

The Kingston LOOP

SITE CONSTRAINTS

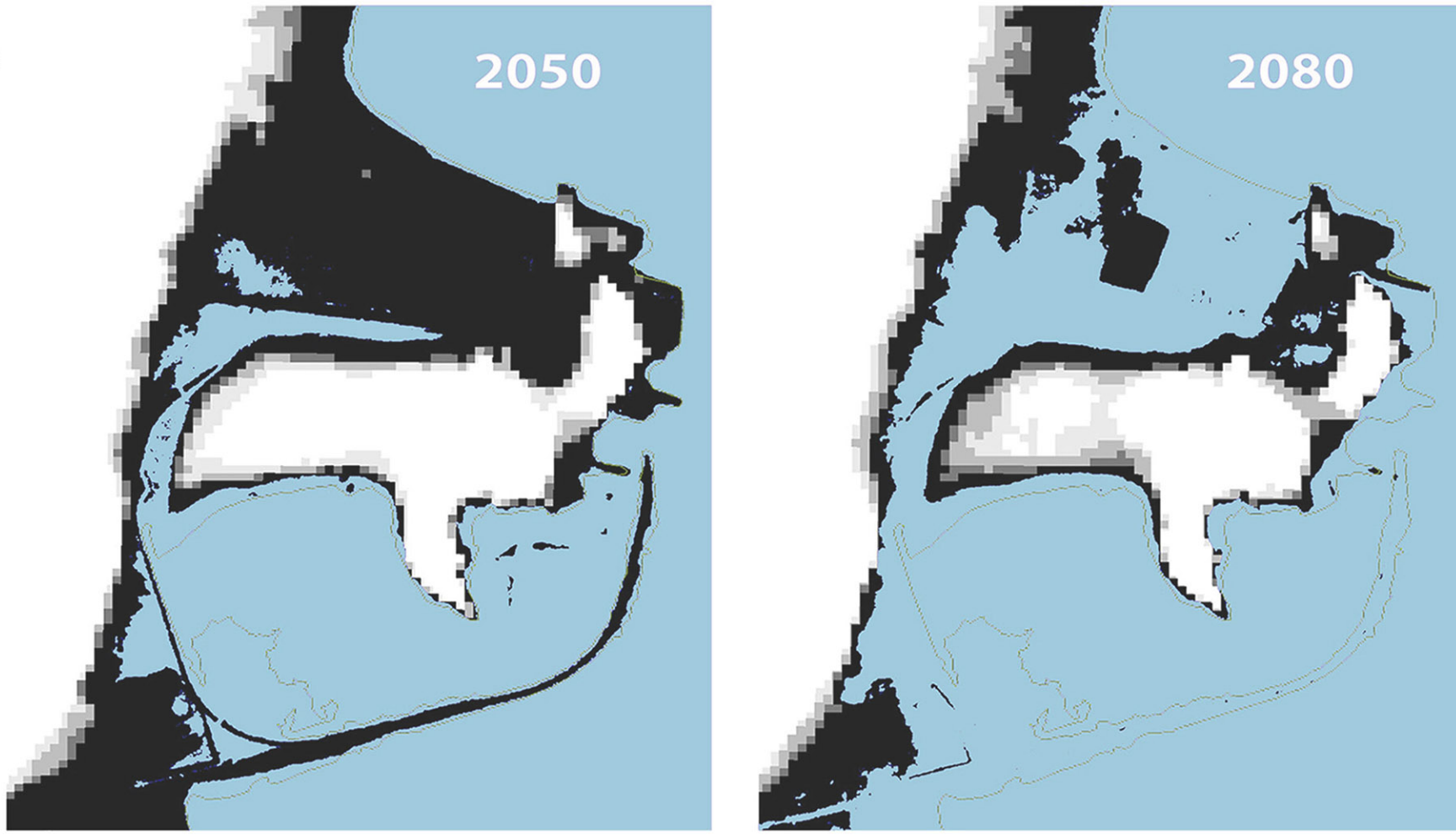
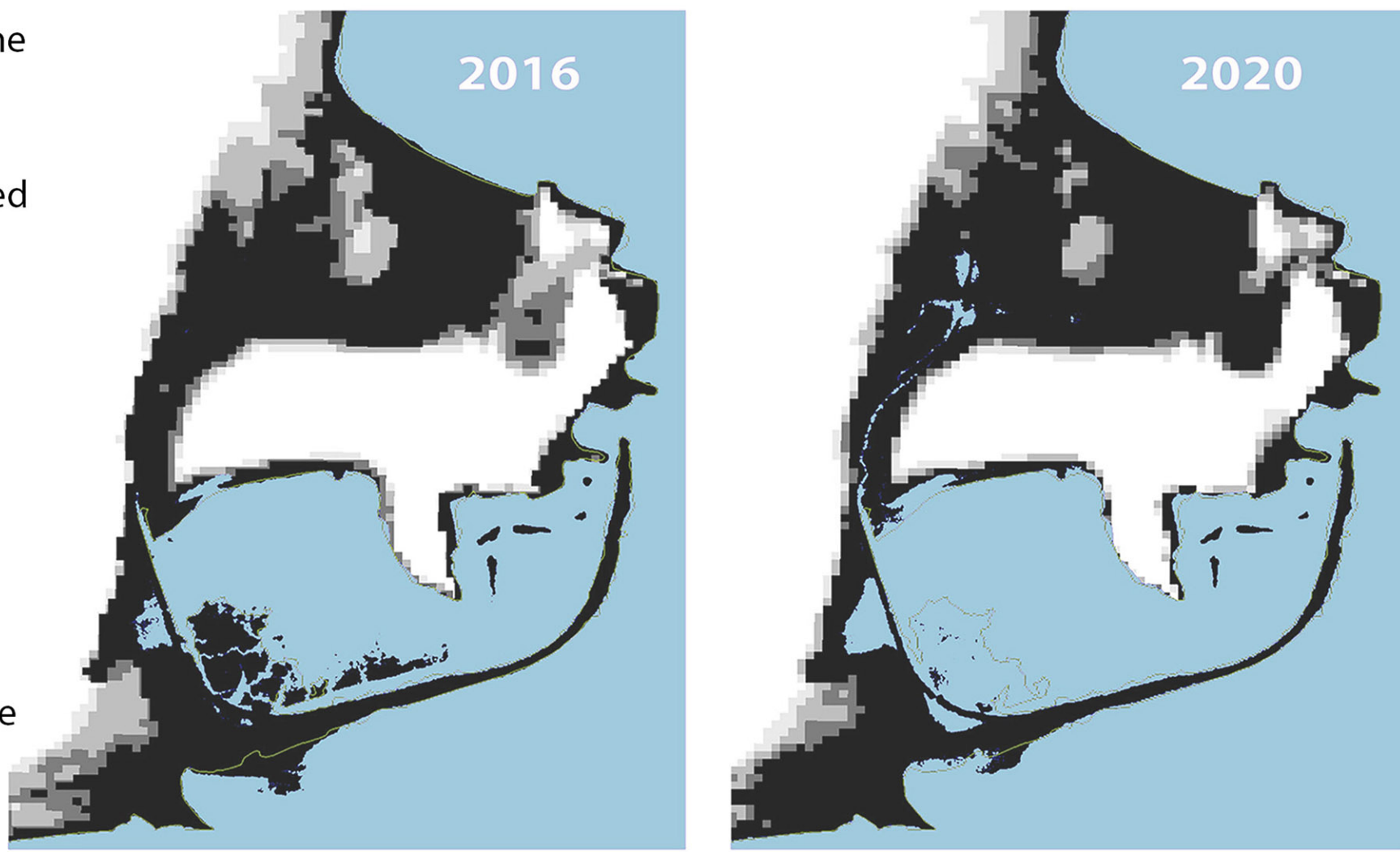
Flooding/ sea level raise is one of the most serious problems in Kingston which may badly threat human property and natural resource. Based on the Kingston flood map, one-third of the Kingston Park will be flooded by water after 10 years. In 2050, the width of rail trail will reduce to half which is losing functionality.

The Kingston Point rail trail will be totally immersed by water in 2080, and then in that time, the protective history lighthouse will also face a seriously flooding threaten.

Not only the flood and Kingston's low shore line problem, too much lowland catchments also erode the inland soil. Catchment areas will collect a great amount of run off during raining days and then the storm water will transfer these regular grassland or forest to wetland environment.

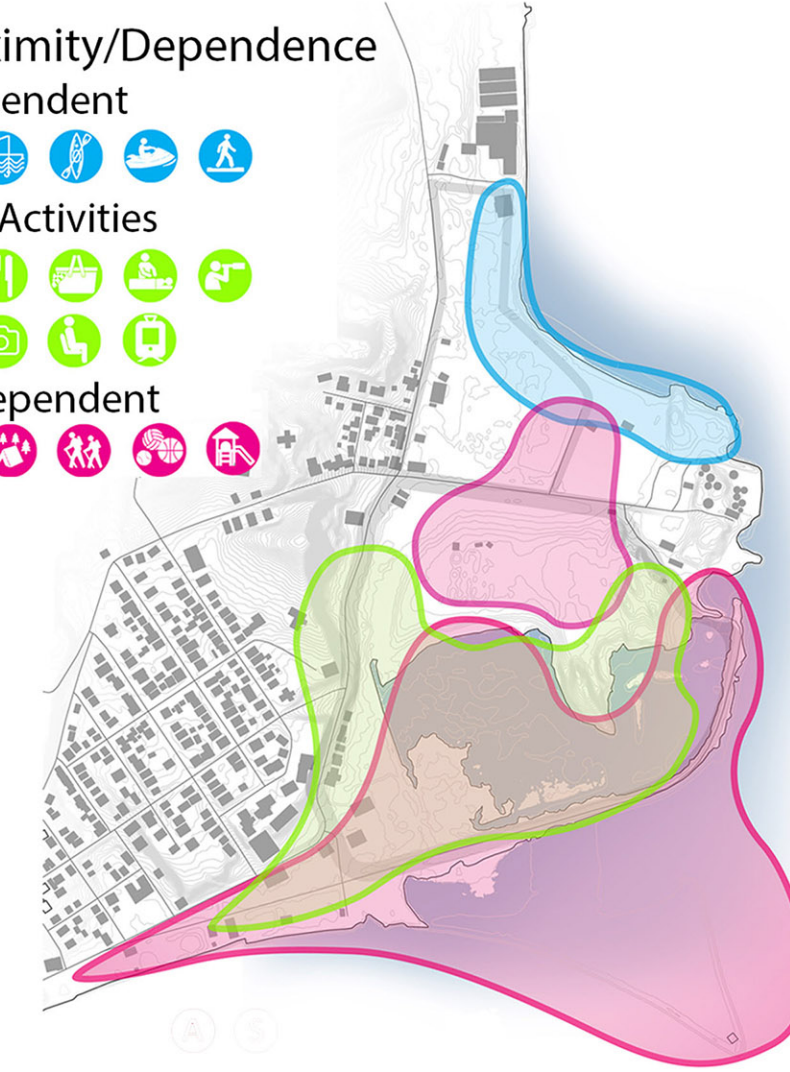
Flood and Sea Level Rise

- Mean high water level
- 10 year flood
- 20 year flood
- 50 year flood
- 100 year flood



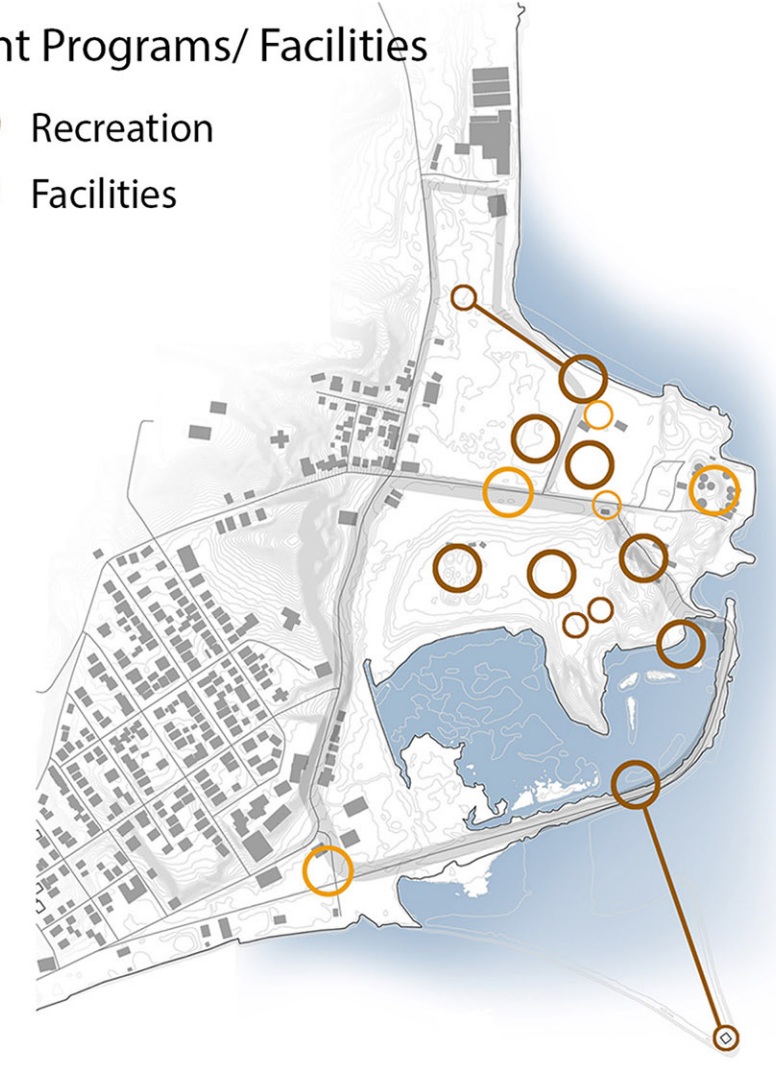
Water Proximity/Dependence

- Water Dependent
- Enhanced Activities
- Water Independent



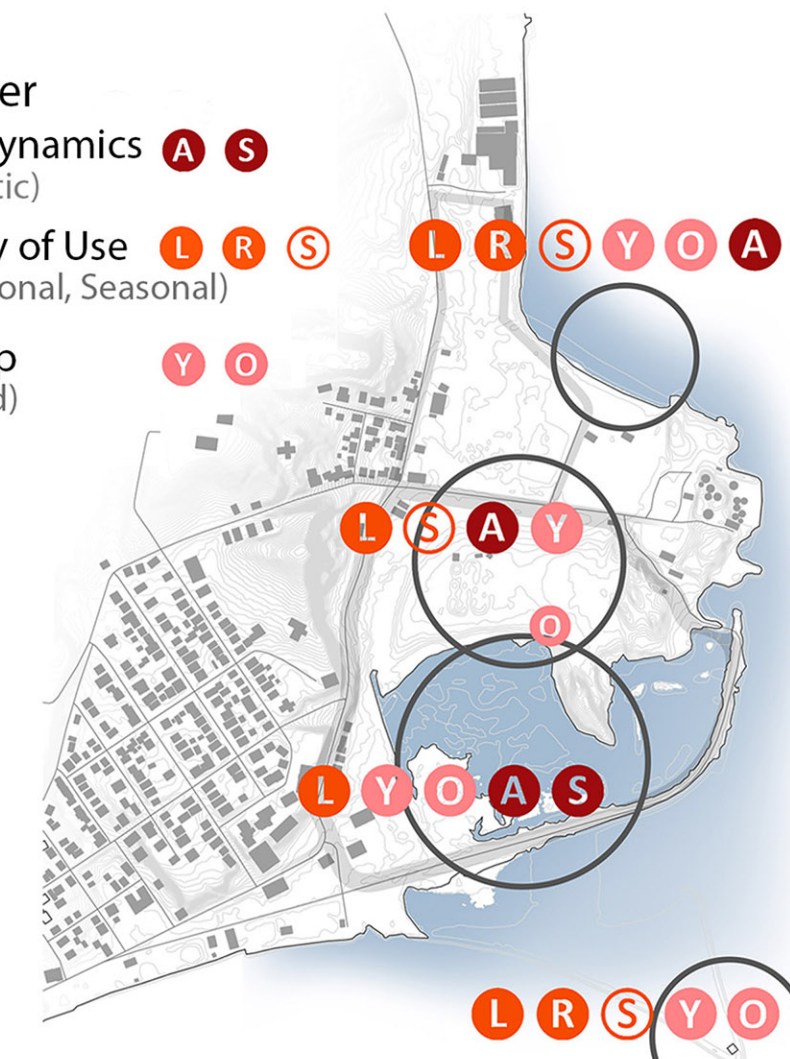
Current Programs/ Facilities

- Recreation
- Facilities



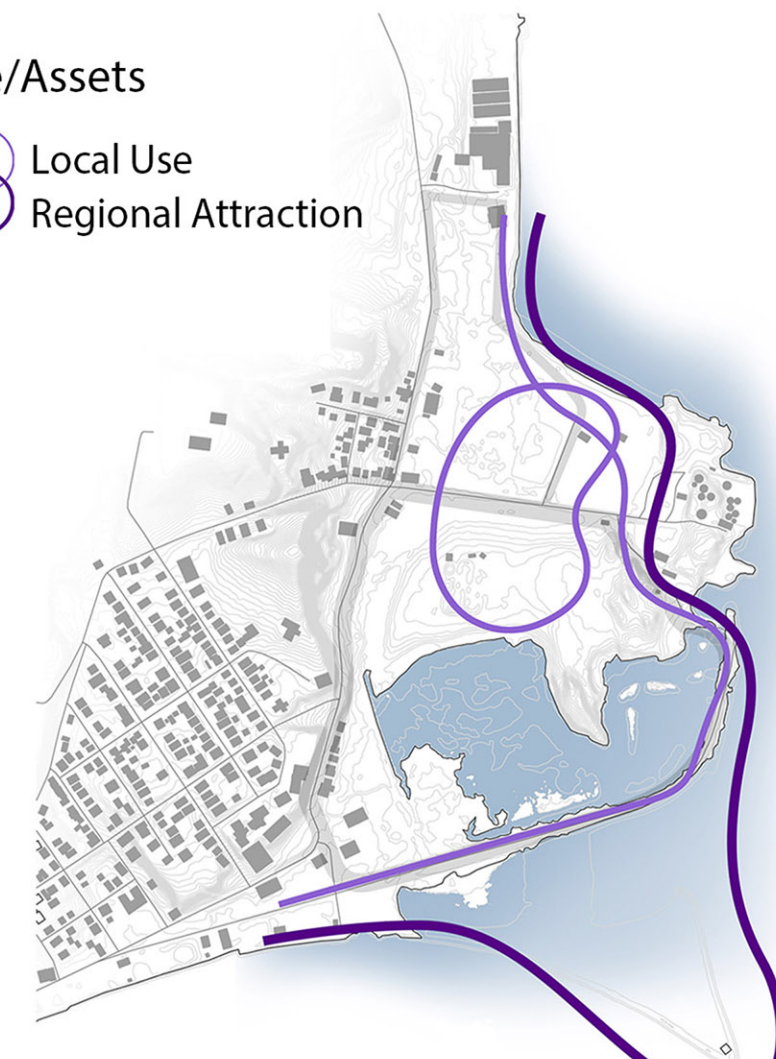
Current User

- Level of Dynamics (Active, Static)
- Frequency of Use (Local, Regional, Seasonal)
- Age Group (Young, Old)



Usage/Assets

- Local Use
- Regional Attraction



DESIGN CONCEPT

Cultural Loop: (looping structures and facilities)

- Site: Meaningful and functional hub, which provides a historical and recreational sense of space
- Local: Connecting places and programs
- Regional: Kingston gateway

ECO Loop: (wetlands, habitats, adaptive system and sustainable infrastructures)

- Experiencing Loop: A loop to experience varied ecological environment
- Living Shorelines: Sea level raise adaptation strategy, habitats for migration species
- Keeping Eco healthy: Wildlife habitats restoration, green infrastructures development

Hub



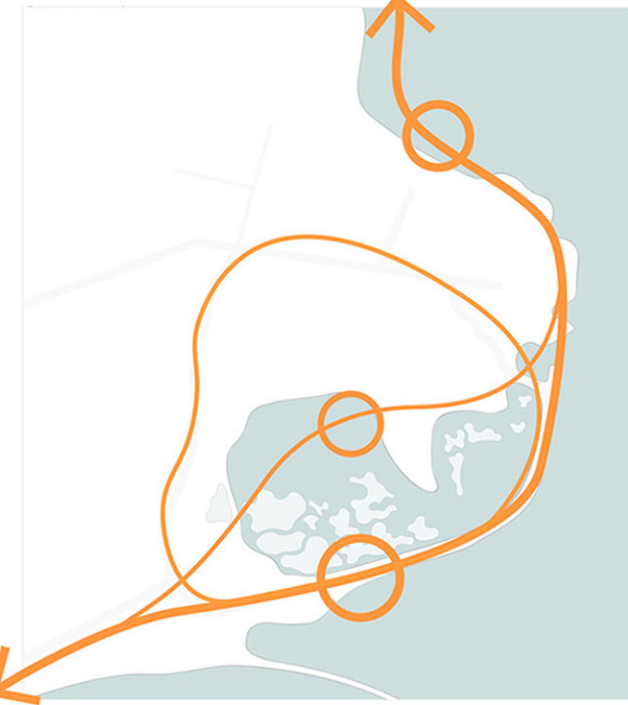
Anchoring site programs together with enhanced connectivity. Reducing the impact of vehicular circulation and promoting pedestrian friendly infrastructure

Connectivity



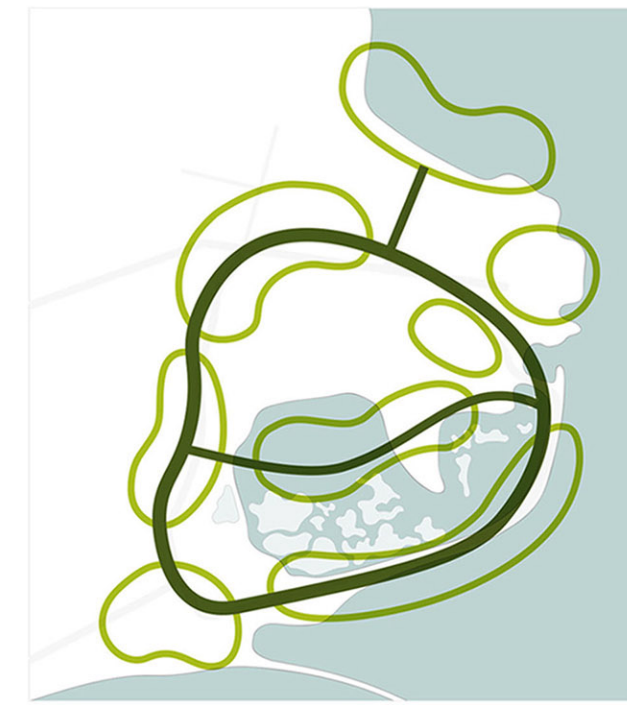
Connecting Kingston Point with the rest of the city through East Strand Street and Delaware Avenue. Connection to East Strand is key to the revitalization of historic waterfront

Gateway



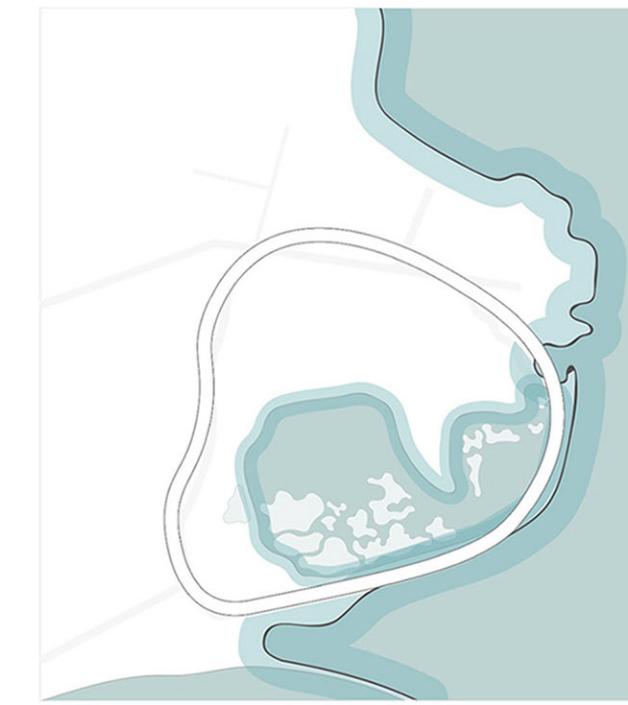
On the regional scale, Kingston Point attracts tourists for its scenic waterfront and historic places. As the gateway of city of Kingston, this park is to be connected to regional bike trails and other recreational resources

Eco- Experience



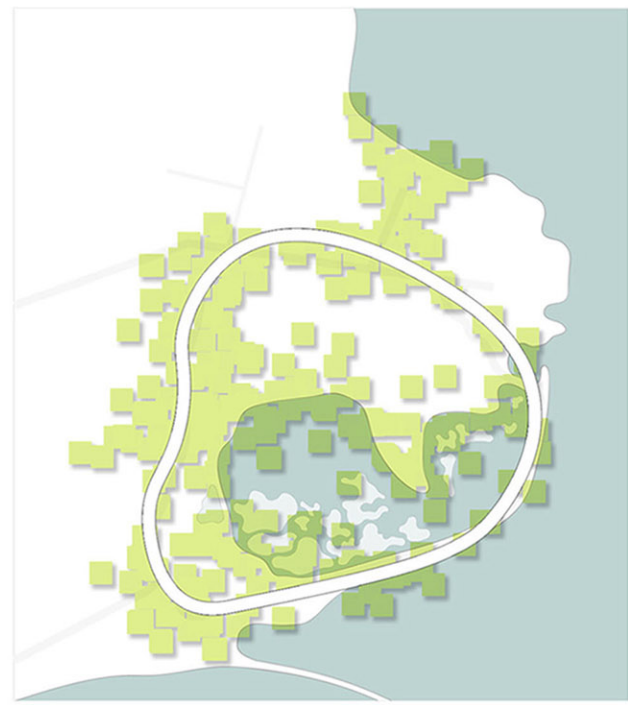
The loop connects multiple habitats and green infrastructures at Kingston Point. By walking along the loop, visitors can observe and experience the diversity of ecological environment of the site

Living Shoreline

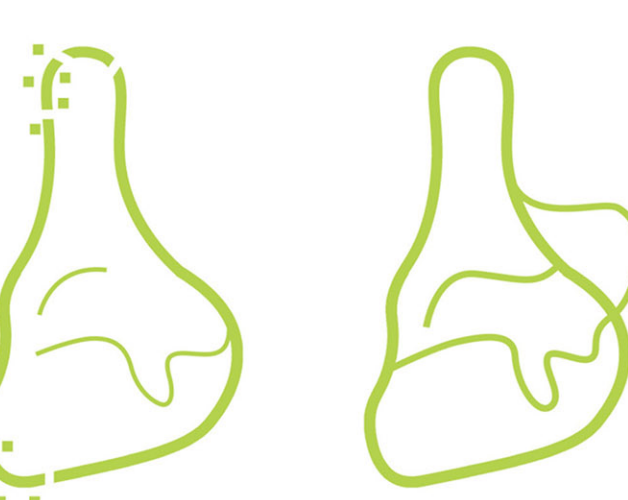
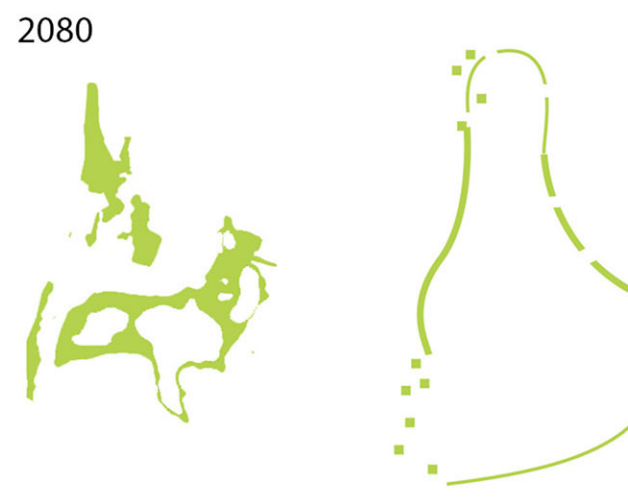
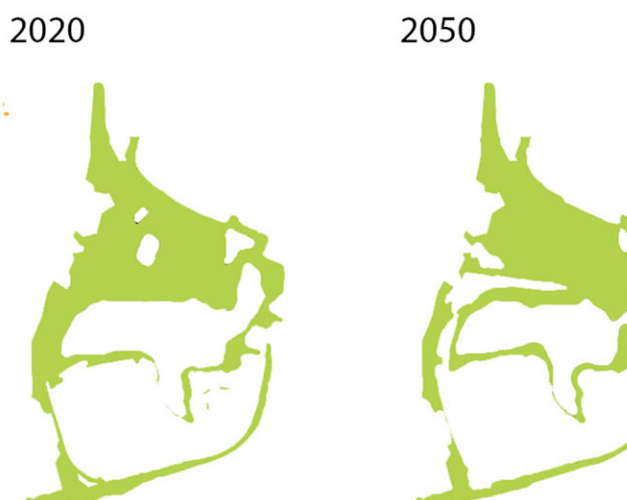
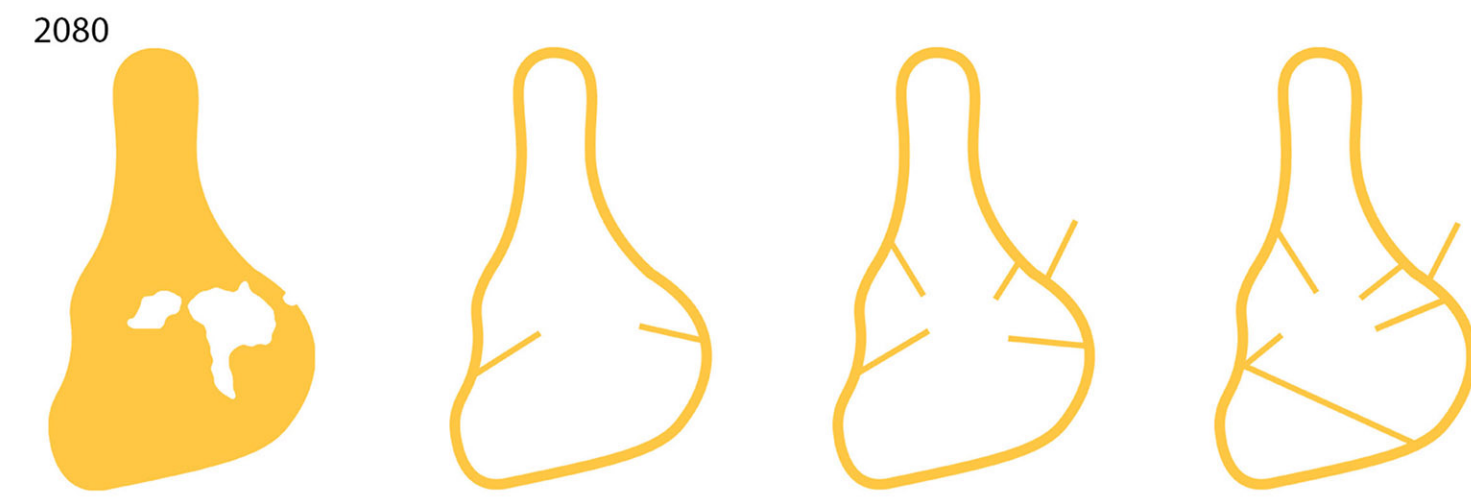
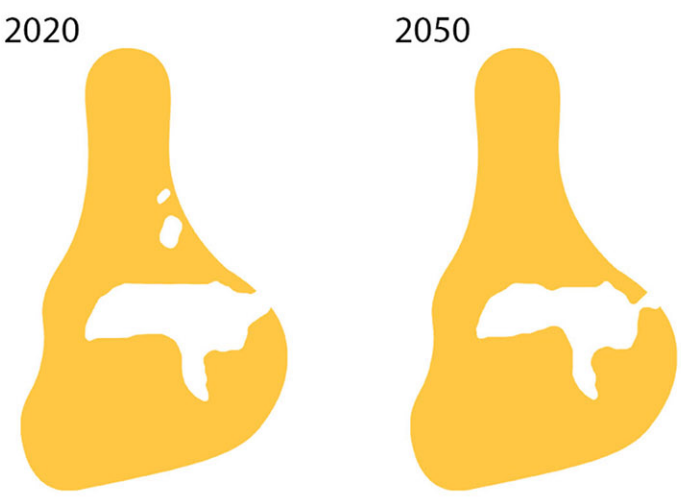


This eco loop stabilizes the site spatially. While facing the serious land erosion and loss, the loop remains an active and stable feature to prevent the integrity of site from falling apart

Eco Health

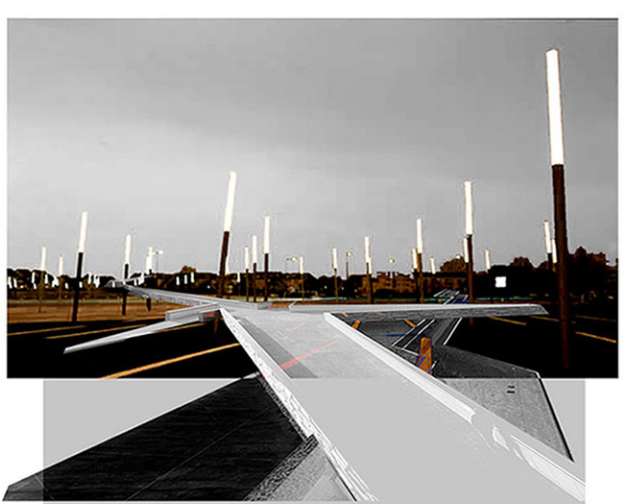


Around the loop, there are strong opportunities to help improving and maintaining the natural health of the site and its context



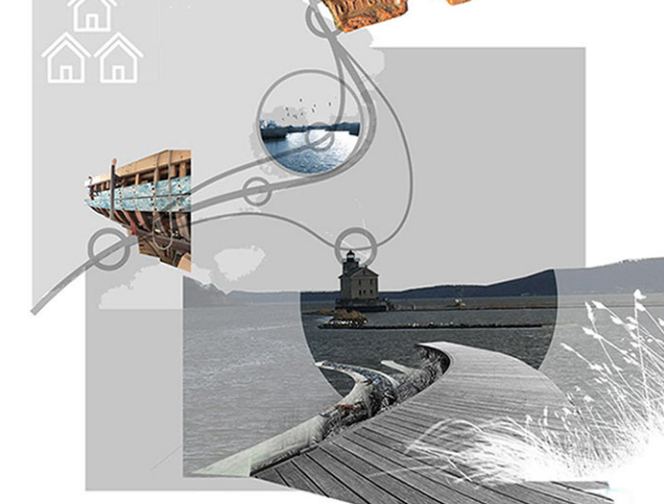
DESIGN STRATEGY

Sidewalk+ Trail



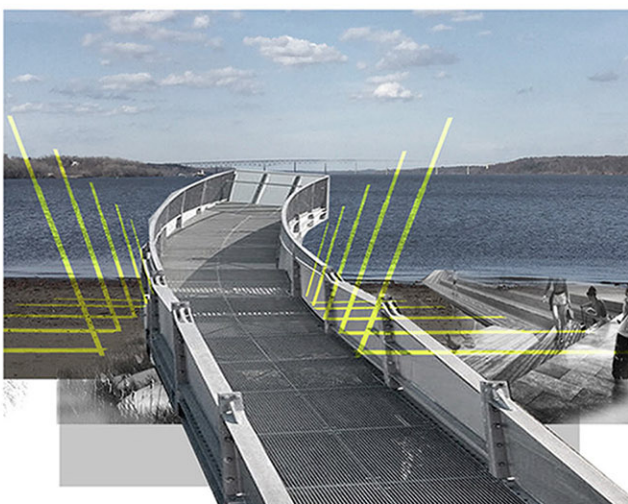
Enhanced pedestrian accessibility promotes the walkability of Kingston Points Park as a recreation hub. Trails, connecting walks and bridging facilities can help enhance accessibility.

Viewing Deck



Views are important experiences. The loop should connect as many cultural assets as possible so that visitors can easily feel the charm of Kingston City. Viewing decks and riverfront walks can bring views to the loop.

Recreation + Focal Point



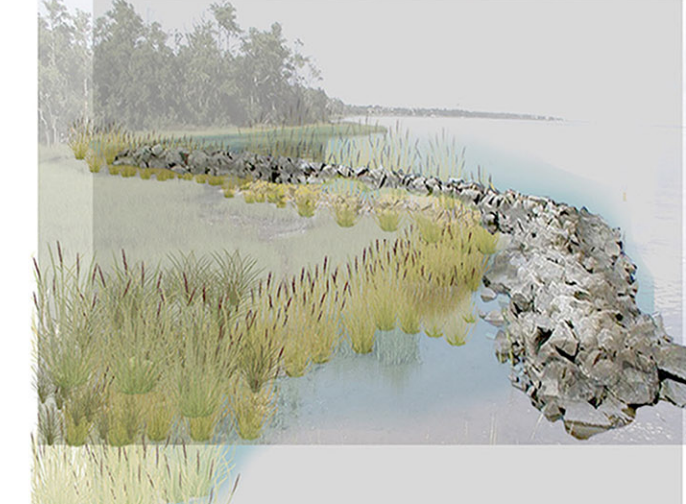
Other design features such as lighting and sculptural installation can provide focal points along the loop. These installation can be used as educational tools. For example lighting feature indicates the change of sea level.

Varied Ecosystem



While walking along the Kingston Point Park trail, our goal is to provide multiple ecosystem types for visitors and animal species. Diverse ecosystems provide different ecological experiences and also provide habitats for different kind of wild life species

Natural Living Shoreline



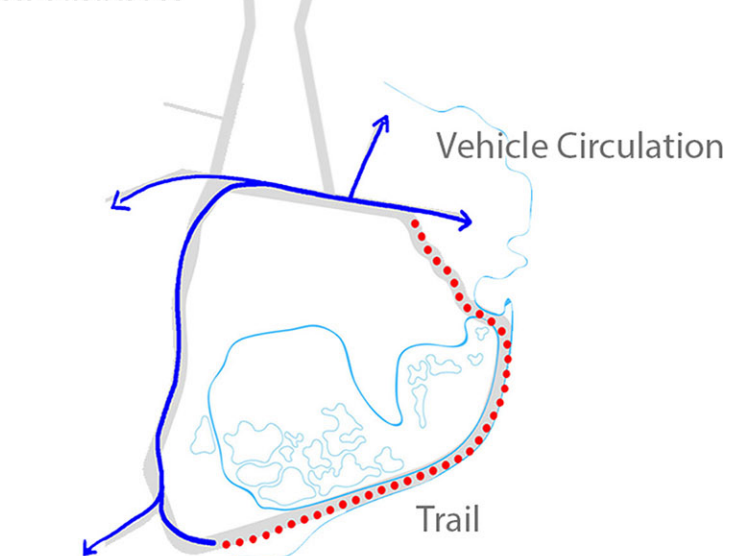
Kingston Point is threatening by a serious flooding problem and erosion issue. We purpose to have multiple natural living shoreline strategies to prevent the damage causing by sea level raise, and as meanwhile protecting and stabling the riverfront land

Restored Habitat

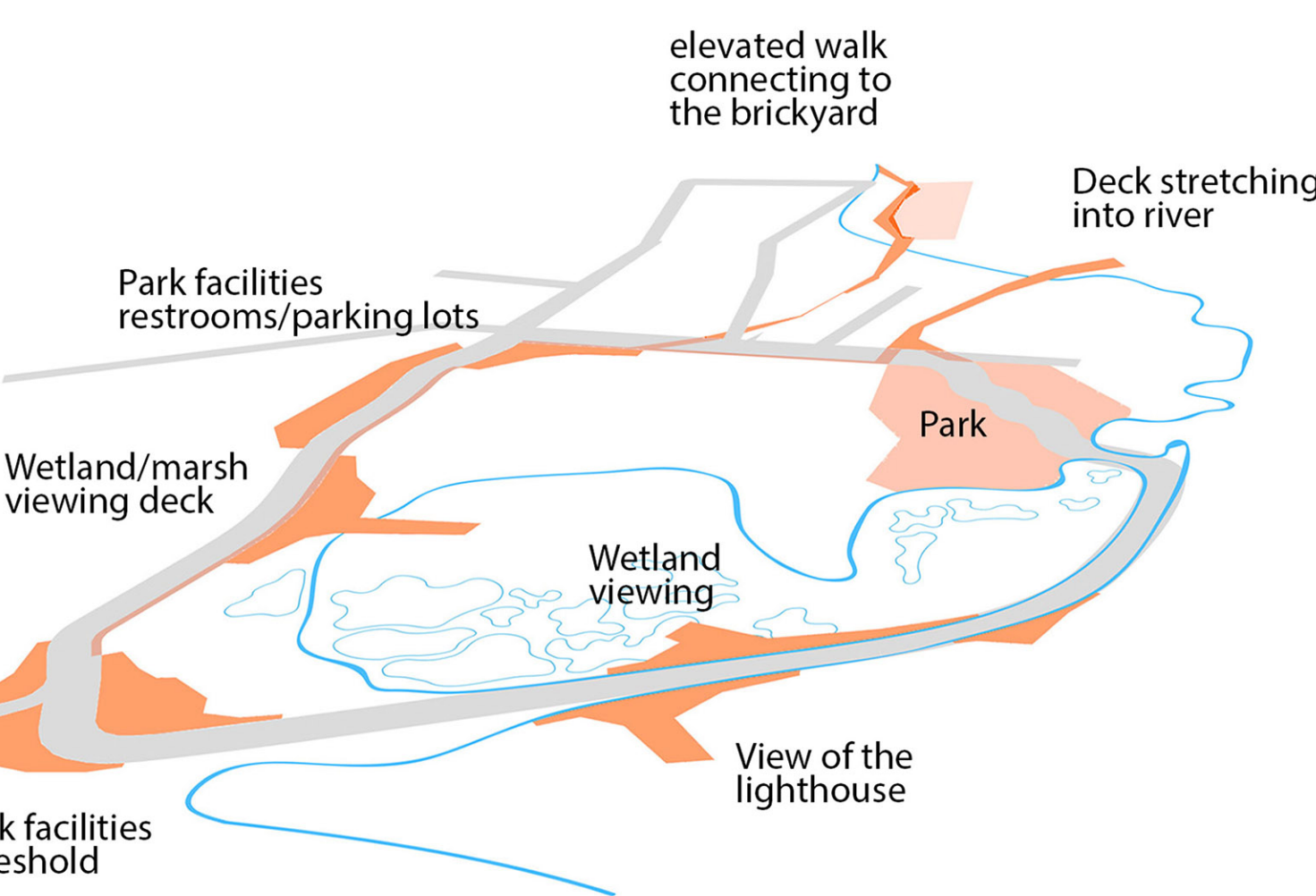
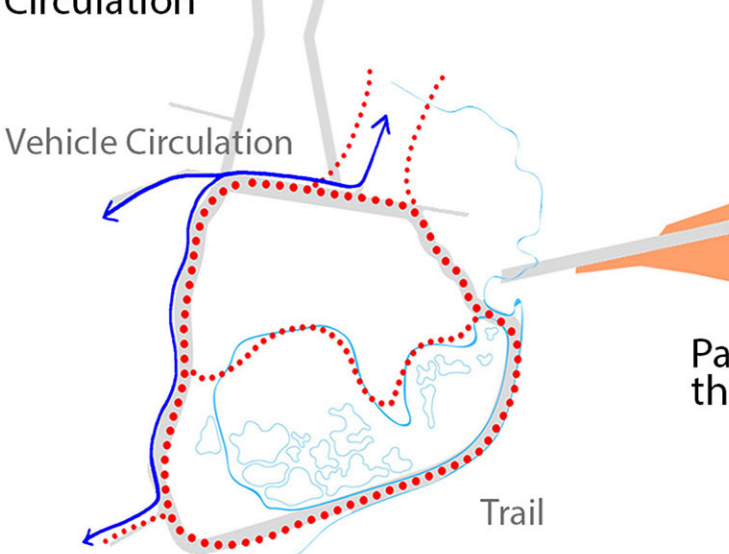


As for a further step of providing varied ecosystems in the Kingston Point Park, we want to enhance the existing animal habitats. Our goal is to improve these natural habitats to be more adaptable and resource-rich. The new natural landscape will attract more local

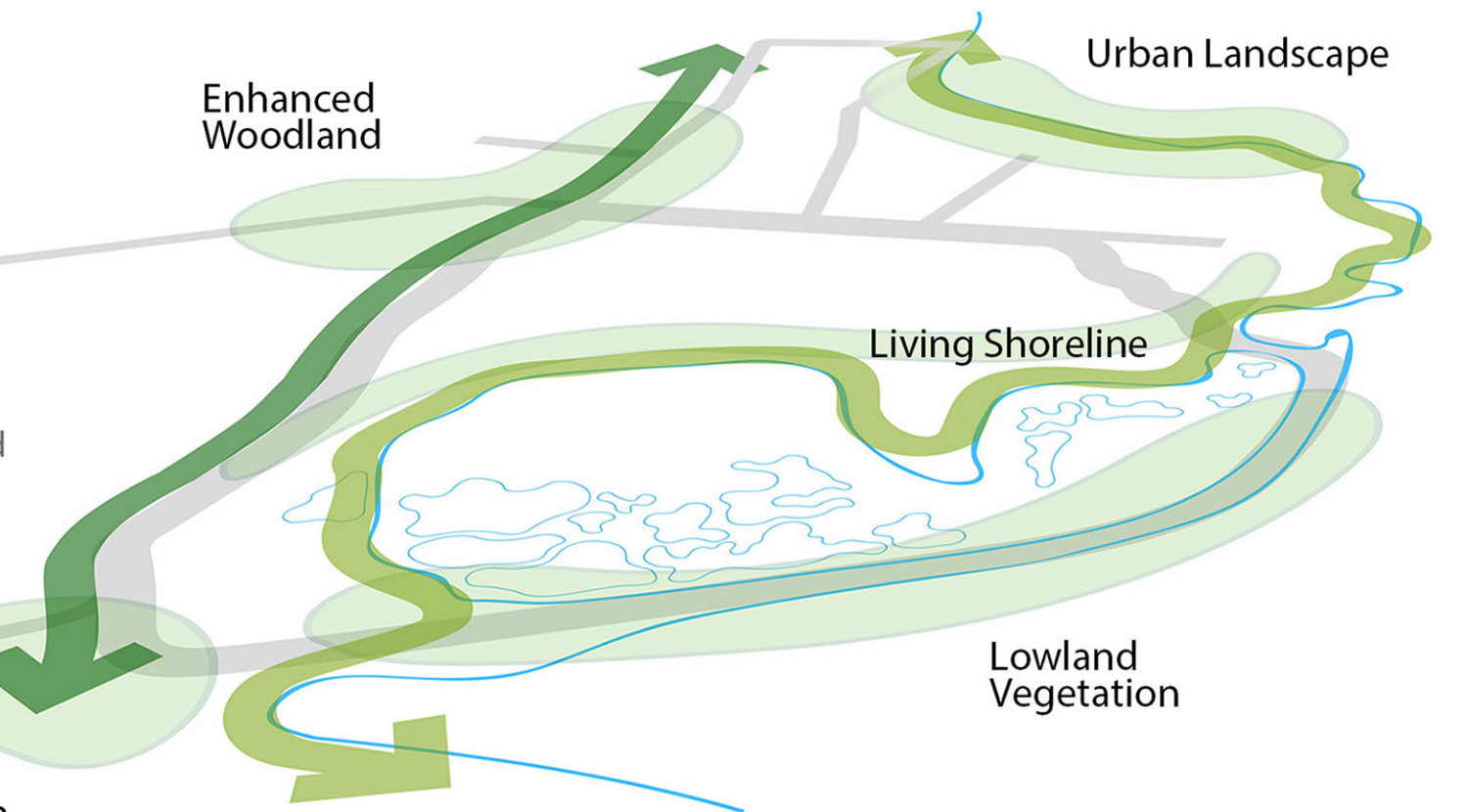
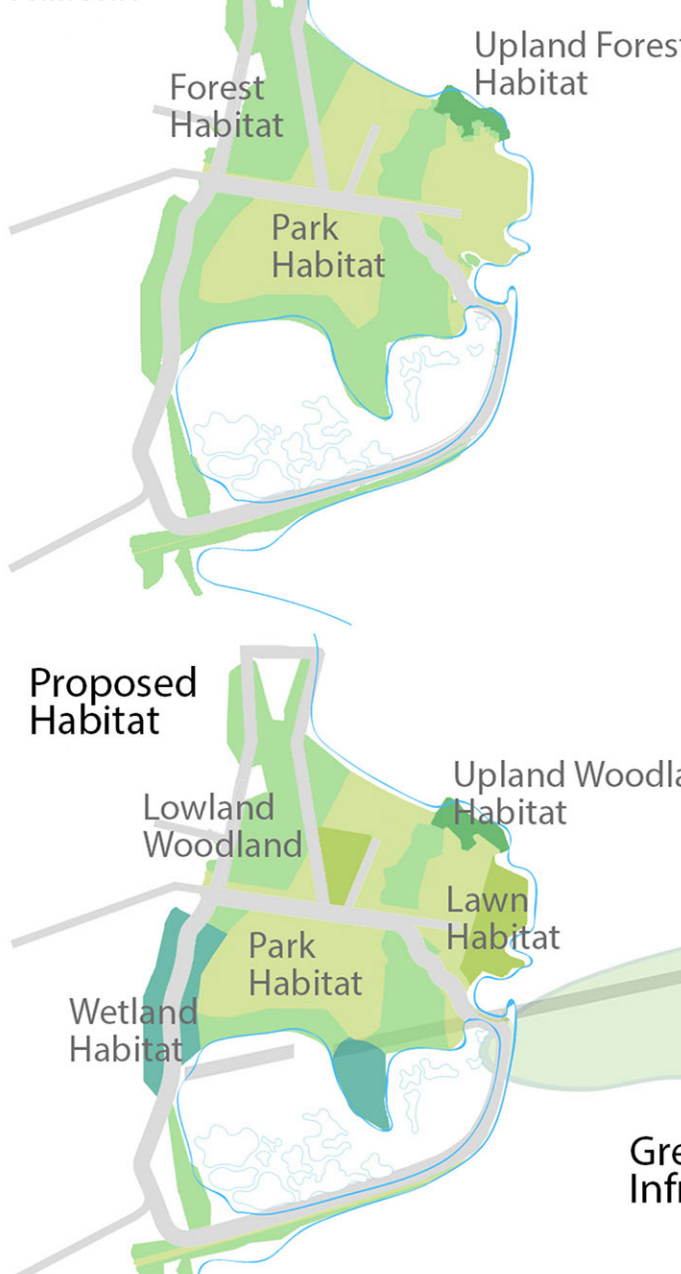
Existing Circulation



Proposed Circulation



Existing Habitat



Kingston LOOP 2050

2050 100 Year Flood



Circulation

- Pedestrian
- Kayak
- Vehicular

Recreation Program

- Water dependent
- Water enhanced
- water independent

Ecological Design

Living Shoreline Strategies

Site A
Rock Sill

Site B
Live Crib Wall

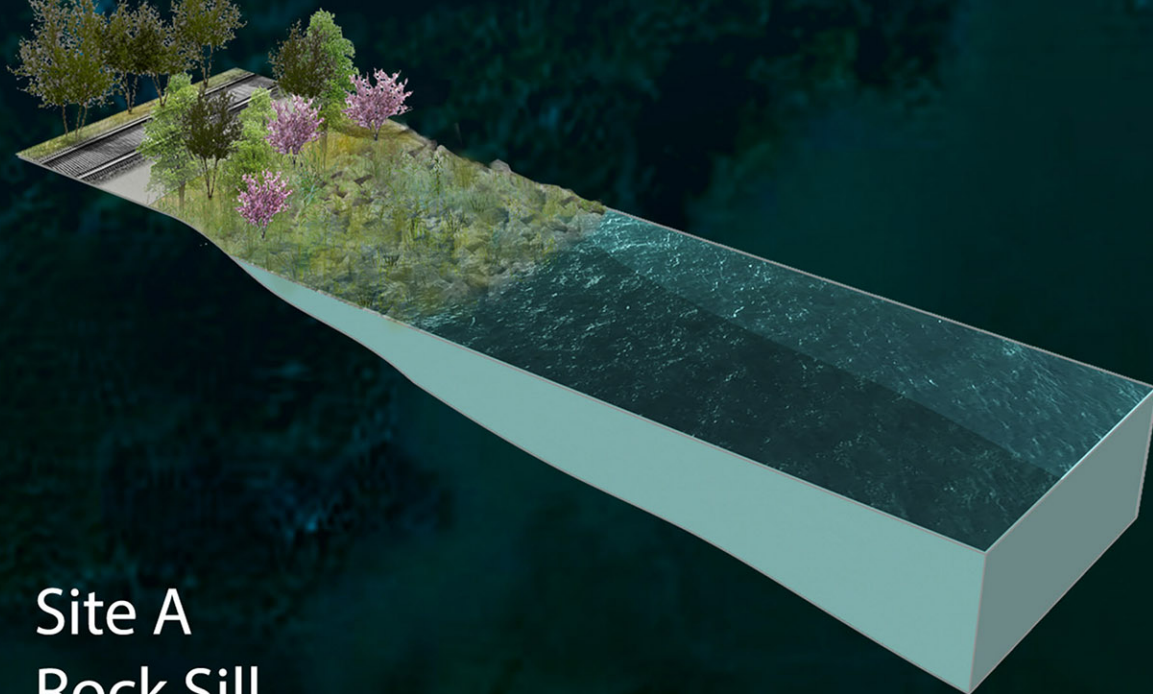
Site C
Living Marsh

Kingston LOOP 2080

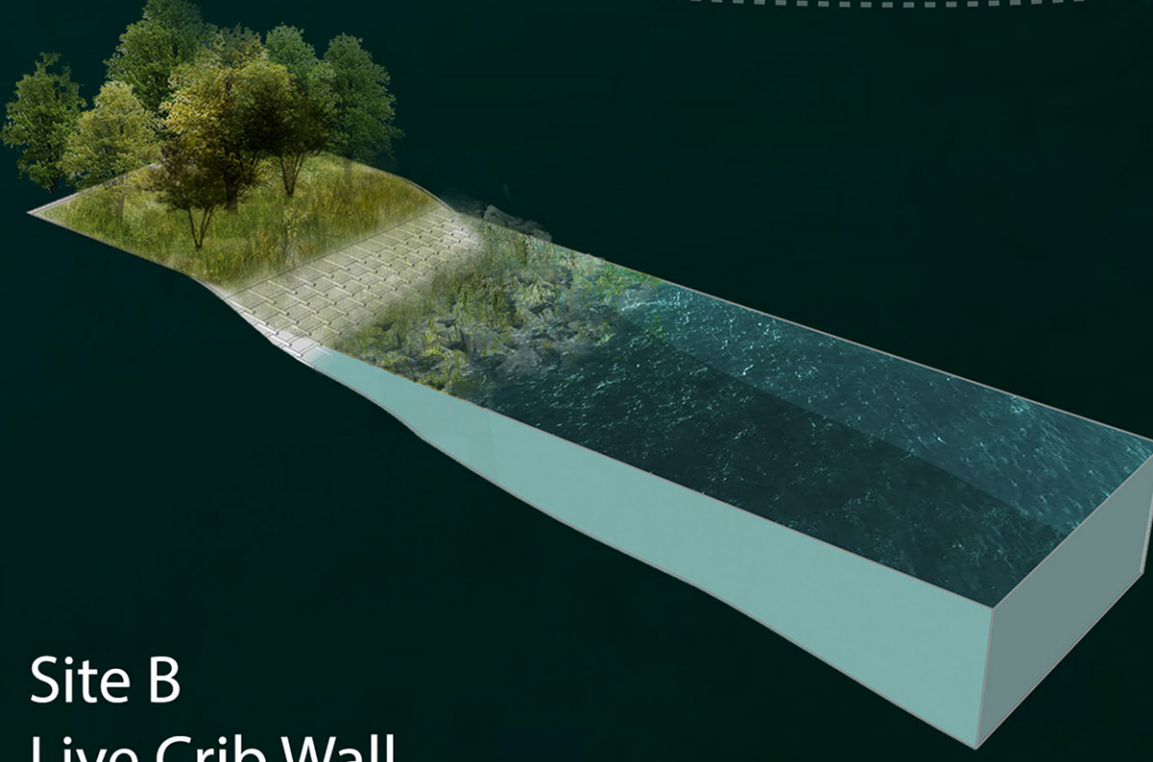
2080 100 year Flood



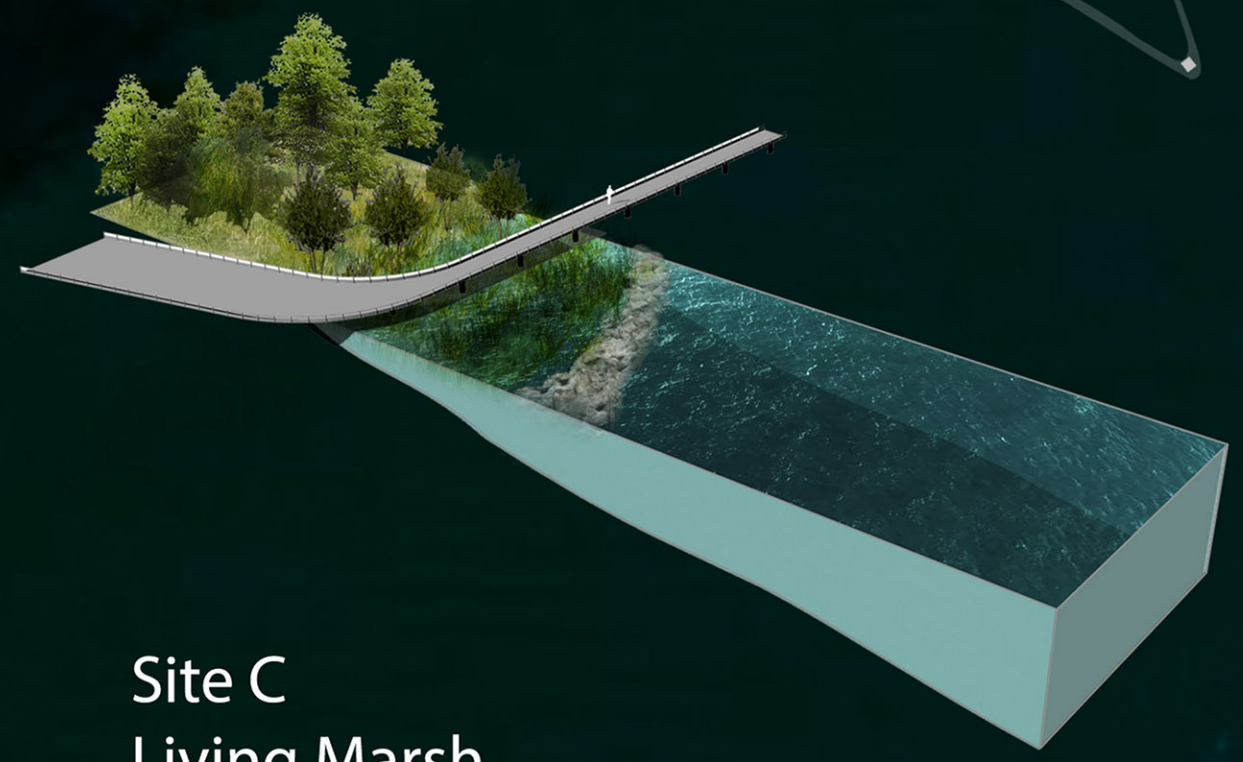
Living Shoreline Strategies



Site A
Rock Sill

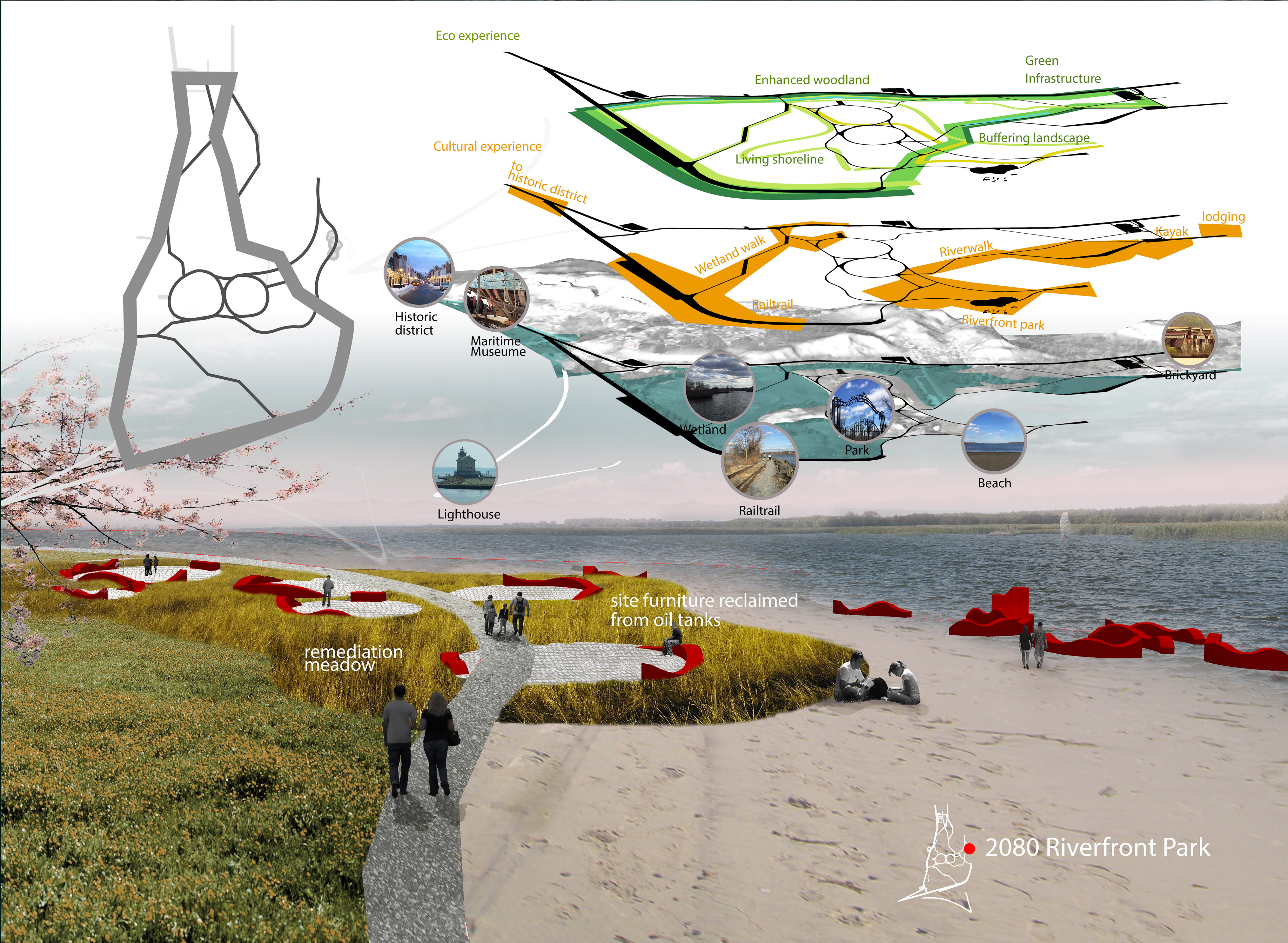
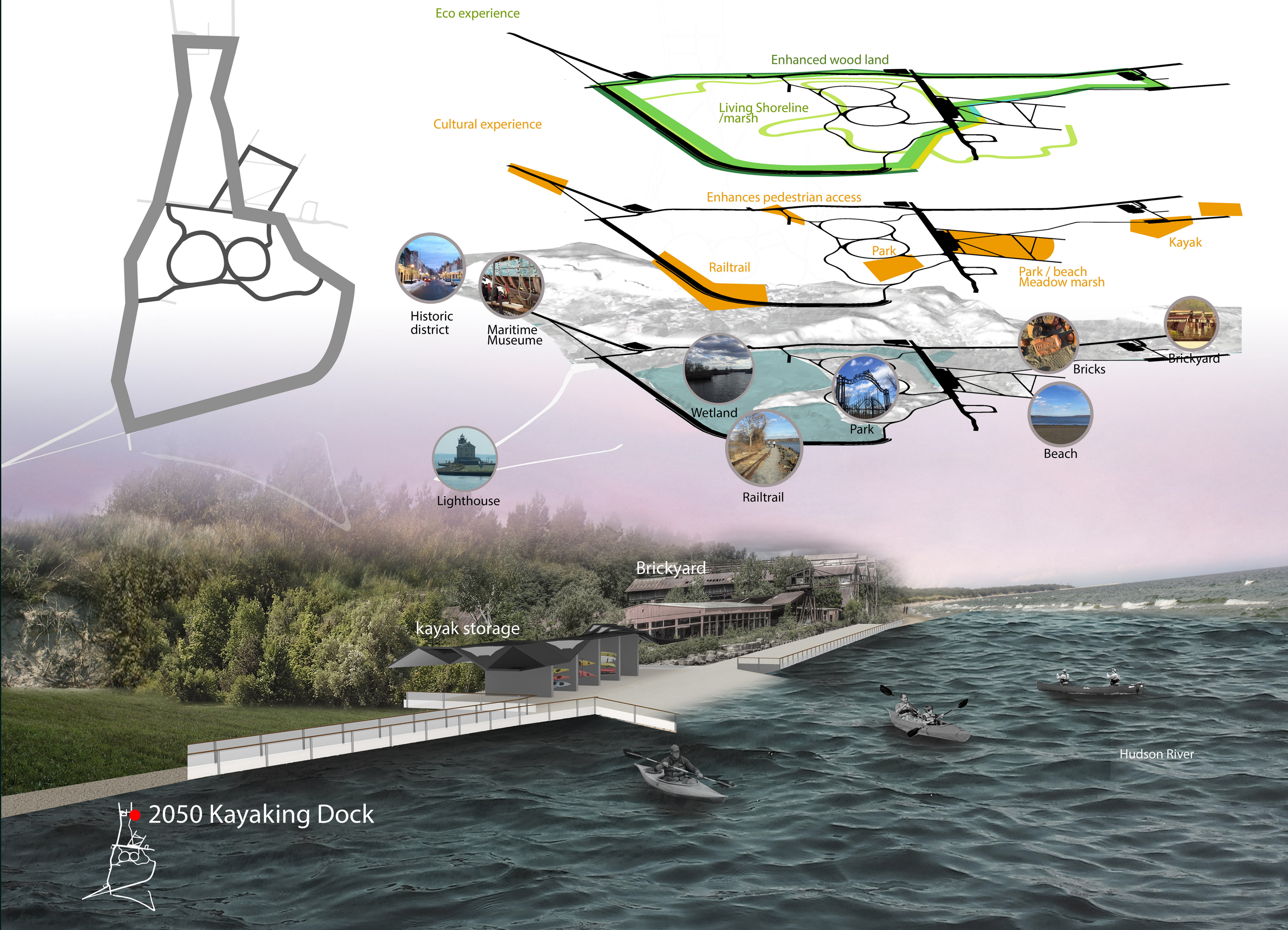


Site B
Live Crib Wall

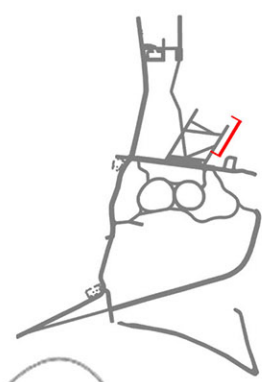


Site C
Living Marsh

The Kingston LOOP



The Kingston LOOP



2050 beach

River deck section

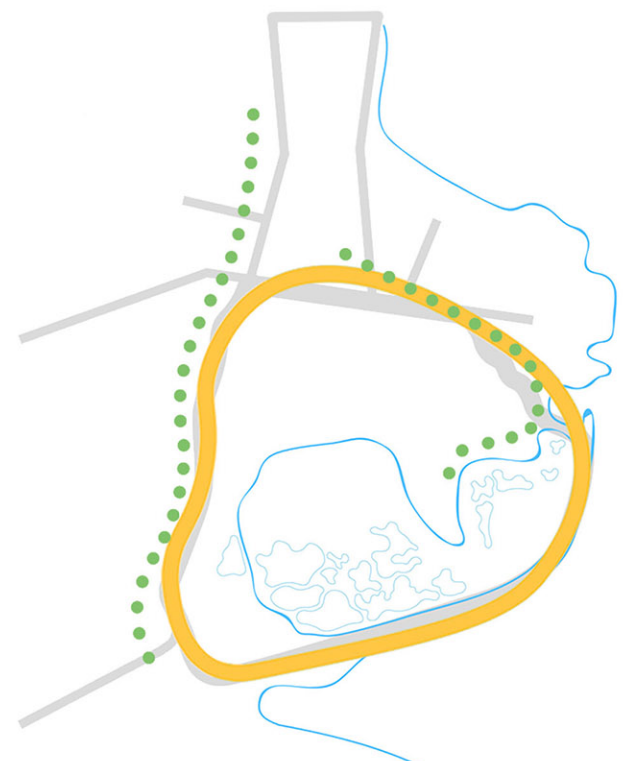


added sidewalk

wetland viewing deck

North Street + Wetland Section

Phasing



Current Condition

Cultural Loop

1. Loop length: 2 miles
2. Main Visiting Way: walk
3. Water Dependent Activity: Kayaking, fishing
4. Water Independent Activity: Dog Park, Recreation Facility, Soccer ball

Eco Loop

1. Floodable landscape: 10%
2. Ecosystem Type: Upland Forest, Lowland Forest, Urban Landscape, Tidal Wetland
3. Forest Canopy: 50%
4. Wild Life Habitat Zone: 3



2020 Condition

Cultural Loop

1. Loop length: 3 miles
2. Main Visiting Way: Walk, Bike
3. Water Dependent Activity: Kayaking, Fishing, **Water Walker Ball**
4. Water Independent Activity: Dog Park, Recreation Facility, Soccer ball, **Bird Observation deck**

Eco Loop

1. Floodable landscape: 15%
2. Ecosystem Type: Upland Forest, Lowland Forest, Urban Landscape, Tidal Wetland, **Marsh**
3. Forest Canopy: 55%
4. Wild Life Habitat Zone: 4



2050 Condition

Cultural Loop

1. Loop length: 3.5 miles
2. Main Visiting Way: Walk, Bike, **Board Walk**
3. Water Dependent Activity: Kayaking, Fishing, Water Walker Ball
4. Water Independent Activity: Dog Park, Recreation Facility, Soccer ball, **Bird Observation deck**

Eco Loop

1. Floodable landscape: 15%
2. Ecosystem Type: Upland Forest, Lowland Forest, Urban Landscape, Tidal Wetland, Marsh, **Rock sill**
3. Forest Canopy: 55%
4. Wild Life Habitat Zone: 4



2080 Condition

Cultural Loop

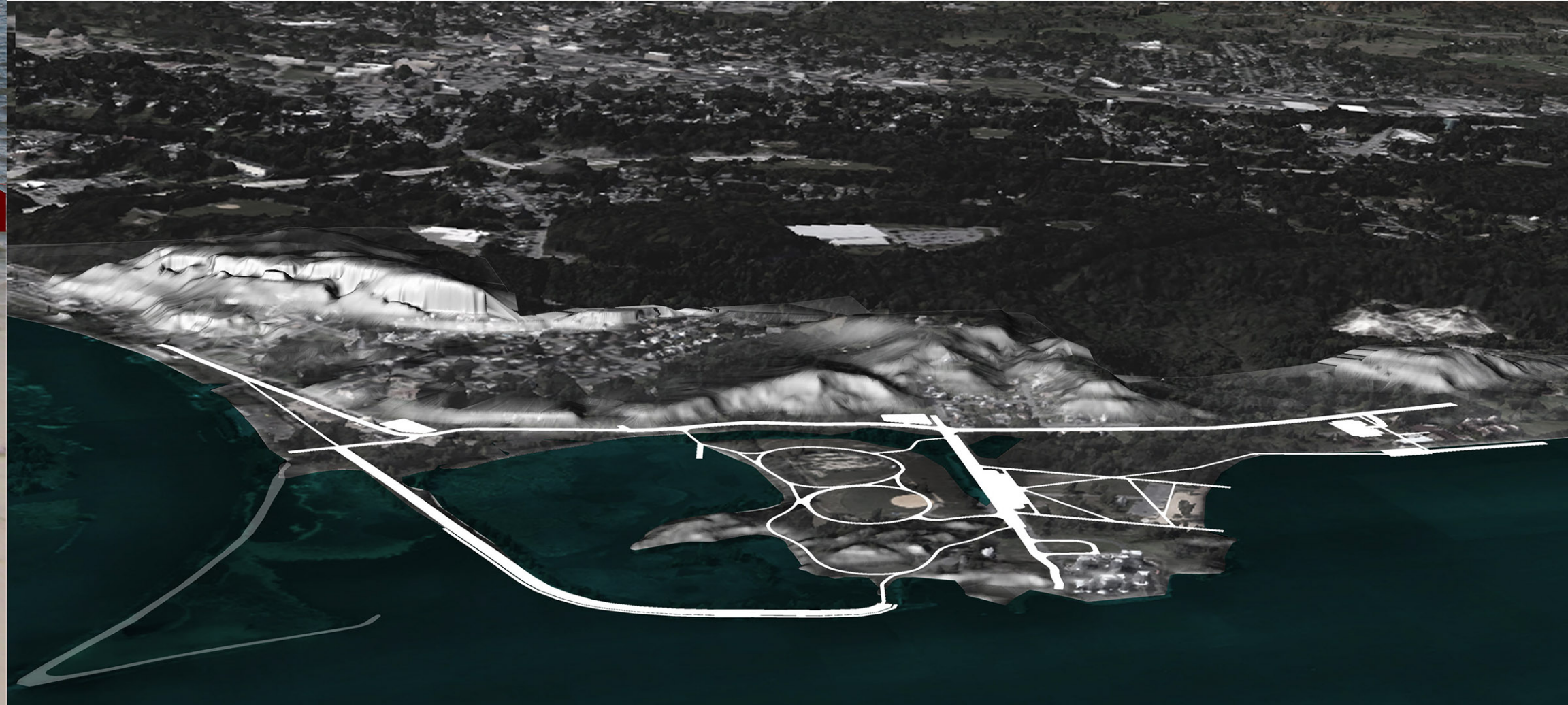
1. Loop length: 4 miles
2. Main Visiting Way: Walk, Bike, **Board Walk**
3. Water Dependent Activity: Kayaking, Fishing, Water Walker Ball, **Beach/ Water front park, Elevated trail, River Walk**
4. Water Independent Activity: Dog Park, Recreation Facility, Soccer ball, **Bird Observation deck**

Eco Loop

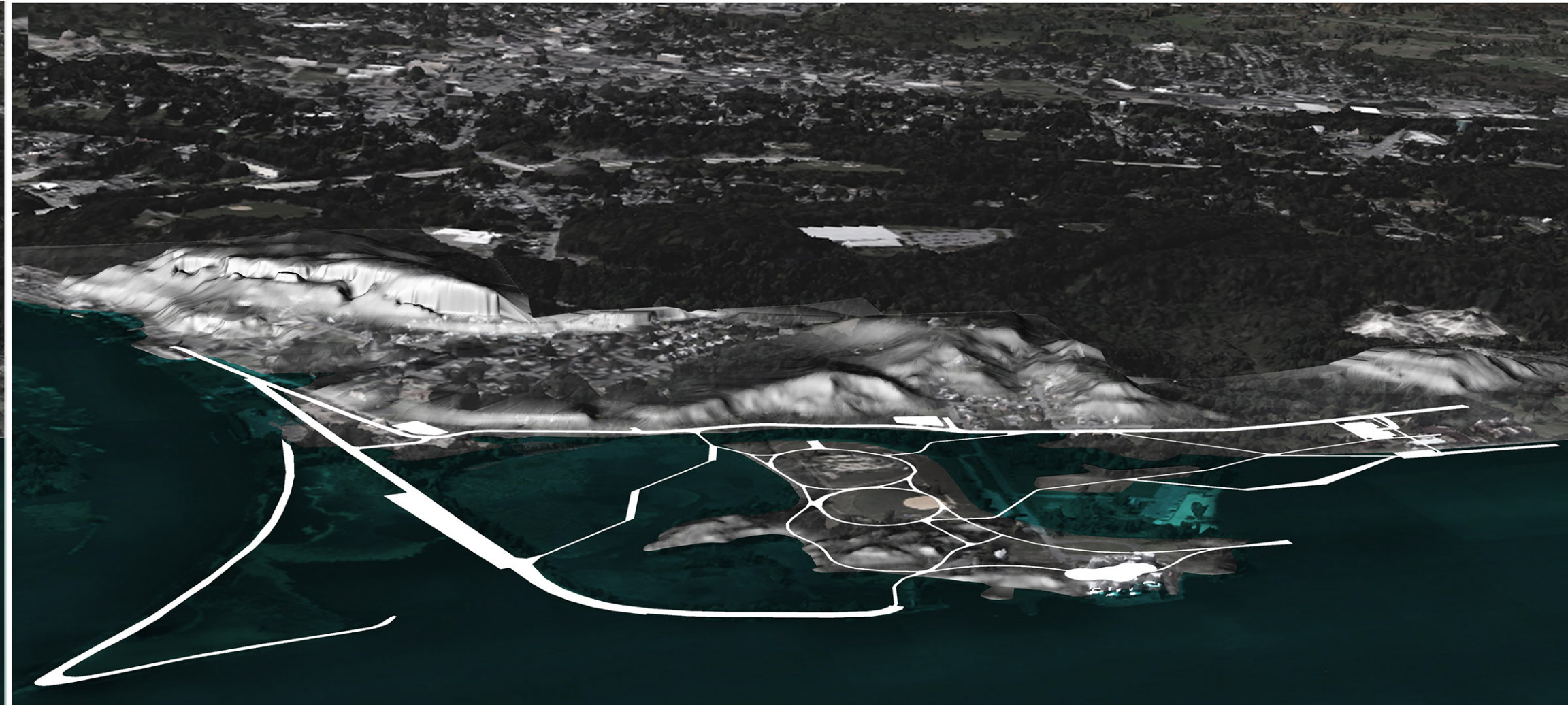
1. Floodable landscape: 25%
2. Ecosystem Type: Upland Forest, Lowland Forest, Urban Landscape, Tidal Wetland, Marsh, **Swamp, Meadow Wetland, Island**
3. Forest Canopy: 65%
4. Wild Life Habitat Zone: 5+



2050 Beach + River Decks



Kingston Loop 2050



Kingston Loop 2080