

KINGSTON COVES RISING TOGETHER

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The re-design of Kingston Point uses topographic manipulation to seamlessly weave together water and terrain, creating novel land and water forms. We will create a series of protected “coves” designed to shift and change with sea level rise. These coves host multiple uses – swimming, aquatic habitat, and shoreline protection. Between these coves, a series of recreational greenways and blueways will create innovative interpretative experiences. The transition zones between green/terrain and blue/water at the shoreline are moments of cultural and experiential connection to the Hudson, aquatic ecosystems and the changing landscapes of sea level rise.

KEY

- Green Ways
- Blue Ways
- A. Swimming Beach
- B. Sand Trap
- C. Earth Mound Park
- D. South Cove Environmental Education Center
- E. Wetland Migration Stations
- F. North Bridge
- G. South Bridge

CURRENT SITE CONCERNS

- 60 tons of sand wash away every 5 years
- Daily tides erode shoreline
- Oil Tanks at risk for damage from flooding
- Flow of the Hudson River
- Wave runup from storms
- Storm surge

2080 SEA LEVEL RISE WITH NO CHANGES

- Beach loss from SLR
- Oil tanks at risk from flooding
- Shoreline Loss
- Destruction of intertidal wetlands from SLR

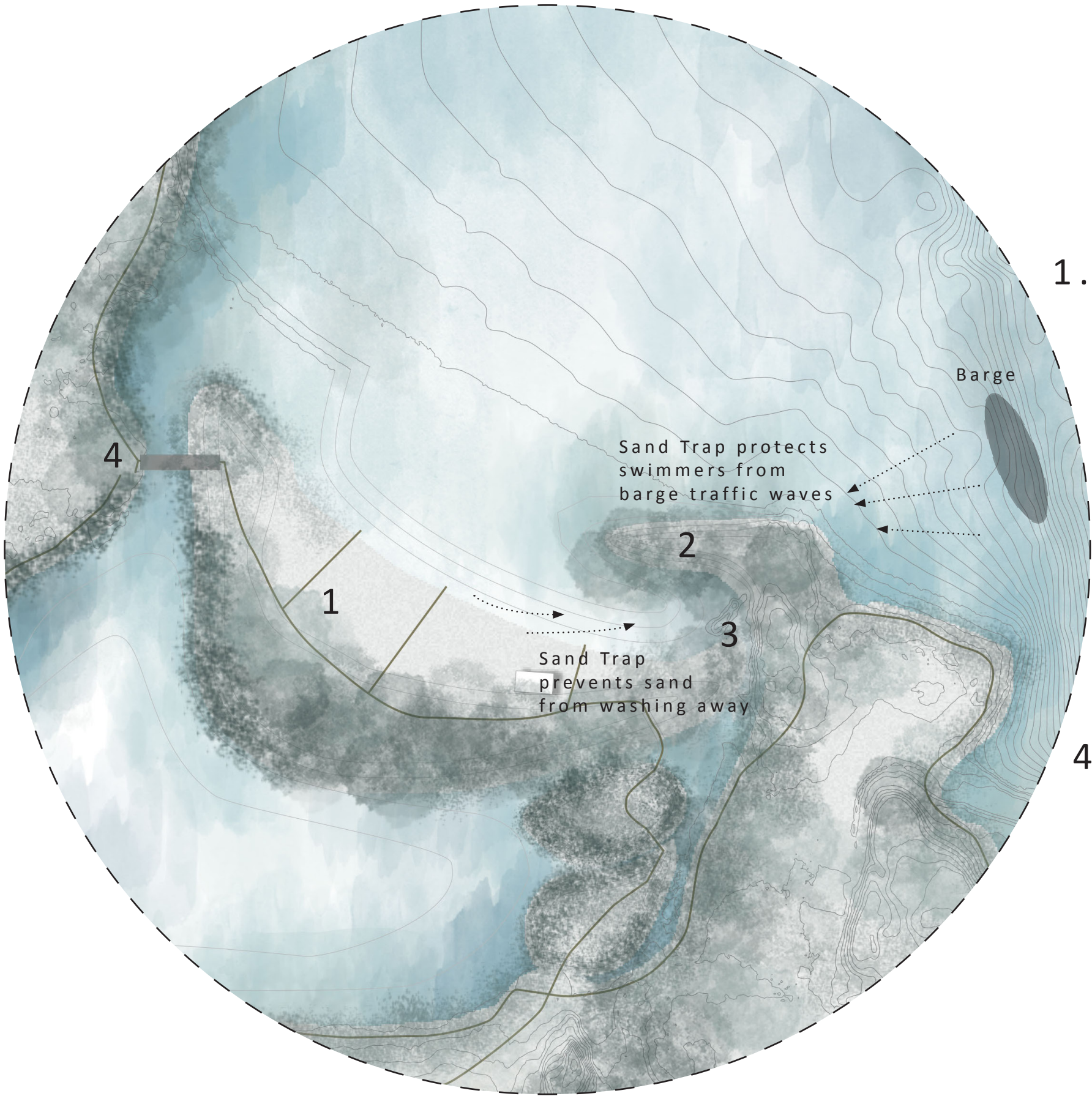
2080 SEA LEVEL RISE WITH PROPOSED CHANGES

- Cut land maintains swimming beach
- Phase out oil tanks
- Extra cut material is stored at mound park
- Jetty raised
- Wetland Migration Stations maintain wetland communities

NORTH COVE

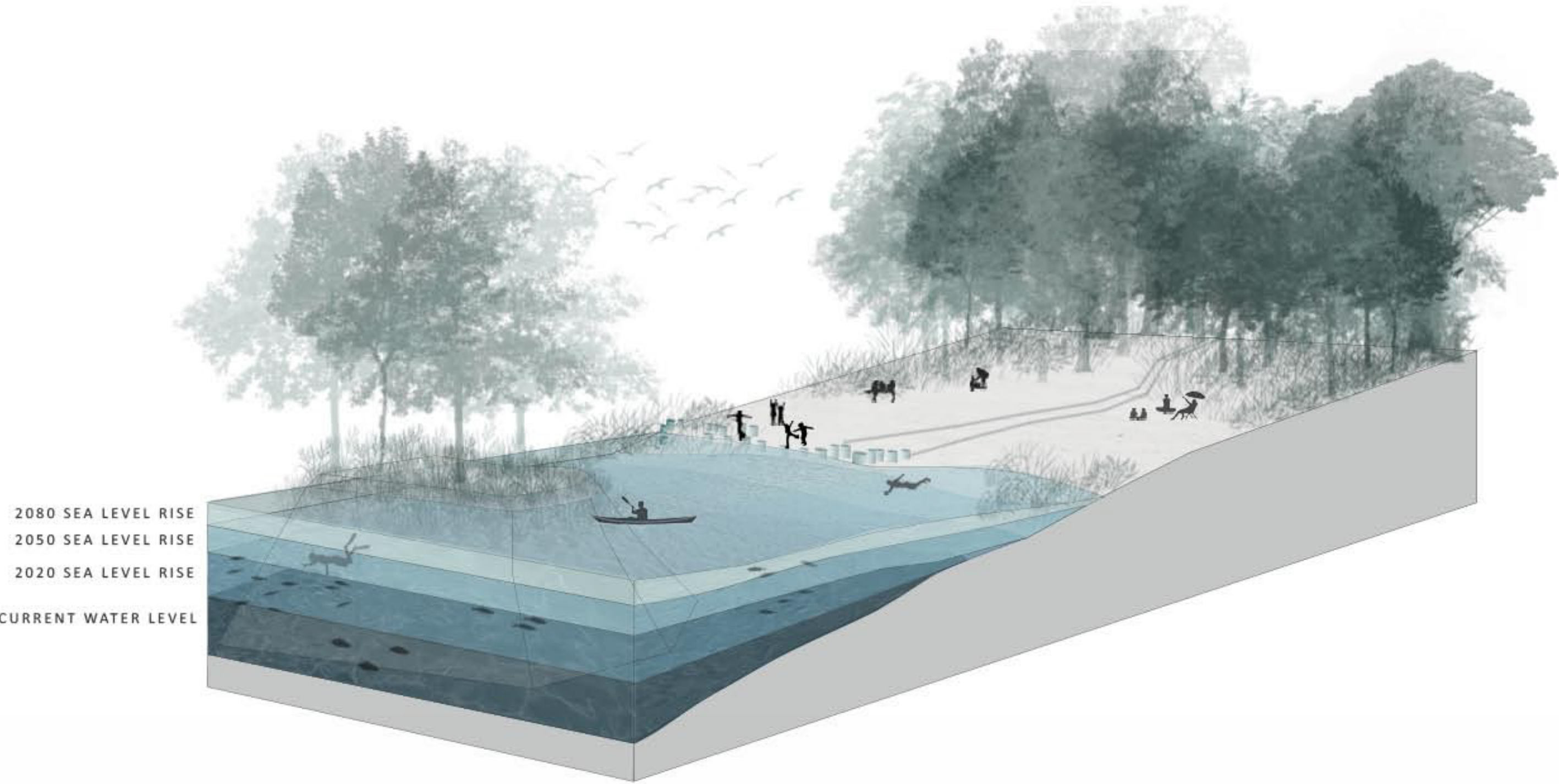
SCULPTURAL SHORELINE HABITAT

The sculptural shoreline is made up of two materials: Corten steel + concrete. The Corten has various size holes cut into it to provide inlets for multiple types of animals to go inside and use for protection. The concrete is pre-cast slabs that will have a 3-dimensional structure to them that imitates the diversity of natural surface areas found underwater, providing nooks + crannies for smaller species such as macroinvertebrates. Both materials are durable and will ideally last for many years and act as shoreline protection from major storms as well as habitat enhancement.



- 1. Swimming Beach
- 2. Sand Trap
- 3. Sculptural Shoreline
- 4. Pedestrian Access Bridge

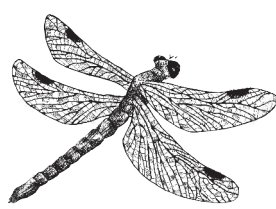
GREENWAYS TO BLUEWAYS TRANSITION ZONE



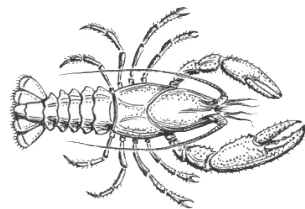
INVERTEBRATES



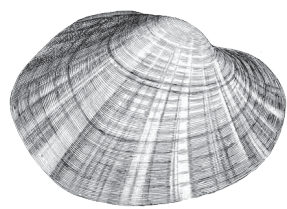
VALVATA PISCINALIS



LIBELLULA SEMIFASCIATA

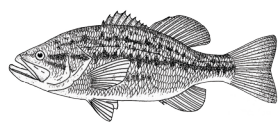


ORCONECTES VIRILIS

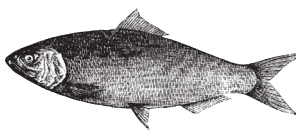


LAMPSILIS CARDIUM

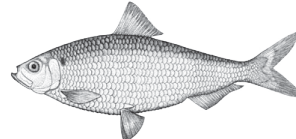
FISH



LARGEMOUTH BASS



AMERICAN SHAD



ALEWIFE



SHORTNOSE STURGEON

BIRDS



OSPREY



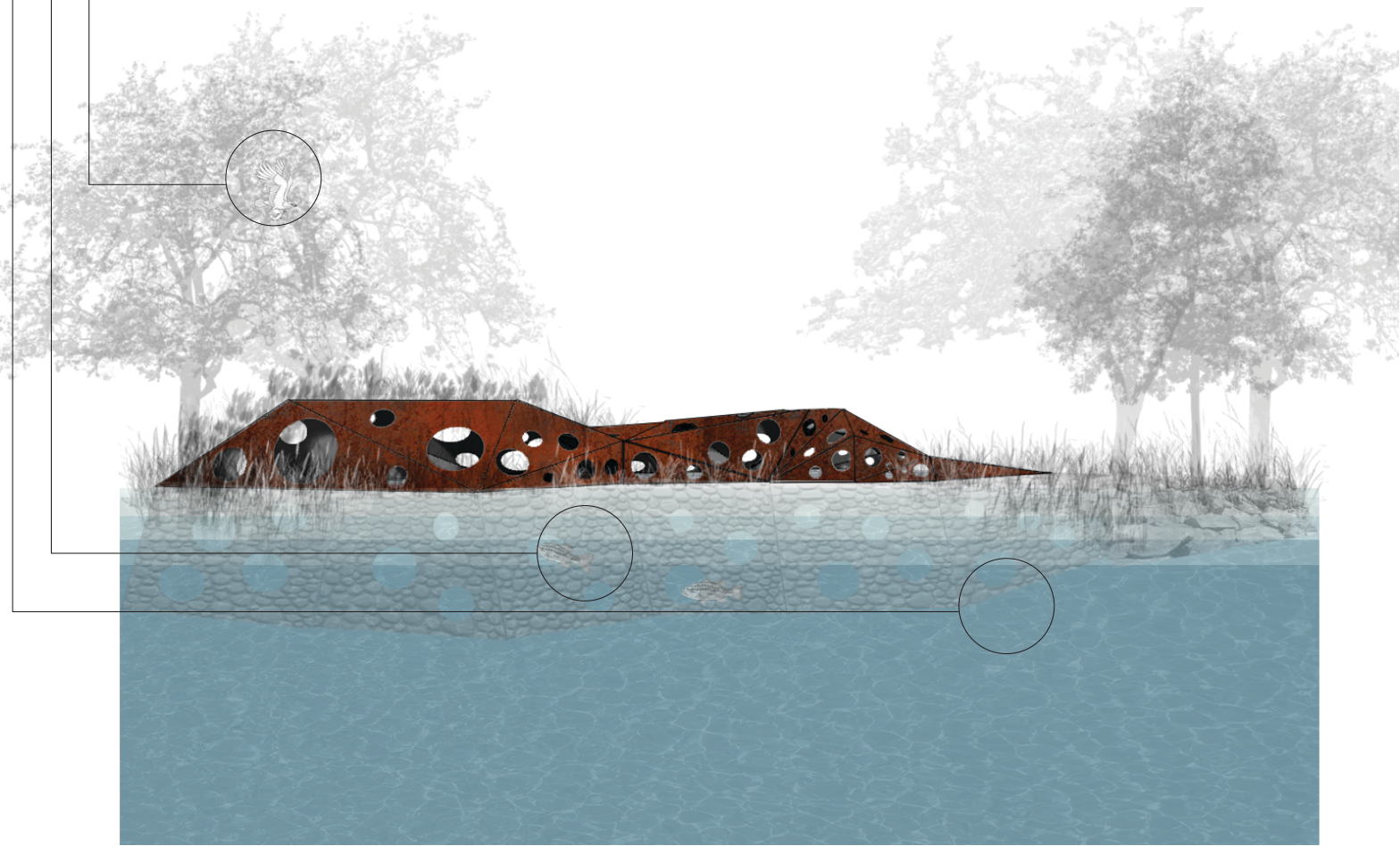
SPOTTED SANDPIPER



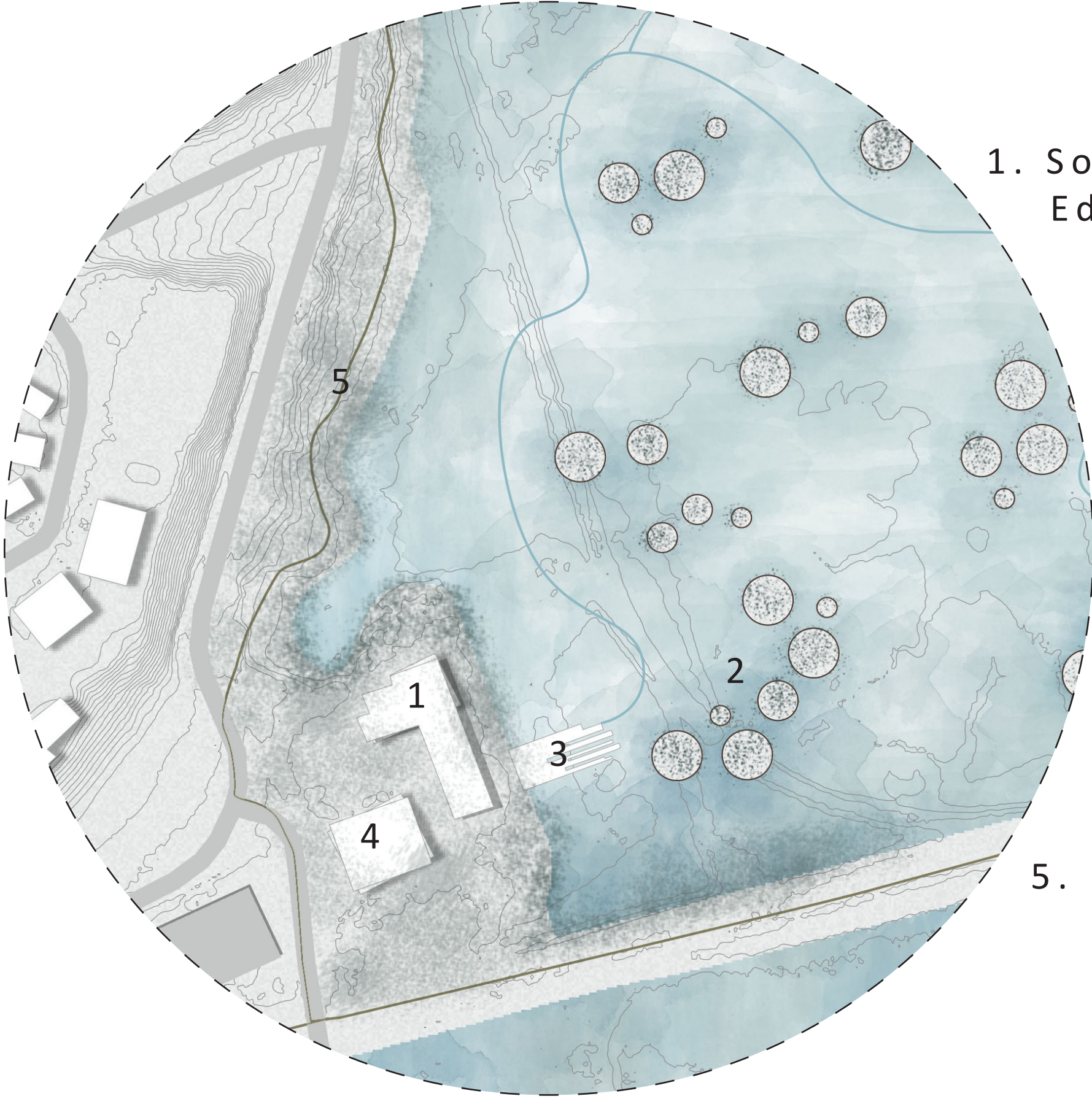
GREEN-WINGED TEAL DUCK



BALD EAGLE

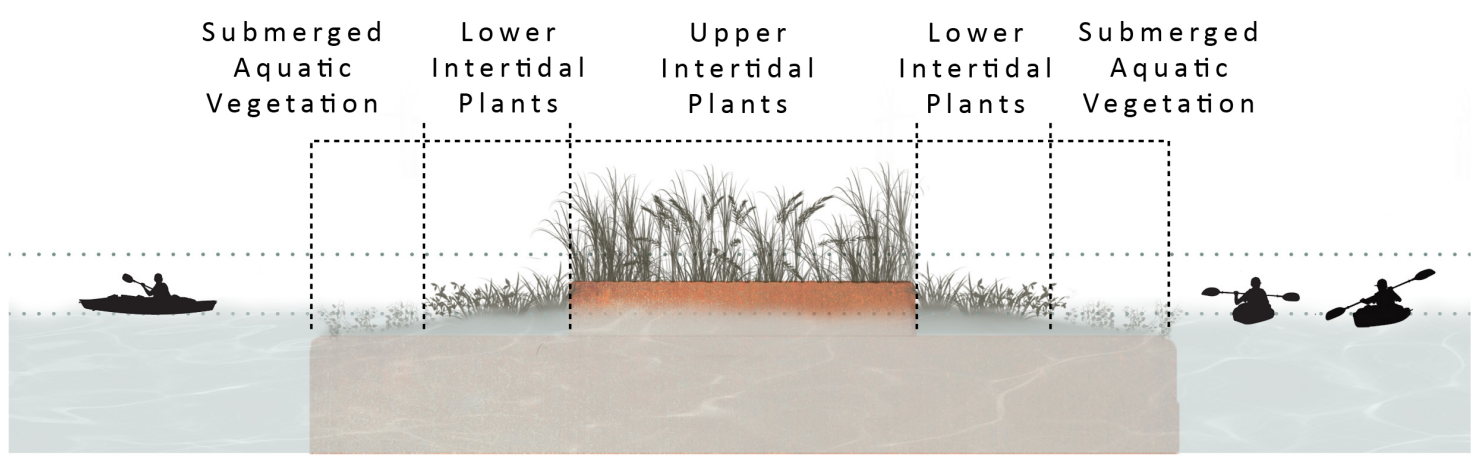
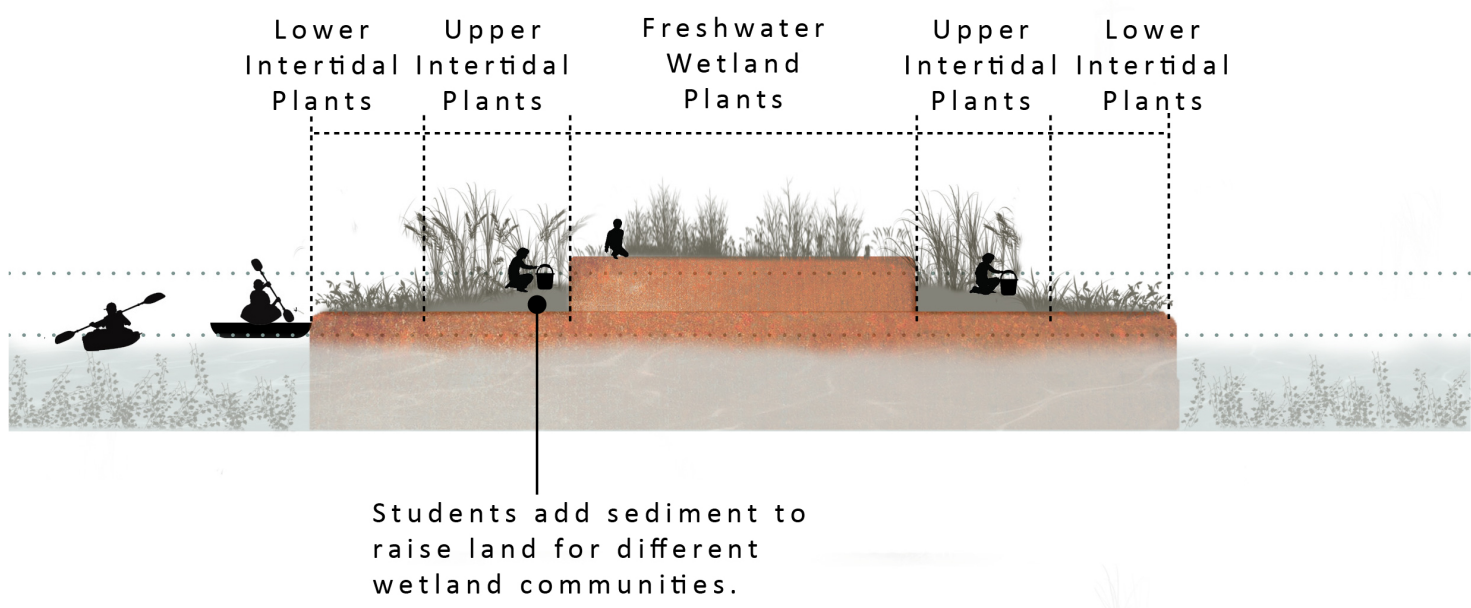
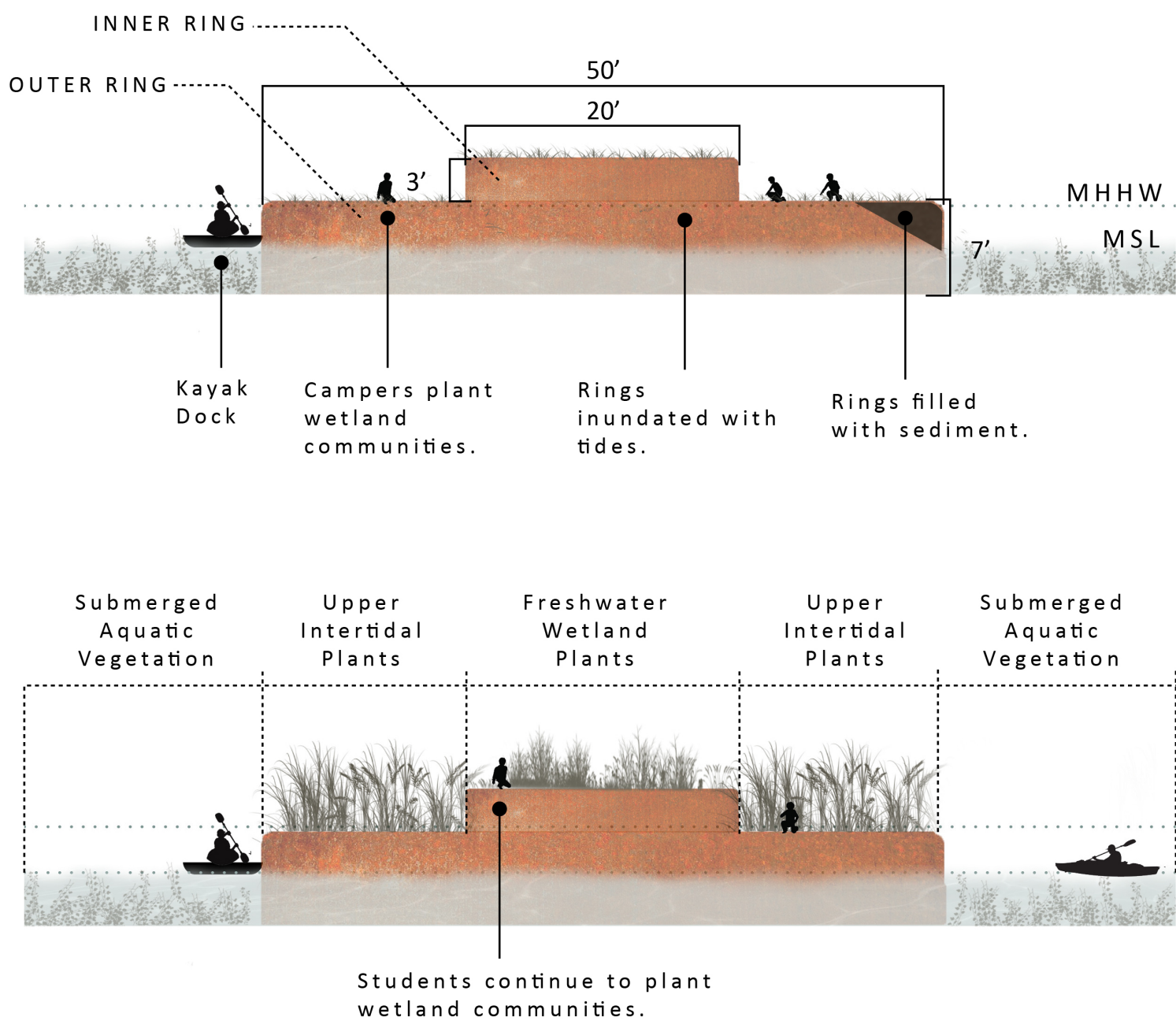


SOUTH COVE

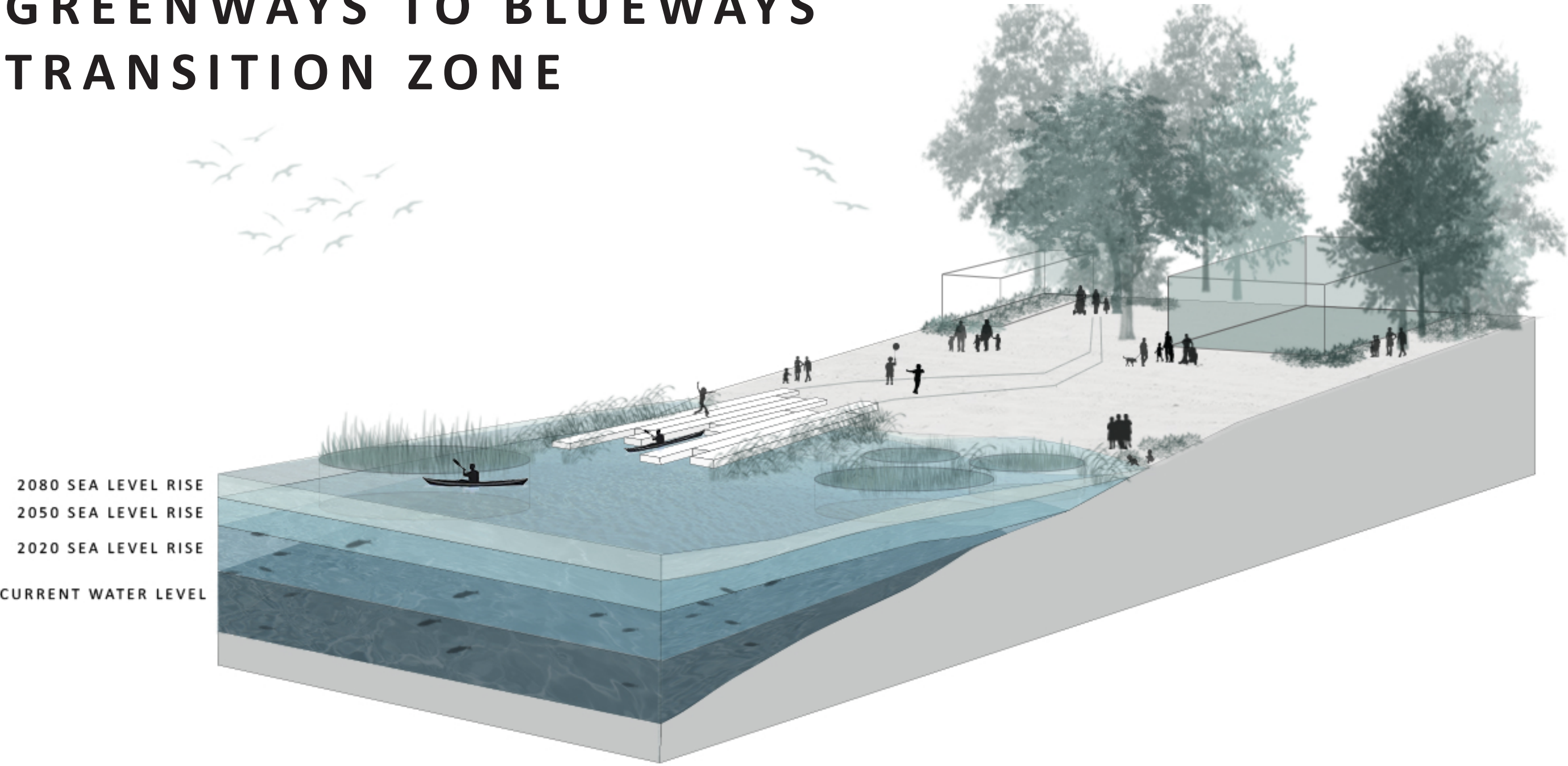


- 1. South Cove Environmental Education Center
- 2. Wetland Migration Stations
- 3. Kayak Launch
- 4. Greenhouses
- 5. Hybrid Shoreline

MARSH MIGRATION STATION OVER TIME

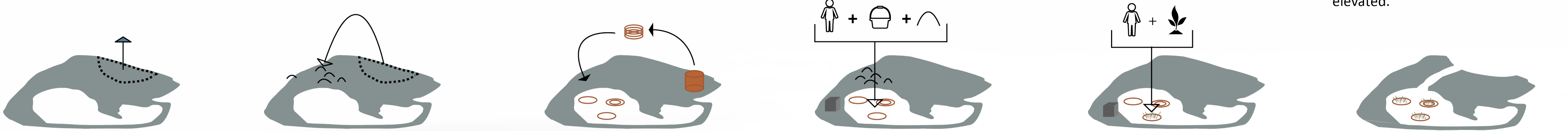


GREENWAYS TO BLUEWAYS TRANSITION ZONE



SOUTH COVE ENVIRONMENTAL EDUCATION WETLAND MIGRATION MACHINE

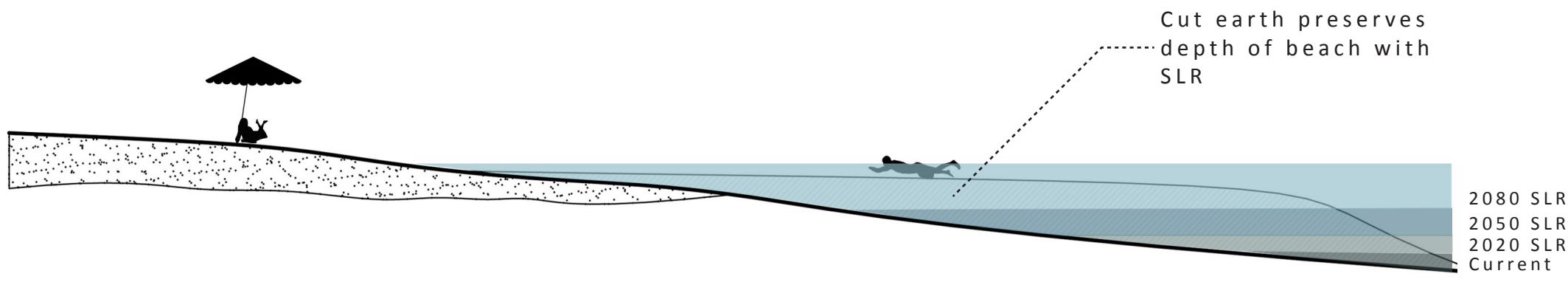
- 1. Complete cut operation to pre-serve and protect North Cove beach.
- 2. Create earthen land art mounds for storing excess cut material.
- 3. Clean and slice old oil tanks into rings and place them into South Cove.
- 4. South Cove Environmental Education students fill "migration stations" with sediment stored in mounds from cut-fill operation.
- 5. Students plant migration stations with intertidal wetland plants grown at the South Cove Environmental Education Greenhouses.
- 6. As sea levels rise, existing wetland communities will disappear, but the migration stations will keep the planted wetland communities elevated.



SHORELINE EXPERIENCES

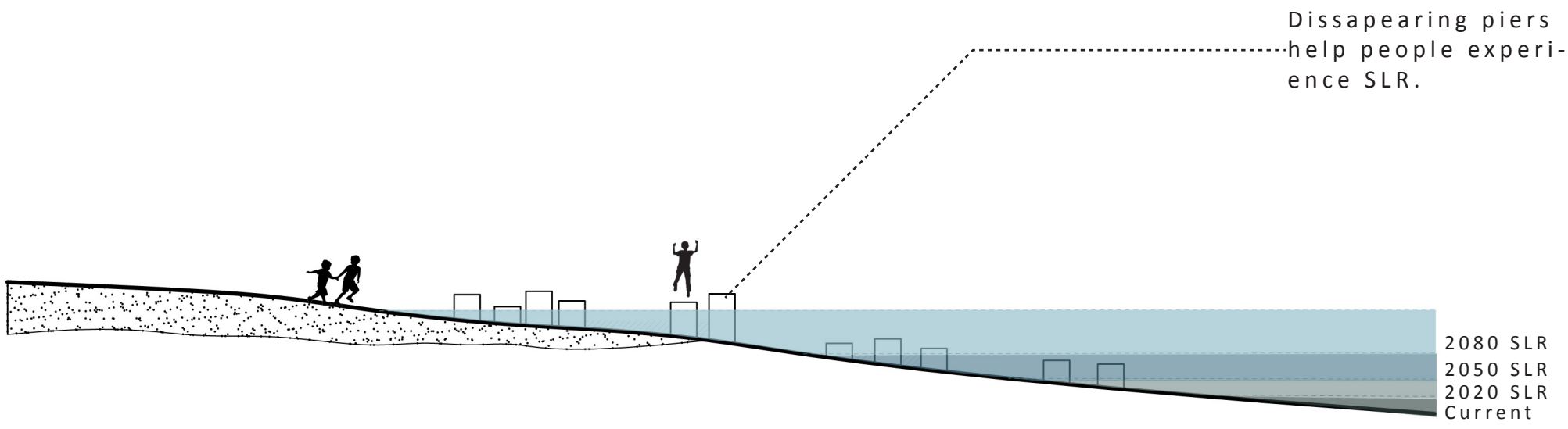
1. BEACH

- + Sense of Place
- + Recreation



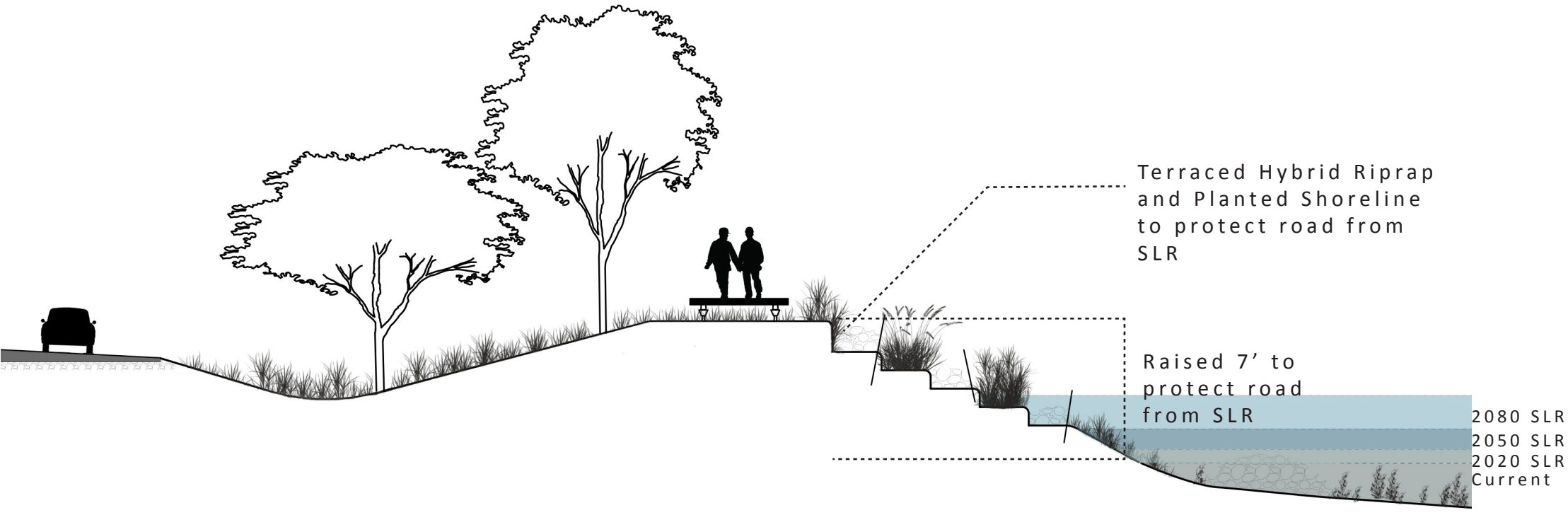
2. EXPERIENTIAL

- + Climate change education
- + Recreation



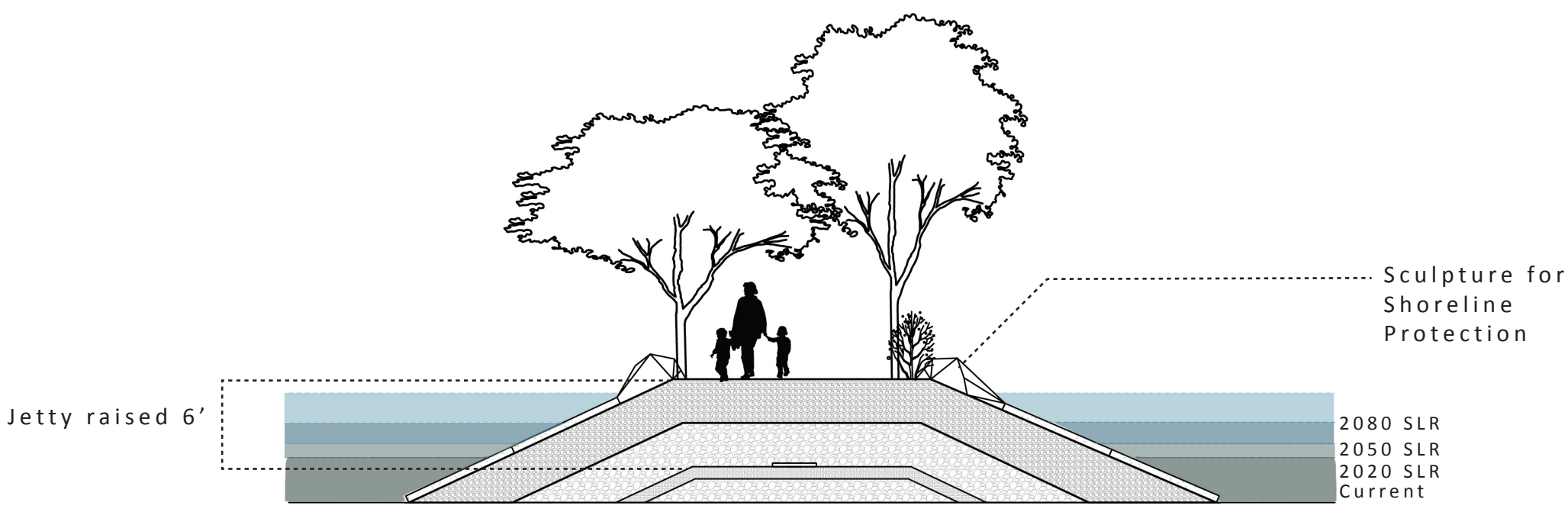
3. HYBRID

- + Shoreline and Road Protection
- + Habitat Enhancement
- + Pedestrian Circulation



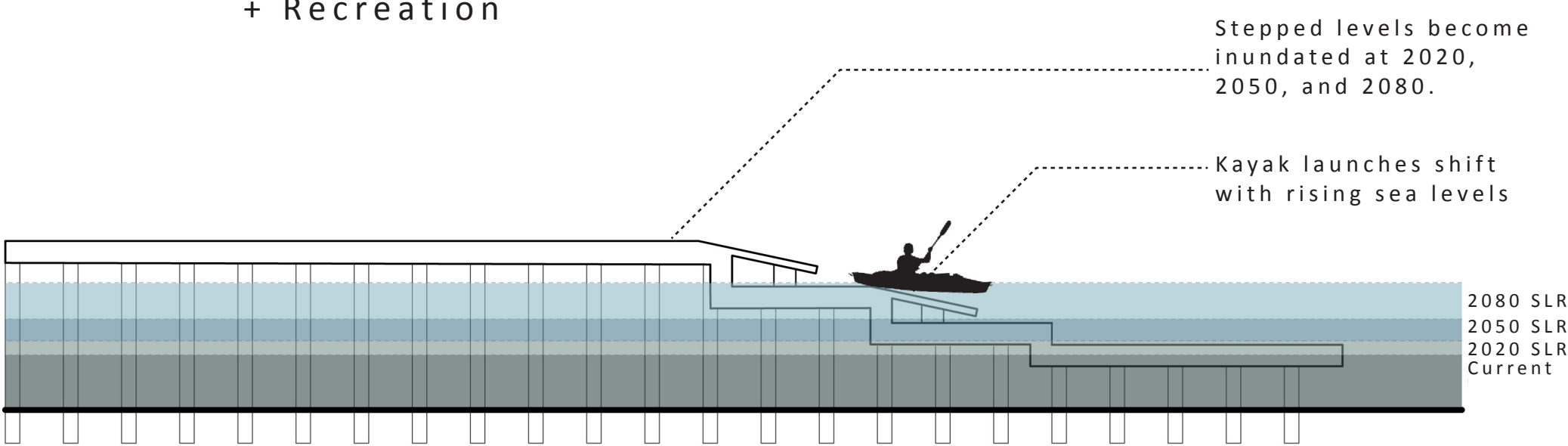
4. SCULPTURAL

- + Shoreline Protection
- + Habitat Enhancement
- + Sense of Place



5. KAYAK LAUNCH

- + Climate Change Education
- + Recreation



6. NATURAL

- + Habitat Enhancement
- + Shoreline Protection

