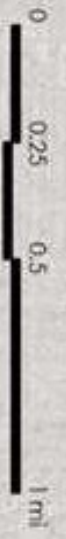




**The North Richmond Collaborative Shoreline Adaptation Plan:
Longer-Term Vision**

- LEVEE CORE
- LEVEE CORE + TRAIL
- PROPOSED BRIDGE / BOARDWALK
- VEGETATED HABITAT SLOPES
- PROPOSED BIKE LANES
- PROPOSED TRAILS
- EXISTING FLOOD CONTROL MEASURES
- EXISTING BIKE TRAILS
- EXISTING CLASS I TRAIL
- STUDY AREA BOUNDARY



Can addressing flooding also provide key access to a continuous trail system and local amenities, while regenerating habitat on degraded sites?



FLOODING EXPOSURES

1. North Richmond neighborhood will be bypassed and driver access to farm residences.
2. Flooding will limit critical access and services to Quetzale Pump Station and related stormwater infrastructure.
3. Community Park market will be inundated.

ECOLOGICAL EXPOSURES

4. Flooding includes the Missouri Creek
5. Existing marsh ecosystems will be disrupted by deeper and more frequent inundation
6. Certain ponds and facilities southwest of this site will experience inundation that exceeds design

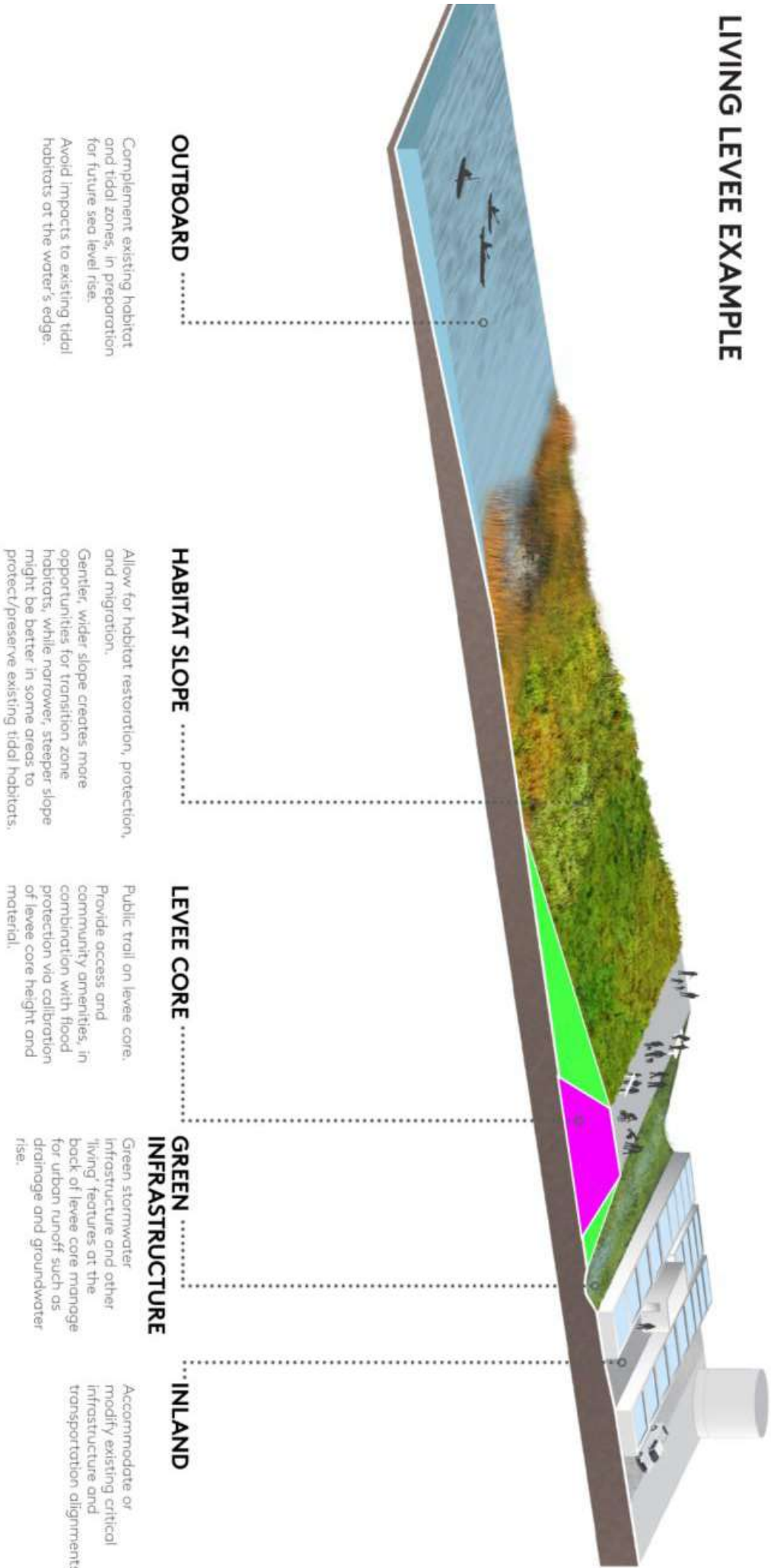
LEGEND

- APPROXIMATE PLANNING PATHWAY
- COVINGTON ROAD STRUCTURE
- 100 YEAR COASTAL FLOOD + 3.7 SEALEVEL RISE 13.00'
- 100 YR. COASTAL FLOOD 19.50'
- MEAN HIGH WATER 12.10'
- STUDY AREA BOUNDARY

NOTE: ALL ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAD83).



LIVING LEVEE EXAMPLE



OUTBOARD

Complement existing habitat and tidal zones, in preparation for future sea level rise.
Avoid impacts to existing tidal habitats at the water's edge.

HABITAT SLOPE

Allow for habitat restoration, protection, and migration.
Gentler, wider slope creates more opportunities for transition zone habitats, while narrower, steeper slope might be better in some areas to protect/preserve existing tidal habitats.

LEVEE CORE

Public trail on levee core.
Provide access and community amenities, in combination with flood protection via calibration of levee core height and material.

GREEN INFRASTRUCTURE

Green stormwater infrastructure and other 'living' features at the back of levee core manage for urban runoff such as drainage and groundwater rise.

INLAND

Accommodate or modify existing critical infrastructure and transportation alignments.

LEGEND

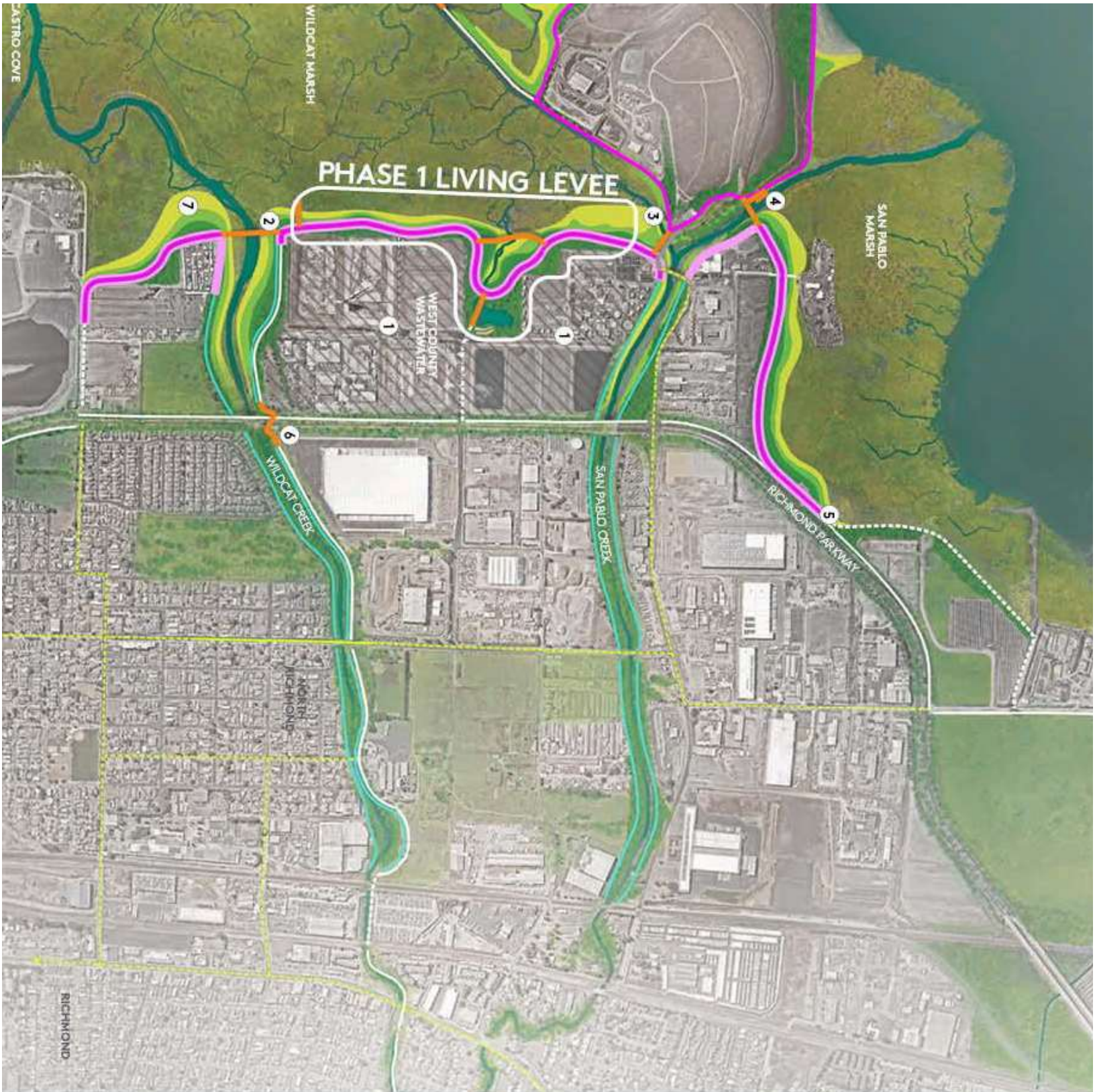
- ▲ Hazardous Waste Facilities (EnviroStor Results)
- Cleanup Sites (EnviroStor Results)
- Cleanup Program Sites (Geotracker Results)
- Leaking Underground Storage Tank (LUST) Sites (Geotracker Results)
- Richmond City Limits

PHASE 1A
NORTH CLUSTER

PHASE 1
LIVING LEVEE

PHASE 1B
SOUTH CLUSTER

As part of this scope of work, Mithun has included Kleinfelder on our team. Their background in analysis and design for contamination concerns will add critical nuance to the approach, particularly in the Phase 1A and 1B Cluster areas, where remediation strategies were an identified scope gap in the previous planning effort.



- 1 **CRITICAL INFRASTRUCTURE** facilities are protected at West County Wastewater (gray hatch)
- 2 **BOARDWALK & BRIDGE** connects North Richmond to Bay Trail and Flea Market, with new marsh and shoreline access amenities
- 3 **HYDROLOGIC RECONNECTION** via new bridge, that elevates landfill access for Republic Services via new ped/bike roadway, while opening historic reconnection of San Pablo creek to Wildcat Marsh
- 4 **SMALL-CRAFT BOAT LAUNCH** reintroduces waterfront access in North Richmond
- 5 **TRAILHEAD** at Richmond Parkway above Port Blvd opens landfill loop and water access to the community, while protecting Parkway from inundation
- 6 **CREEK TRAIL BRIDGE** safely connects neighborhood to Bay Trail, Flea Market and shoreline access
- 7 **HABITAT SLOPE** at Flea Market provides for flood protection, habitat migration, and continuous safe shoreline access from Gertrude Ave
- 8 **MARSH REGENERATION** and hydrologic reconnection at landfill site

- LEGEND**
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