



Imperial Beach COMMUNITY RESILIENCE PLAN

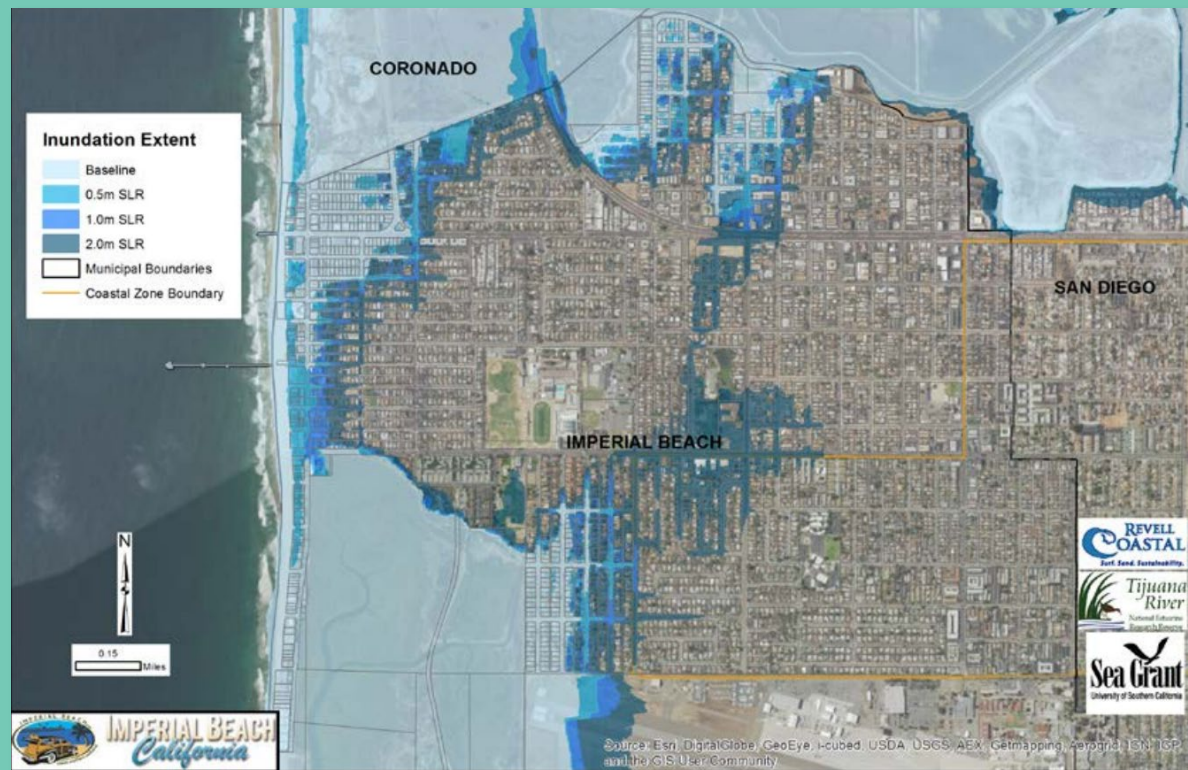
Draft Potential Coastal Adaptation Strategies



Imperial Beach Existing and Future Flood Conditions

Existing coastal hazards and impacts

- Nuisance flooding
- Wave overtopping
- Road closures
- Infrastructure damage



Future coastal hazards and impacts with sea level rise

- 1.7 miles of road potentially subject to coastal erosion from a 100-year wave erosion event
- All beach access/oceanfront properties are in existing coastal erosion and coastal flood hazard zones associated with a 100-year wave event
- Existing coastal flooding in Seacoast Drive, 7th St., and Grove Avenue. All struggle to drain water during periods of coincident high tides, heavy rains, or big surf

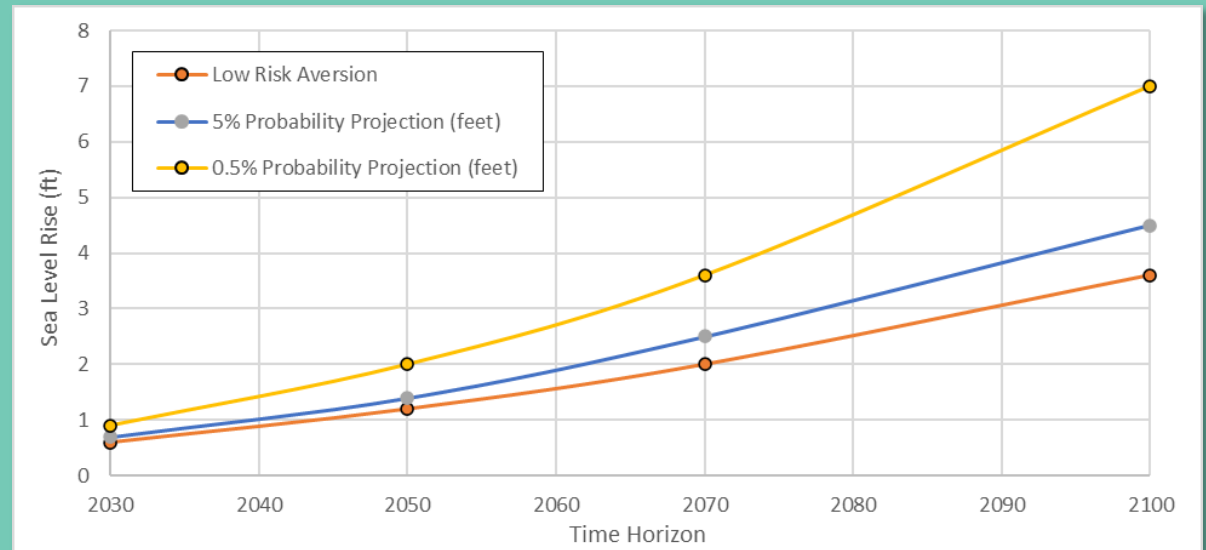
Sea Level Rise Projections

State of California goal is to plan and prepare for:

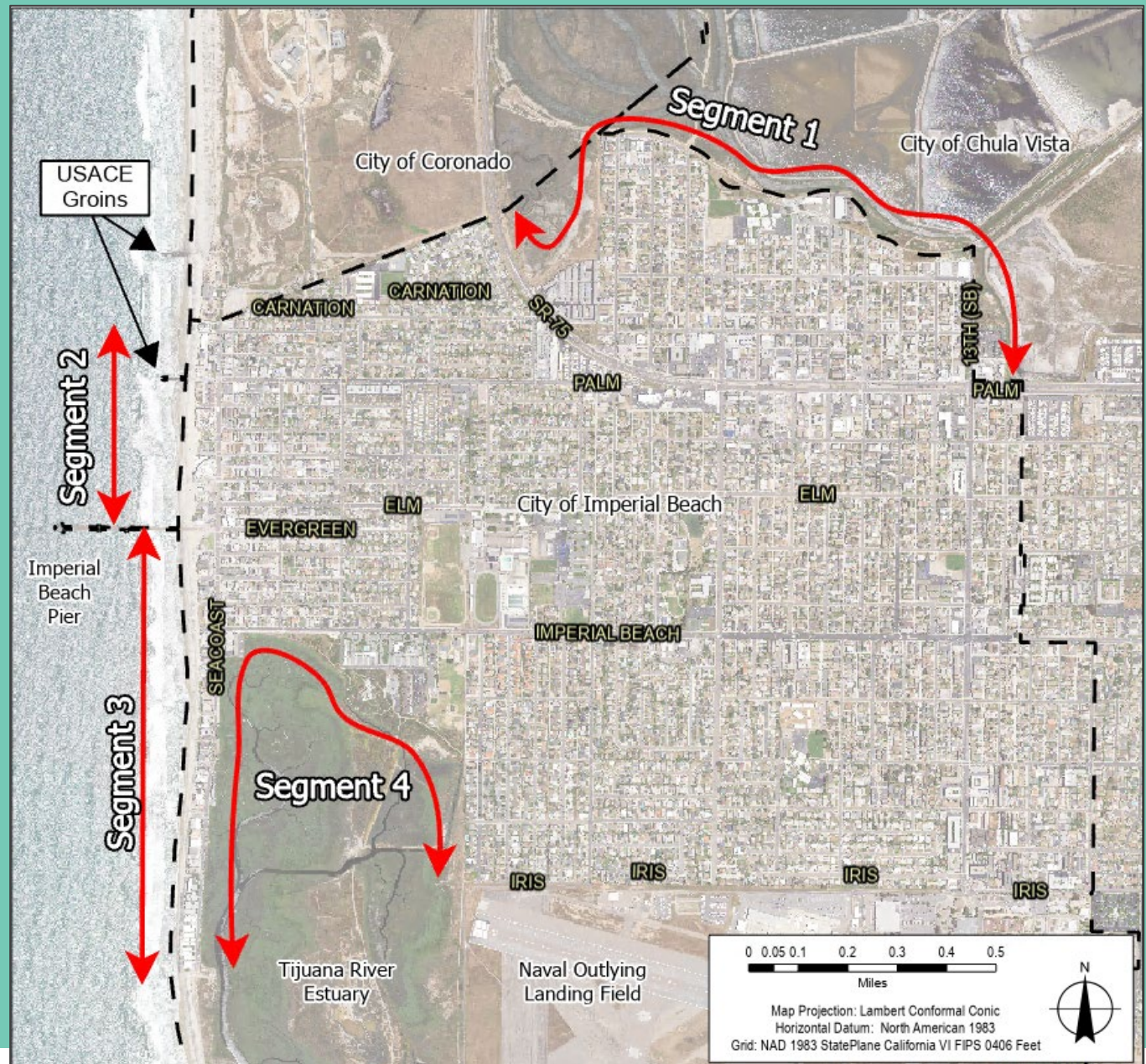
- 3.5' by 2050
- 6.0' by 2100

The **Community Resilience Plan** is evaluating mid-term solutions that can be adapted in the long-term.

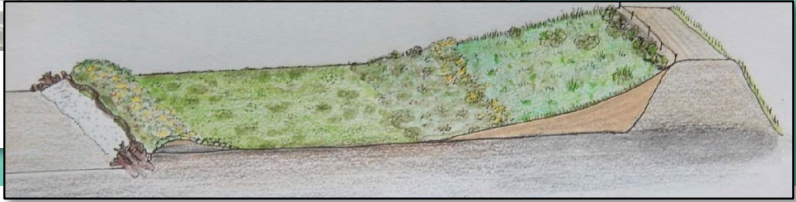
Time Horizon	Low Risk Aversion		Medium Risk Aversion	Medium-High Risk Aversion
	66% Probability SLR is between		5% Probability SLR meets or exceeds...	0.5% Probability SLR meets or exceeds
2030	0.4	0.6	0.7	0.9
2050	0.7	1.2	1.4	2.0
2070	1.1	2.0	2.5	3.6
2100	1.8	3.6	4.5	7.0



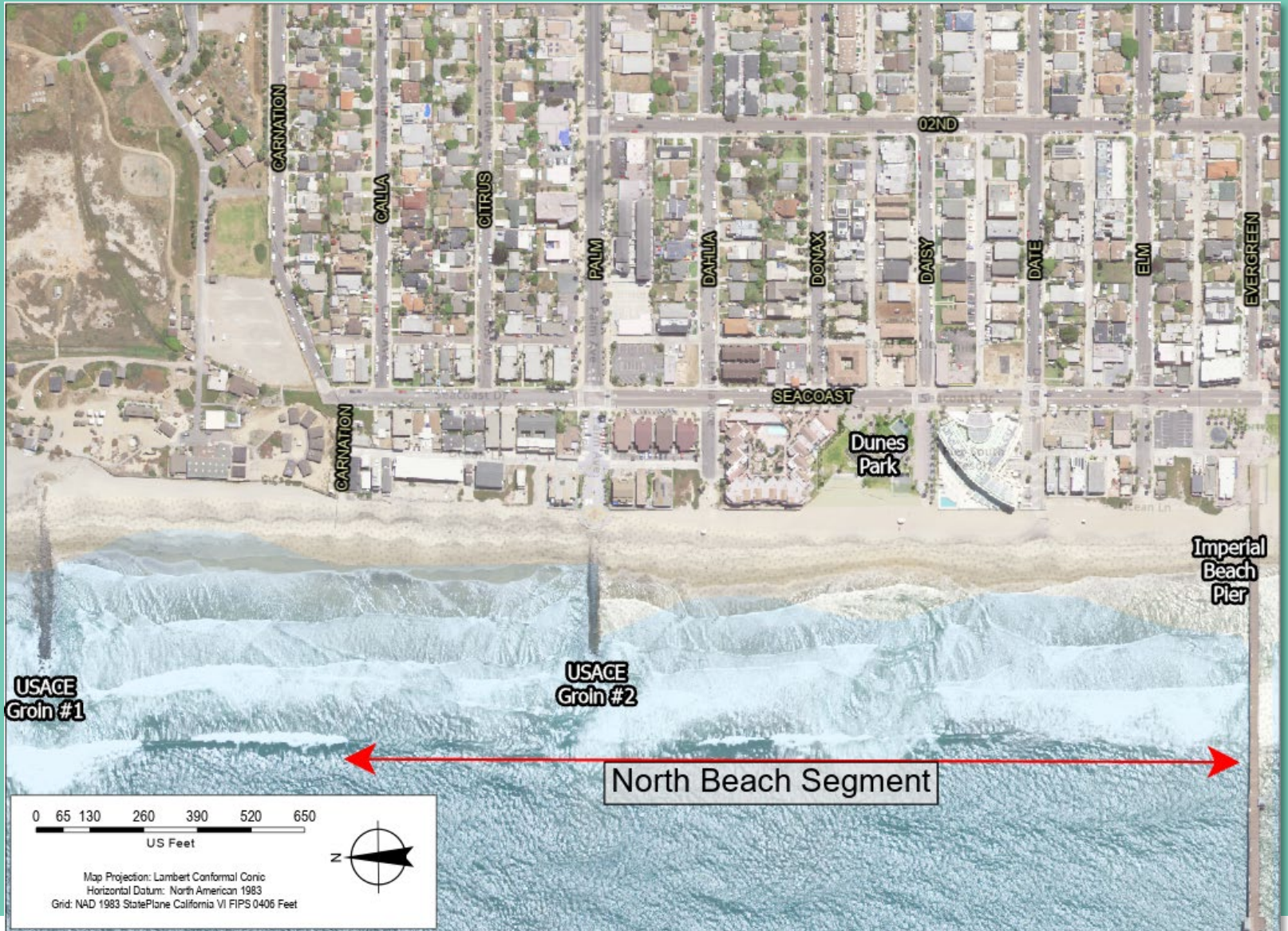
Feasibility analyses focused on the four areas of the City that currently flood and are forecasted to be substantially impacted flooding and inundation from future sea level rise.



Segment 1



Segment 2



Segment 2



Potential Solution:

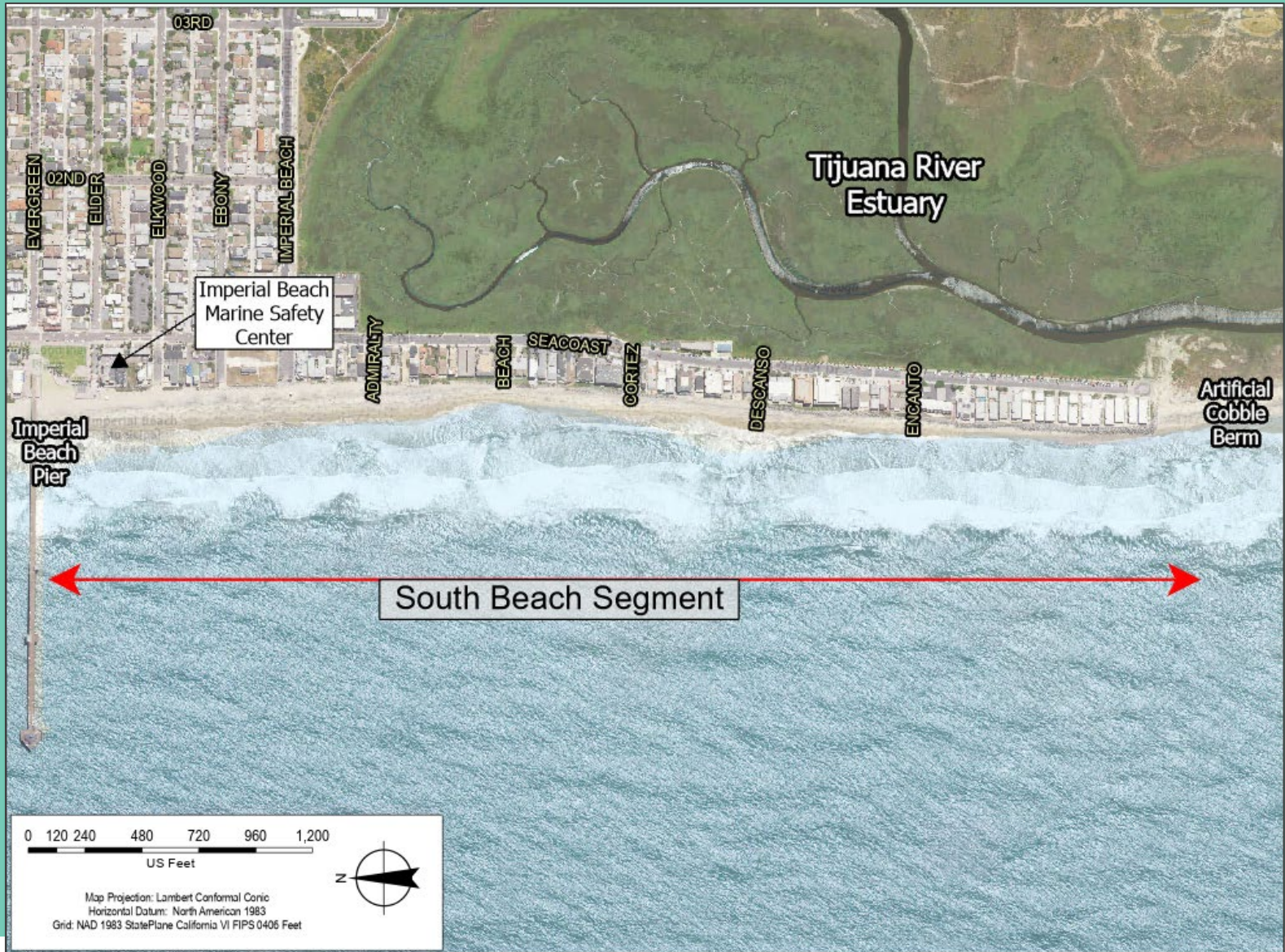
Consider extending existing groins to permitted length.



Potential Solution:

Nature-based solution like the Cardiff Beach Living Shoreline Project

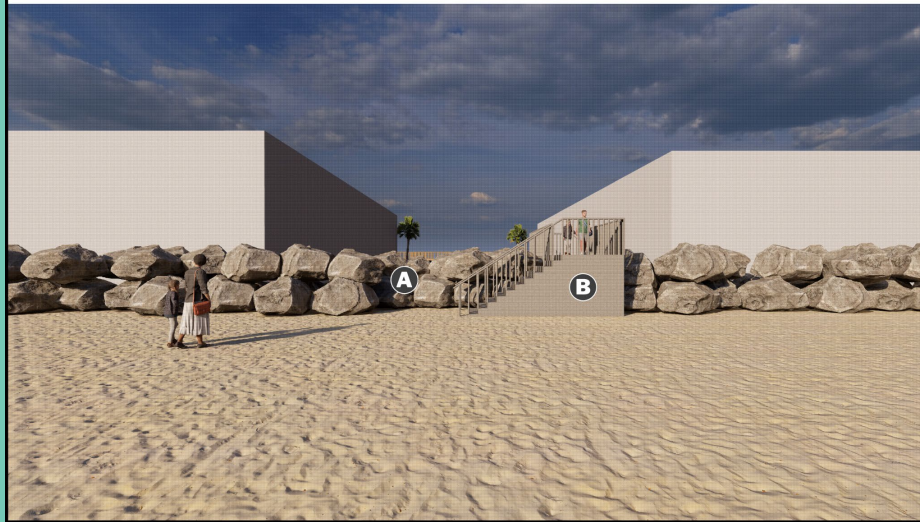
Segment 3



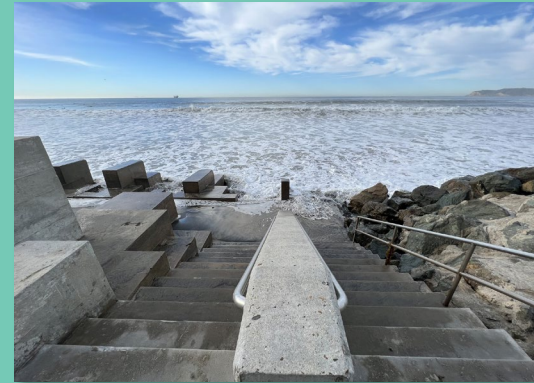
Segment 3



- A** Revetment Gap Filled
- B** Pedestrian Access



Potential Solution:
Fill gaps in the revetment at access points or elevate existing revetment to adjacent elevation



Segment 4

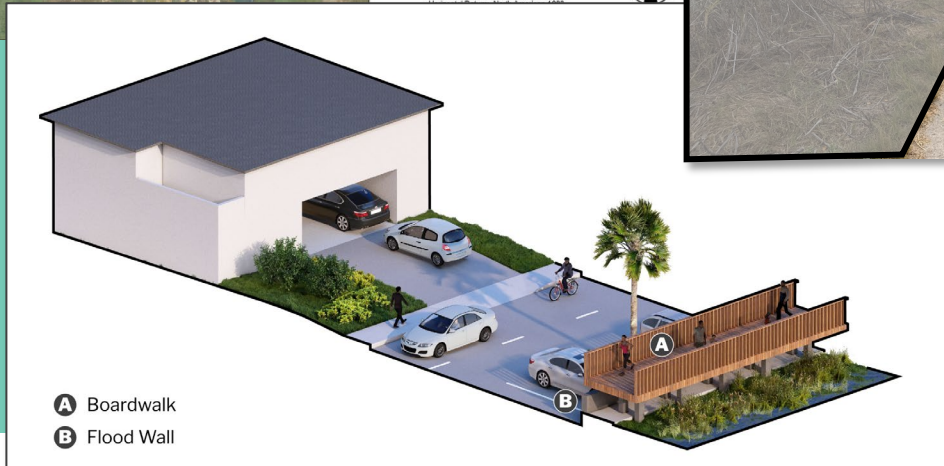


Segment 4

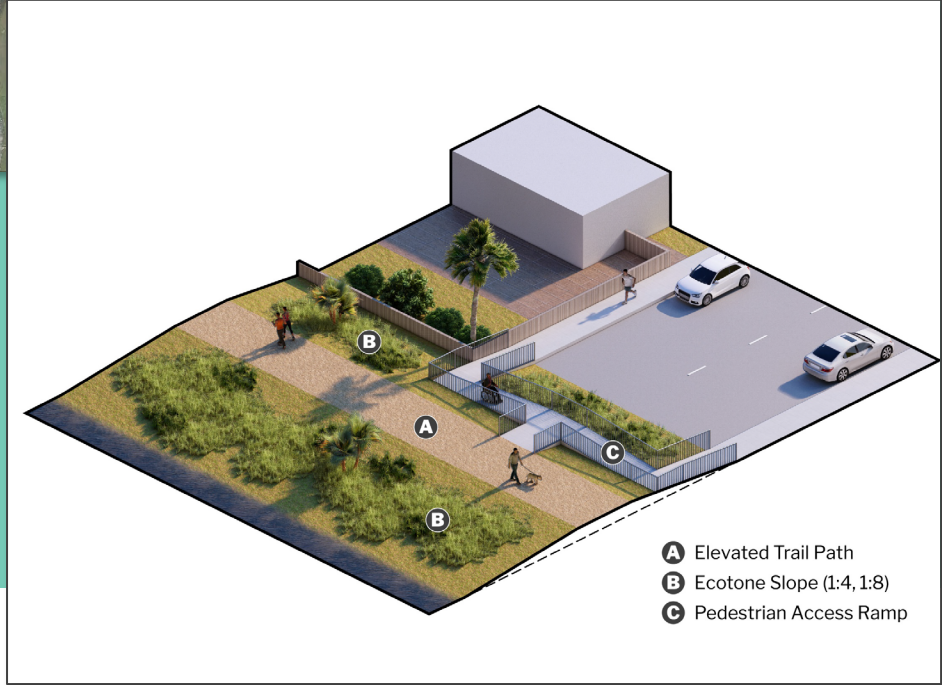
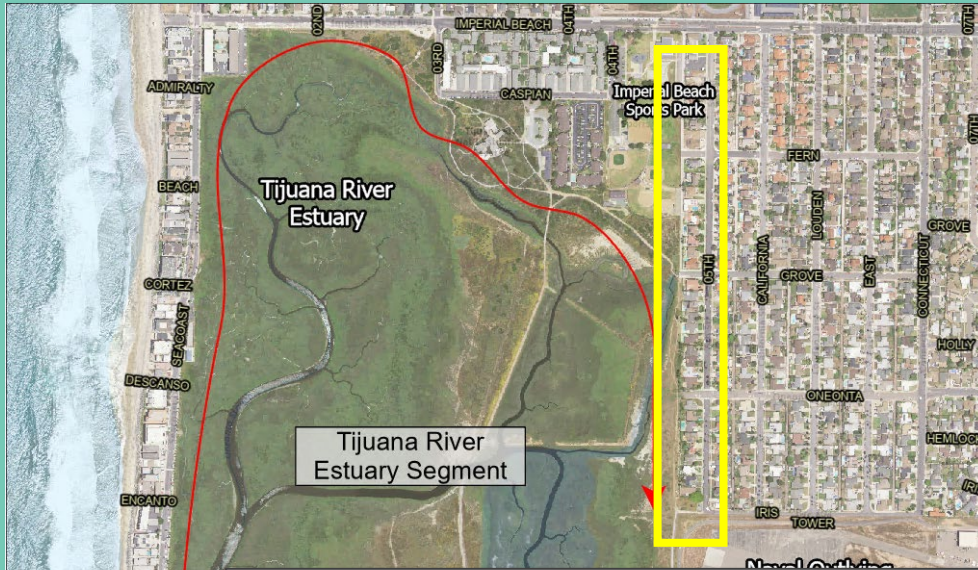


Potential Solution:

Floodwall on the estuary side of south Seacoast Drive that is adaptable with an elevated boardwalk



Segment 4



Potential Solution:

- Living levee with elevated path
- Ecotone slope
- Pedestrian access ramp

Segment 4

Potential Solution: Estuary Promenade with community connections and estuary activation. Promenade serves multi-benefit as public access and flood protection.

