North Richmond Shoreline Audubon by William D. Smith. Funding was provided by the San Francisco Estuary Program and the CA 2012 Watershed Program. For more information about the North Richmond Shoreline, visit www.northrichmondshoreline.org



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

San Francisco Estuary Partnership: Climate Ready Estuaries

North Richmond Community Shoreline Vision Project

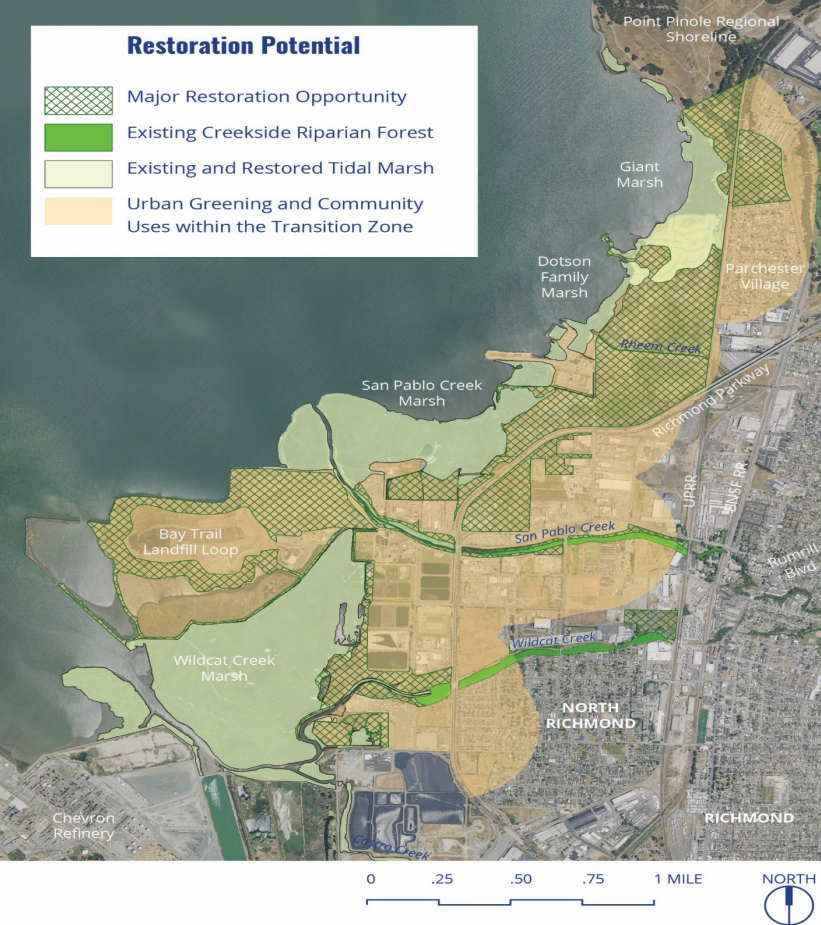
- Community stakeholder meetings
- Informational interviews with public agencies, community-based organizations, and service providers
- 284 Resident Surveys



San Francisco Estuary Partnership: Climate Ready Estuaries

Restoration Potential

- Major Restoration Opportunity
- Existing Creekside Riparian Forest
- Existing and Restored Tidal Marsh
- Urban Greening and Community Uses within the Transition Zone



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

San Francisco Estuary Partnership: Climate Ready Estuaries

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 SFFD.

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 through 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



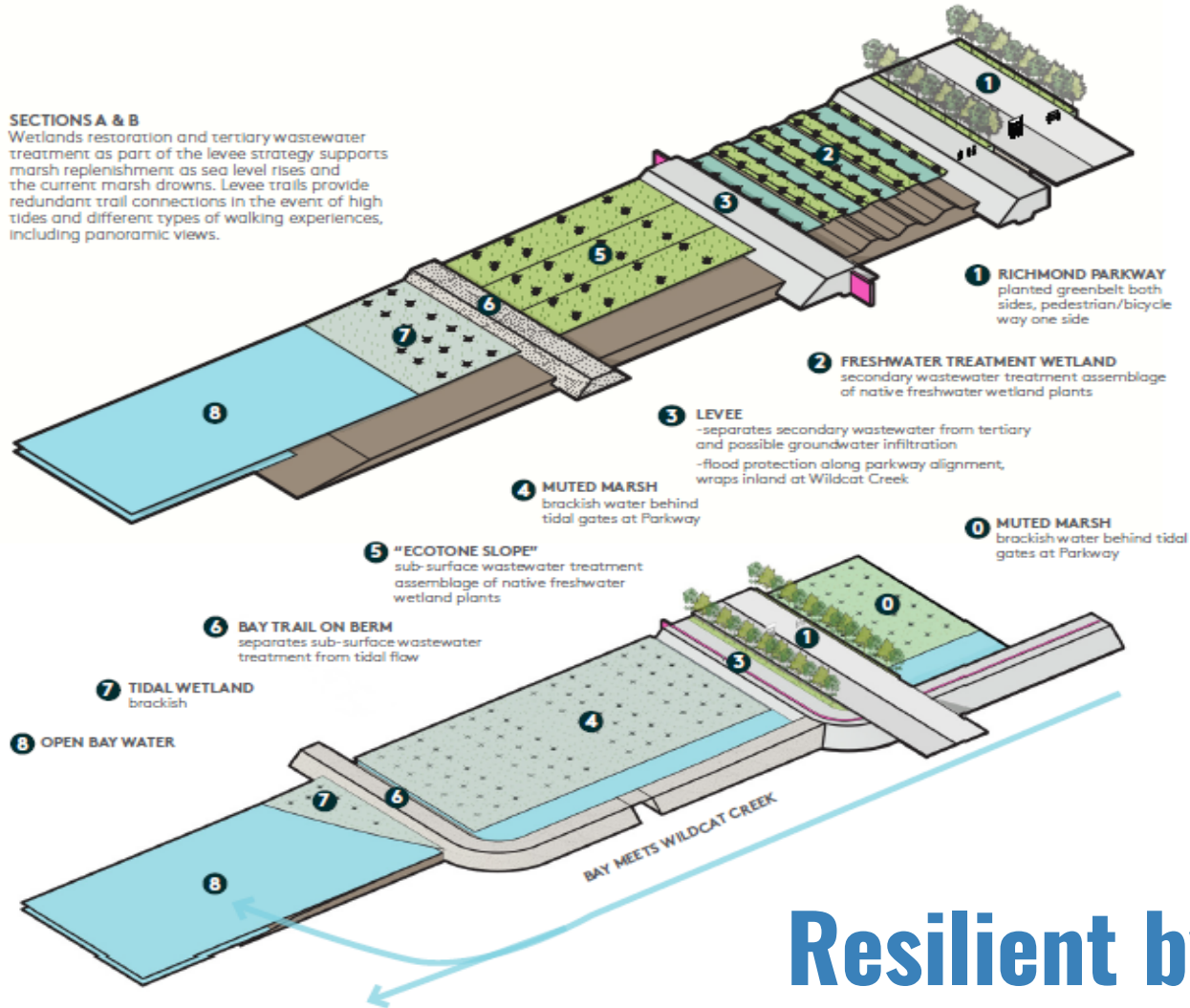
The Home Team (Mithun) with Community Advisory Board



Resilient by Design

SECTIONS A & B

Wetlands restoration and tertiary wastewater treatment as part of the levee strategy supports marsh replenishment as sea level rises and the current marsh drowns. Levee trails provide redundant trail connections in the event of high tides and different types of walking experiences, including panoramic views.



Resilient by Design







- 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?

