



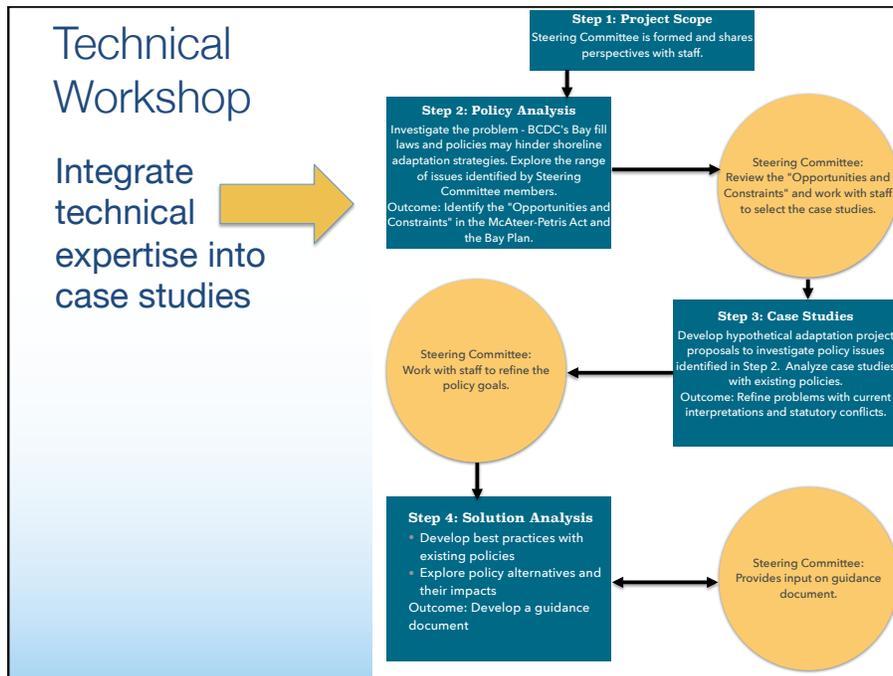
The
Policies for a Rising Bay
Project

Commission Fill Policies Working Group
May 21, 2015

Project Goal



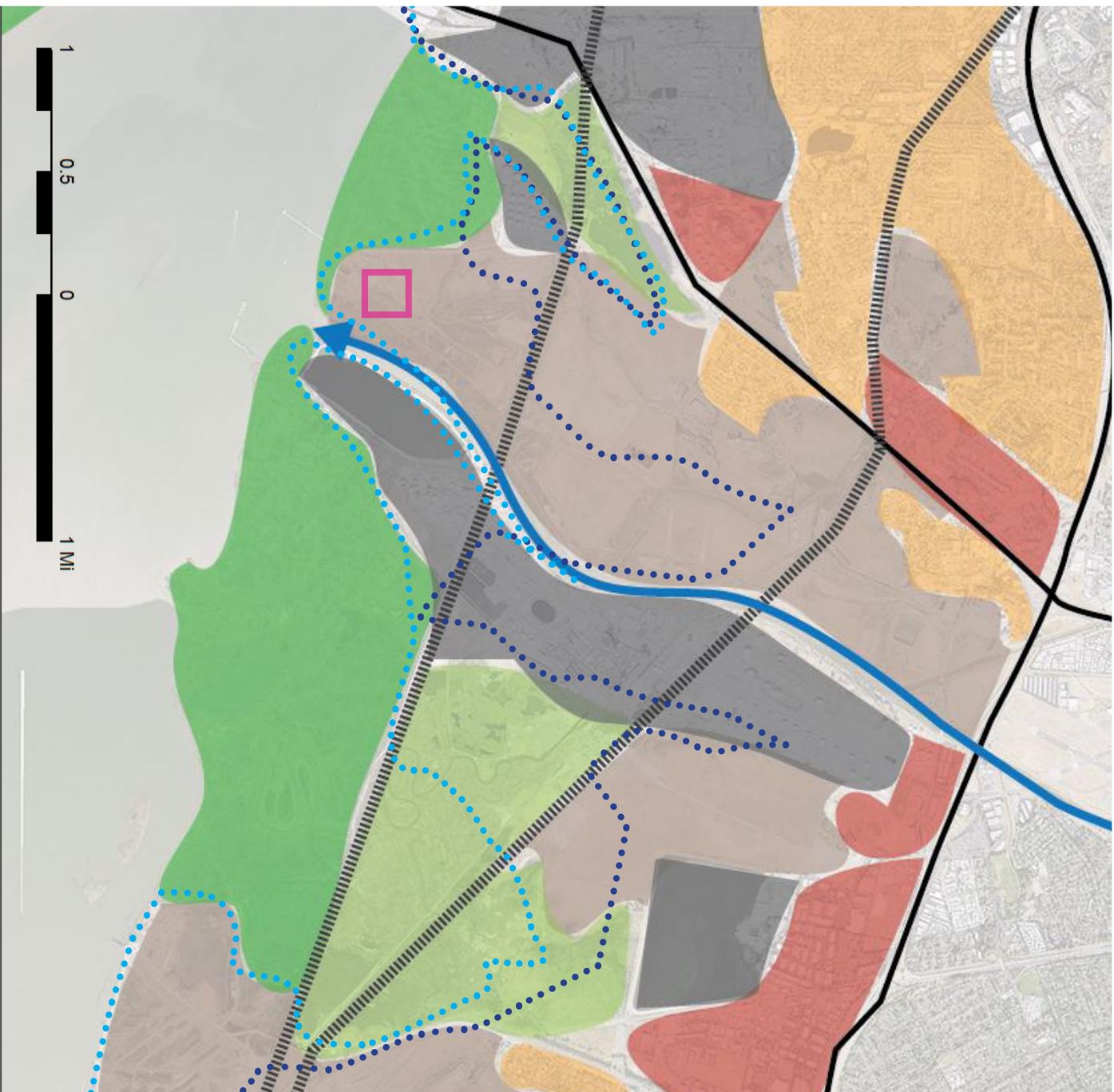
Collaboratively evaluate BCDC's fill policies in light of sea level rise and develop guidance for the Commission, staff and project proponents to promote shoreline resilience



Case Studies



- Case studies reflect a diversity of shoreline settings and natural resource/development assets at risk.
- Workshop participants evaluated adaptation actions that protect existing assets to mid-century and that are adaptable to end of century:
 - Applicability given landscape conditions
 - Timing and adaptability
 - Tradeoffs*



CONCEPTUAL LAND USES

- Tidal marsh
- Muted tidal marsh
- Open space/landfills etc.
- Heavy industrial
- Light industrial/commercial
- Residential (near baylands)
- Railroad
- Major road
- Major creek
- Historic contaminated landfill

- 1 ft SLR + MHHW (NOAA)
- 3 ft SLR + MHHW (NOAA)

CONCEPTUAL LANDSCAPE SETTING CHARACTERISTICS

Geomorphic setting	Wide alluvial valley
Bay SSC	Low
Wave energy	Medium
Nearshore sediment transport	Dispersive
Proximity to deep water	High
Mudflat width	Narrow
Shoreline composition	Marsh (brackish)
Shoreline evolution	Eroding
Species consideration	Ridgeway rails
Marsh width	Wide
Watershed sed yield	High

CONCEPTUAL LAND USES

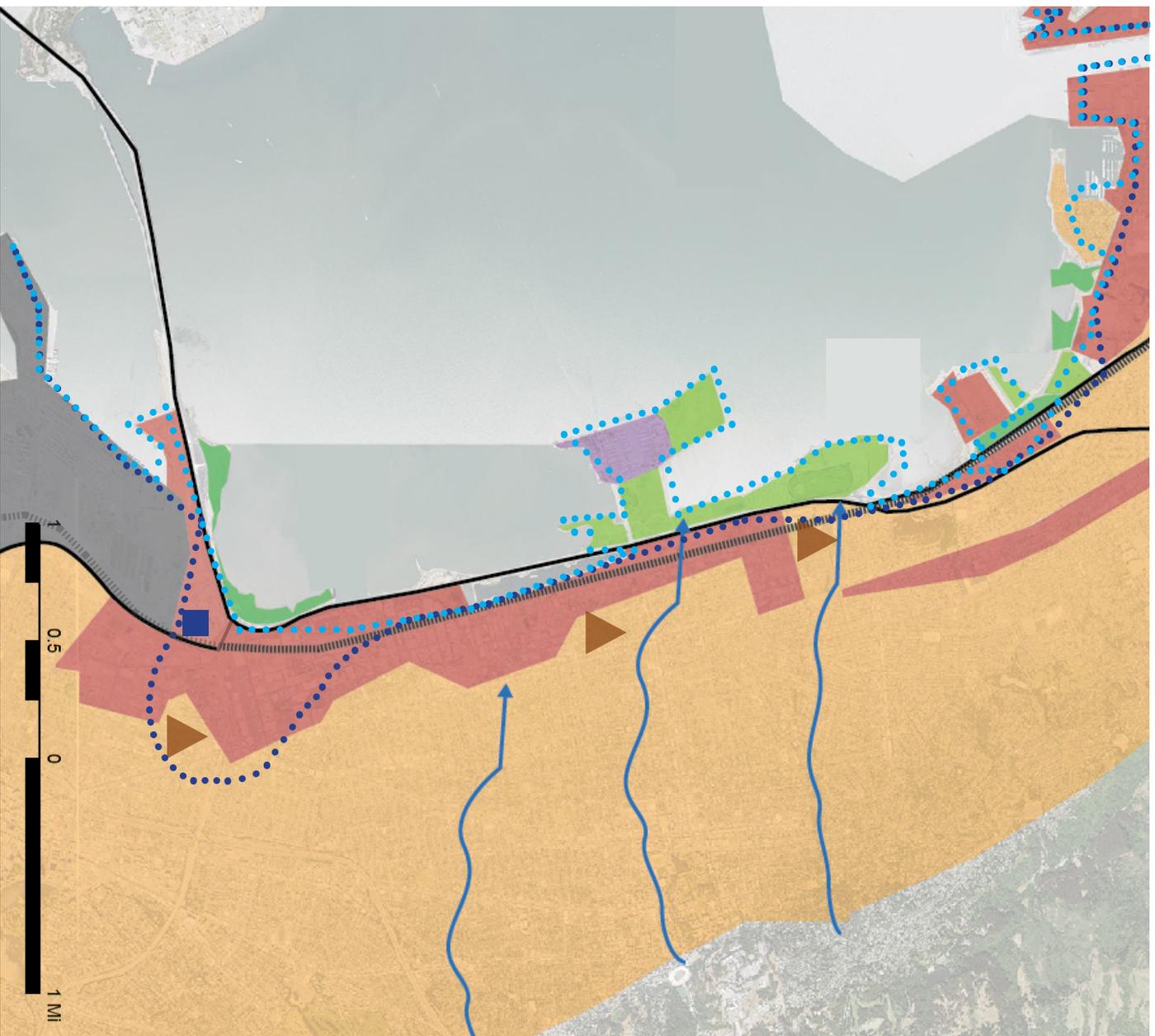
- Tidal marsh
- Shoreline parks/golf courses etc.
- Marinas
- Heavy industrial (ports, airports)
- Light industrial/commercial
- Residential (near baylands)
- Low income housing areas
- Wastewater treatment facility
- Railroad
- Major road
- Major creek

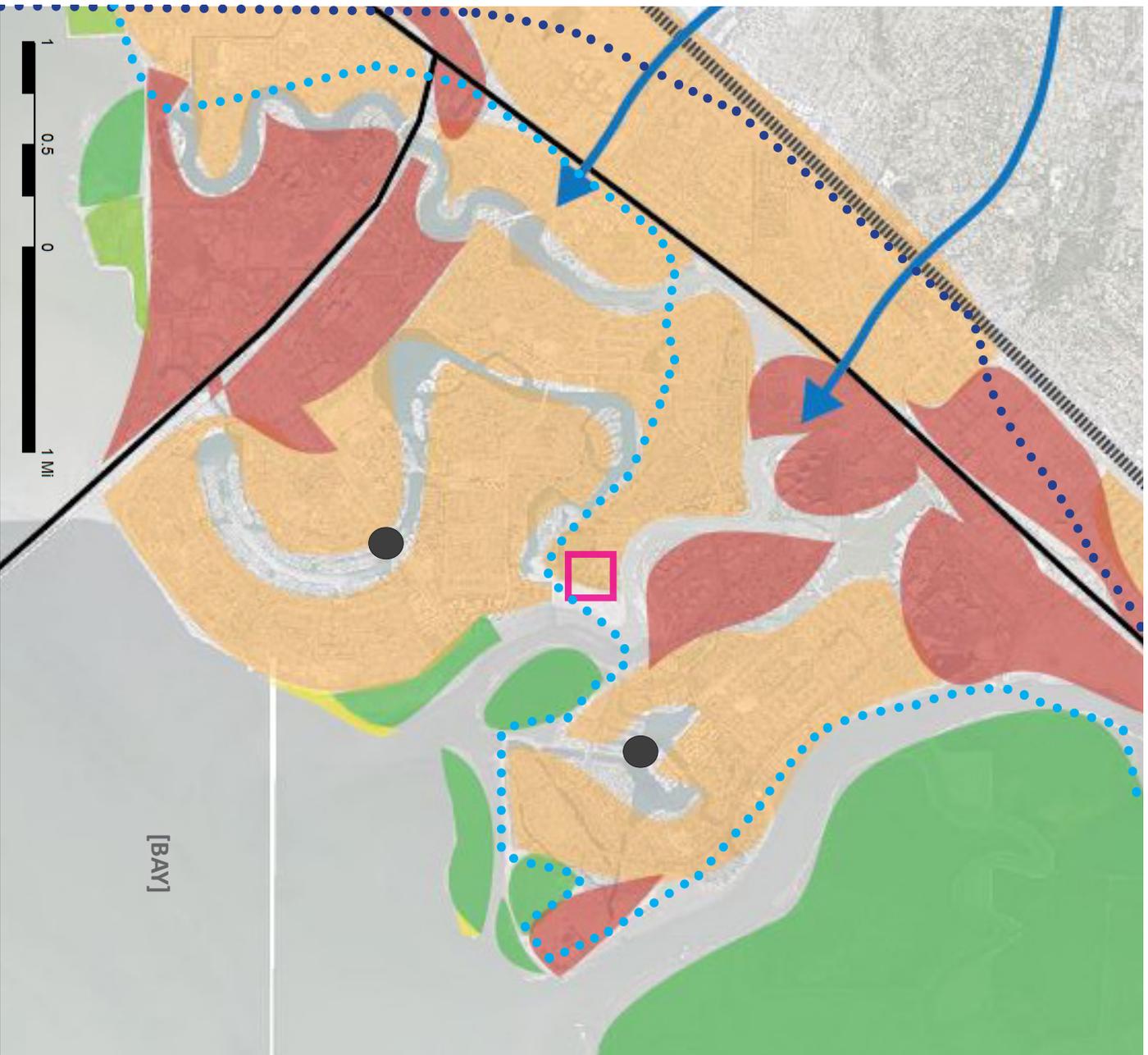
- 1 ft SLR + MHHW (NOAA)
- 3 ft SLR + MHHW (NOAA)

CONCEPTUAL LANDSCAPE SETTING

CHARACTERISTICS

Geomorphic setting	Alluvial fan, long plain
Bay SSC	Low
Wave energy	High
Nearshore sediment transport	Depositional cove
Proximity to deep water	Low
Mudflat width	Wide
Shoreline composition	Riprap
Shoreline evolution	Eroding
Species consideration	SMHM
Marsh width	Narrow
Watershed sed yield	Low





CONCEPTUAL LAND USES

- Tidal marsh
- Shoreline parks/golf courses etc.
- Beach
- Light industrial/commercial
- Residential (near baylands)
- Railroad
- Major road
- Major creek
- Historic landfill
- Stormwater detention basins
- 1 ft SLR + MHHW (NOAA)
- 3 ft SLR + MHHW (NOAA)

CONCEPTUAL LANDSCAPE SETTING CHARACTERISTICS

Geomorphic setting	Short plain
Bay SSC	Medium
Wave energy	High/Medium
Nearshore sediment transport	Dispersive
Proximity to deep water	Medium
Mudflat width	Medium
Shoreline composition	Levees, beaches
Shoreline evolution	?
Species consideration	Ridgway's rails
Marsh width	None [Wide marsh nearby]
Watershed sed yield	High



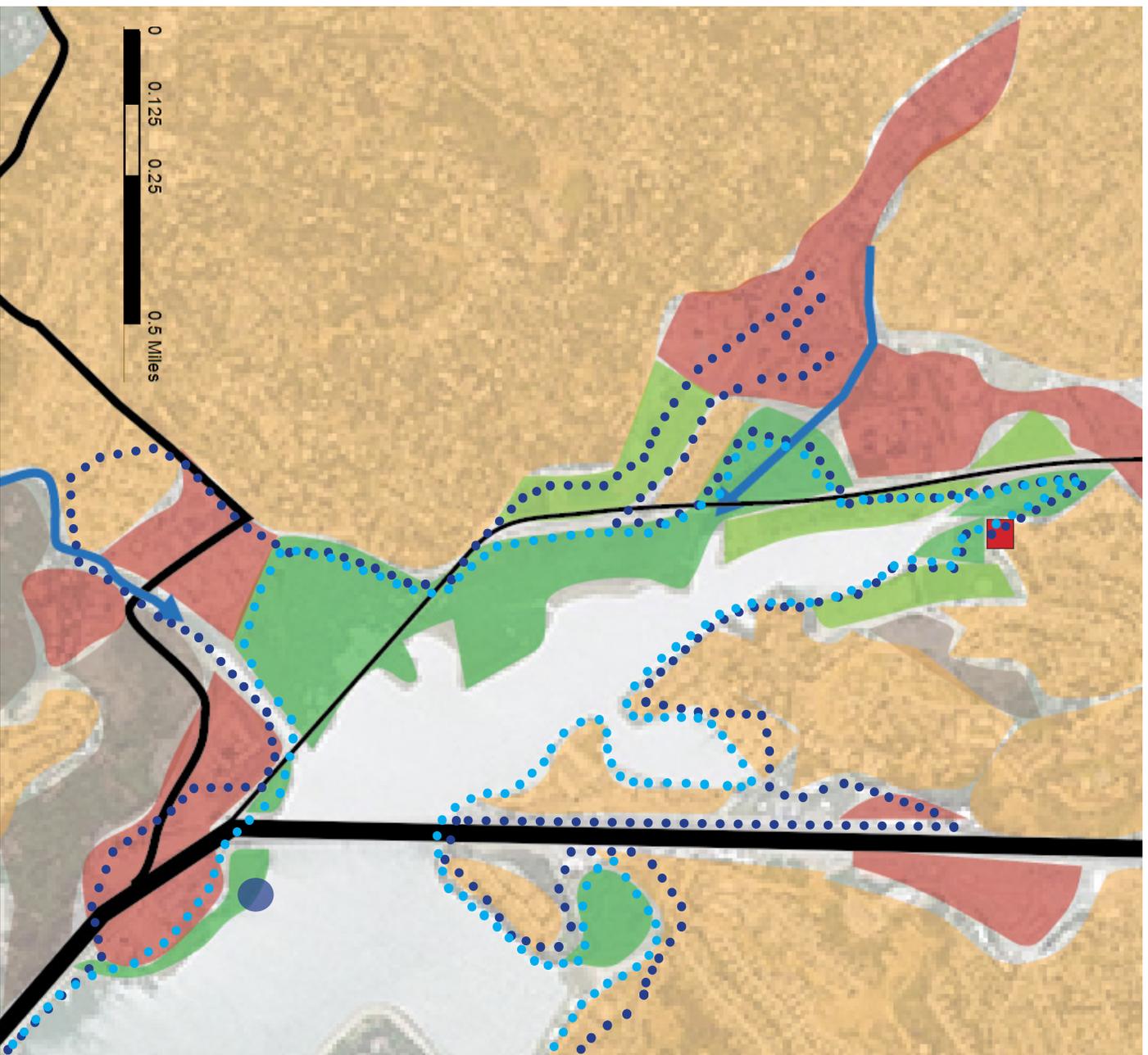
CONCEPTUAL LAND USES

- Tidal marsh
- Shoreline parks/golf courses etc.
- Beach
- Light industrial/commercial
- Heavy industrial (ports, airports)
- Residential (near baylands)
- Railroad
- Major road
- Major creek
- Low income housing areas

- 1 ft SLR + MHHW (NOAA)
- 3 ft SLR + MHHW (NOAA)

CONCEPTUAL LANDSCAPE SETTING CHARACTERISTICS

Geomorphic setting	Alluvial fan/long plain
Bay SSC	Low
Wave energy	High
Nearshore sediment transport	Dispersive
Proximity to deep water	Medium
Mudflat width	Low
Shoreline composition	Levees, beaches
Shoreline evolution	?
Species consideration	Ridgway's rails
Marsh width	Narrow
Watershed sed yield	High



CONCEPTUAL LAND USES

- Tidal marsh
- Shoreline parks/golf courses etc.
- Light industrial/commercial
- Residential (near baylands)
- Major road
- Major creek
- Bay Trail
- Wastewater treatment plant
- Ferry terminal

- 1 ft SLR + MHHW (NOAA)
- 3 ft SLR + MHHW (NOAA)

CONCEPTUAL LANDSCAPE SETTING

CHARACTERISTICS	
Geomorphic setting	Small valleys/headlands
Bay SSC	High
Wave energy	High/Medium
Nearshore sediment transport	Depositional
Proximity to deep water	Low
Mudflat width	Medium
Shoreline composition	Marsh, shoreline protection structures, trails/roads
Shoreline evolution	?
Species consideration	Ridgway's rails
Marsh width	Medium
Watershed sed yield	High

Next steps



- Refine adaptation action “cheat sheet”
- Identify adaptation actions that raise policy issues
- Solicit feedback on selection of case studies during July 24th Steering Committee Meeting

For more information, contact:
Sarah Richmond
sarah.richmond@bcdc.ca.gov
415-352-3660



Photo: Courtesy of Peter Baye