

WEAVING THE WATERFRONT KINGSTON

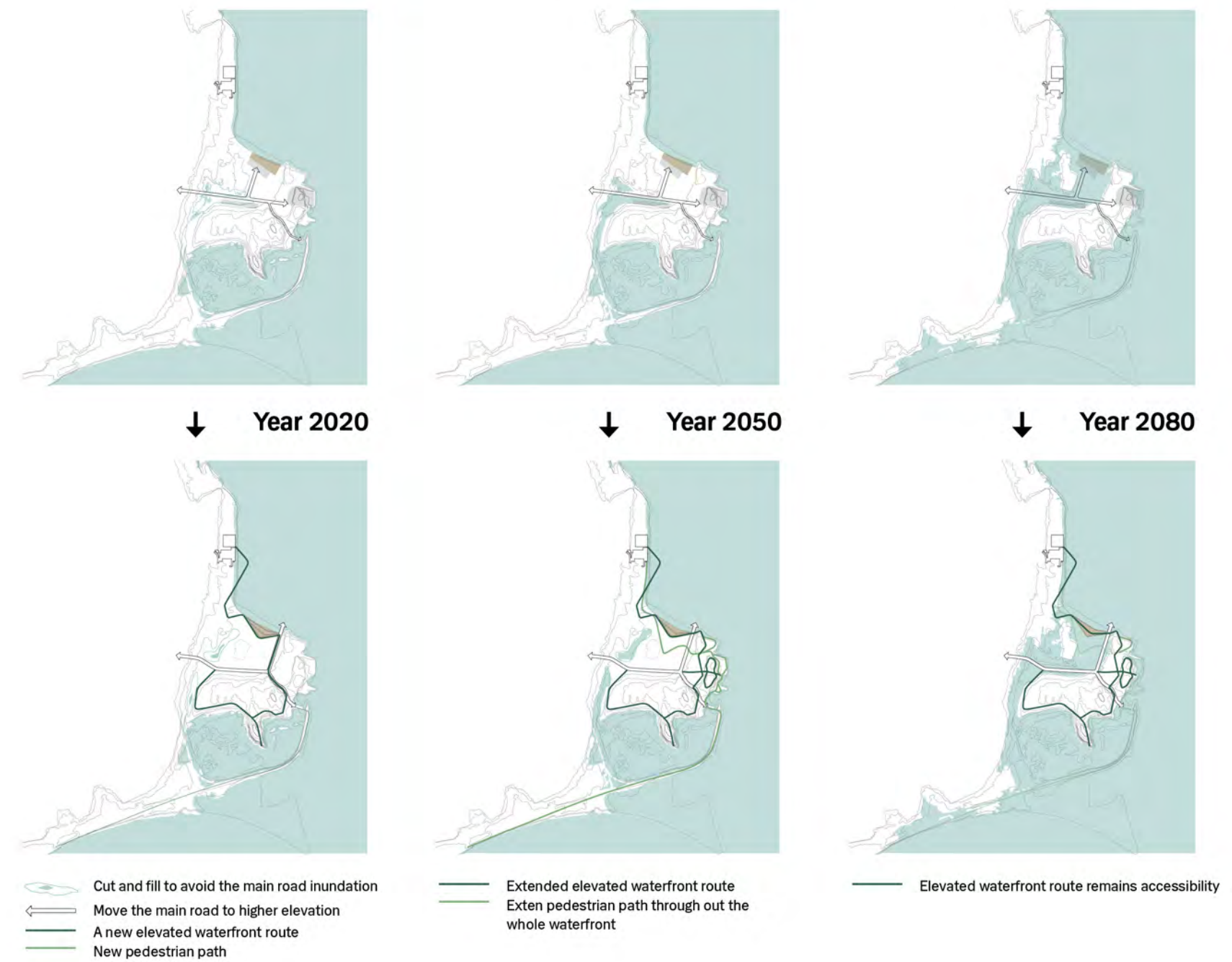
Kingston Point Climate Adaptive Design Proposal Ideas from Cornell CAD Studios

WEAVING THE WATERFRONT

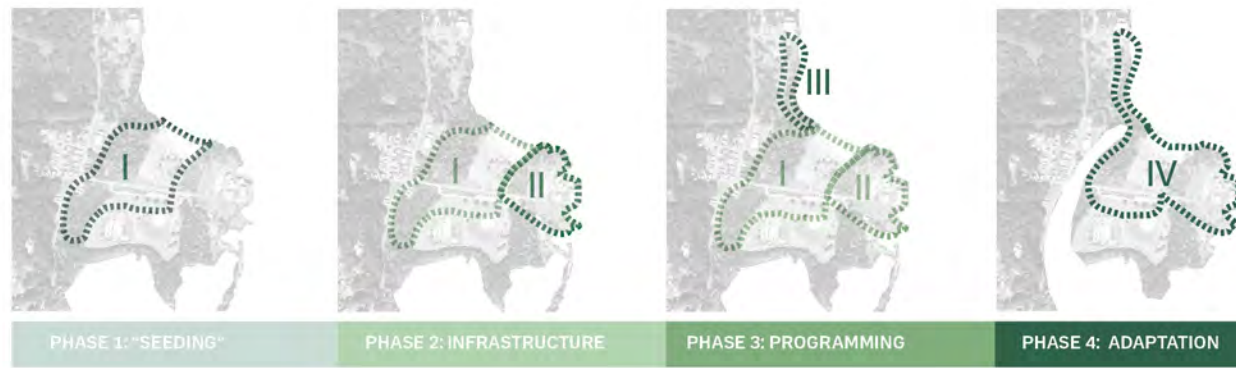
-- Project from Cornell CAD KINGSTON II Studio 2017 Spring
Luyao Kong, Hong Gao, Qianli Feng



SEA LEVEL RISE CHALLENGE AND STRATEGIES



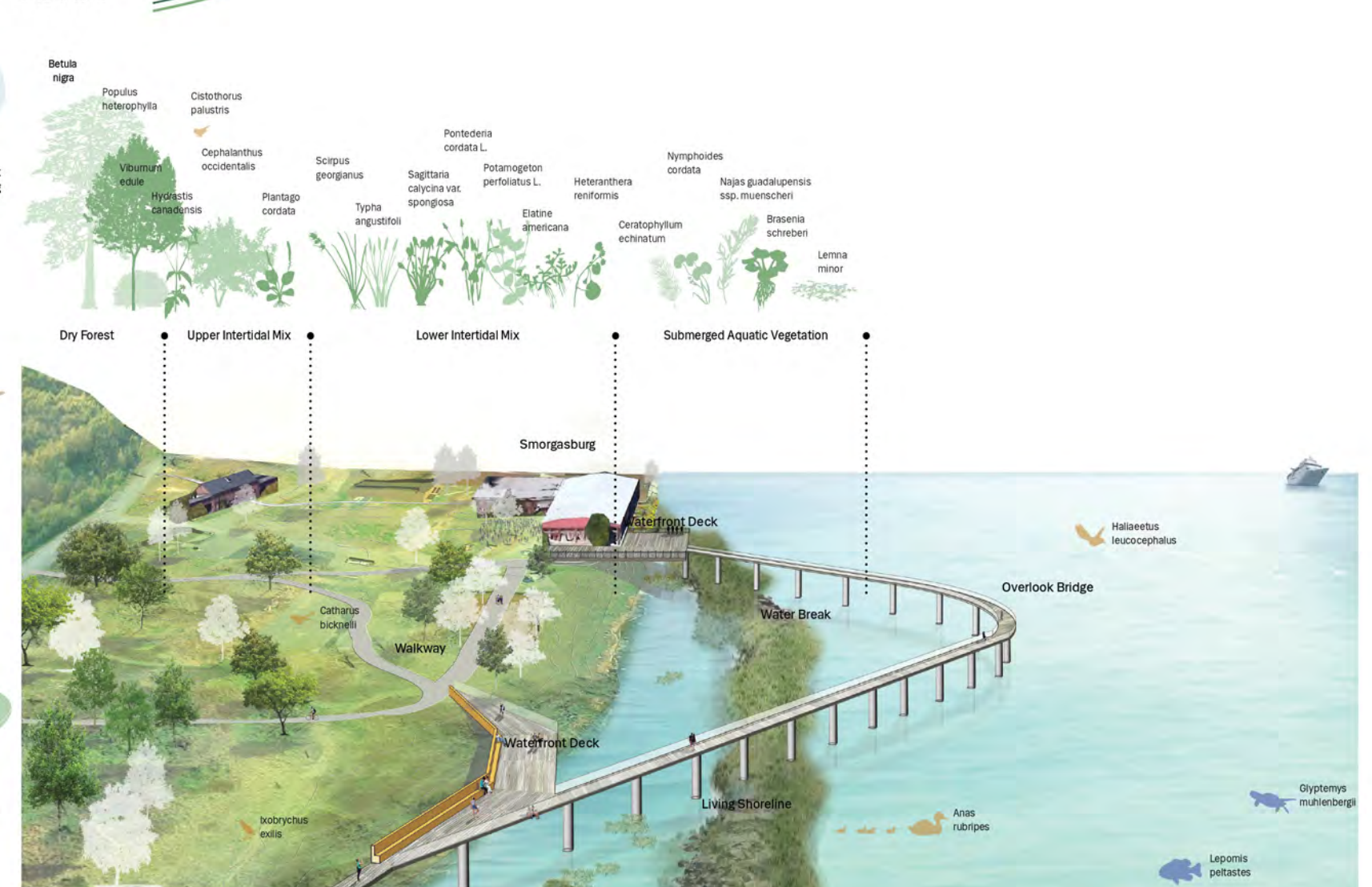
PHASES



ADAPT



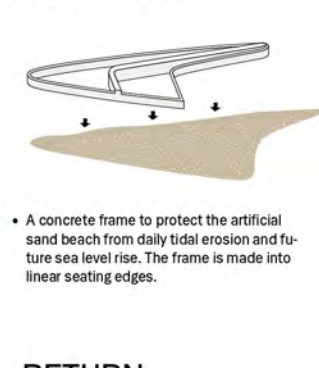
ADAPT



ADAPT

- Stabilization of the shoreline with structures such as stone reefs, oak fiber logs, wetlands plants and submerged aquatic vegetation
- Add waterfront wooden decks and elevated overlook bridge
- Protects the Smogsbury area as an outdoor activity zone with new fishing areas, market places
- Improve accessibility up to 5ft sea level rise (Year 2100)
- Improve water quality via filtration of colored run-off while creating habitat zone
- Protect surrounding riparian and intertidal environment

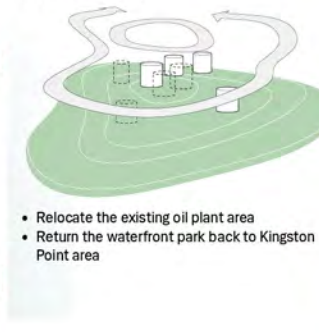
REINFORCE



REINFORCE

- Put three walls with different height to divide the sand beach into three parts
- Move the automobile road and parking area to higher level on the east side
- Connect the middle wall to surrounding elevated roads to provide accessibility for future
- Divided beach dependent activities to different beach zones, eg beach volleyball
- Remove most part of the beach area until 2.5 ft sea level rise 2080
- The highest part will become a path when surrounding walls is inundated

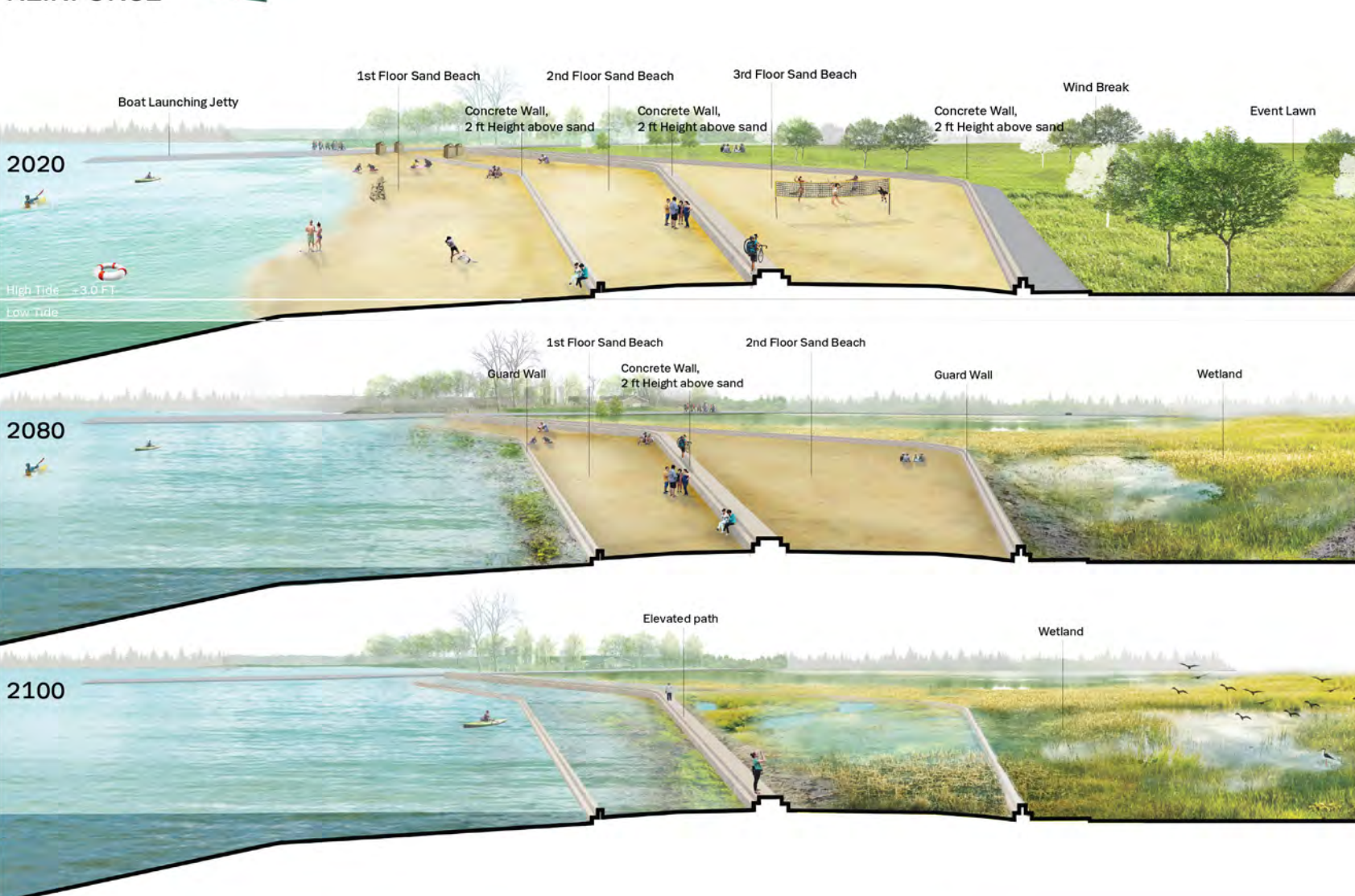
RETURN



RETURN

- Relocate the oil plant to industrial waterfront
- Clean up Post-industrial zone
- Transform the area into a post-industrial park with trails, pedestrian roads and vegetation
- Set kayak launch placement and water storage tank

REINFORCE



RETURN



Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



WWT WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design

Project Site & Sea Level Rise Projection



Kingston Point Beach



Existing Parking Lot Area



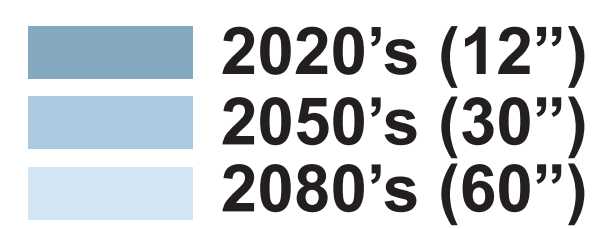
Softball Field



EXISTING AERIAL IMAGE



SEA LEVEL RISE PROJECTION



Kingston Rotary Park



Wetland



Trolley Stop

Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design Site Analysis - Kingston Point

TOPOGRAPHY

Legend

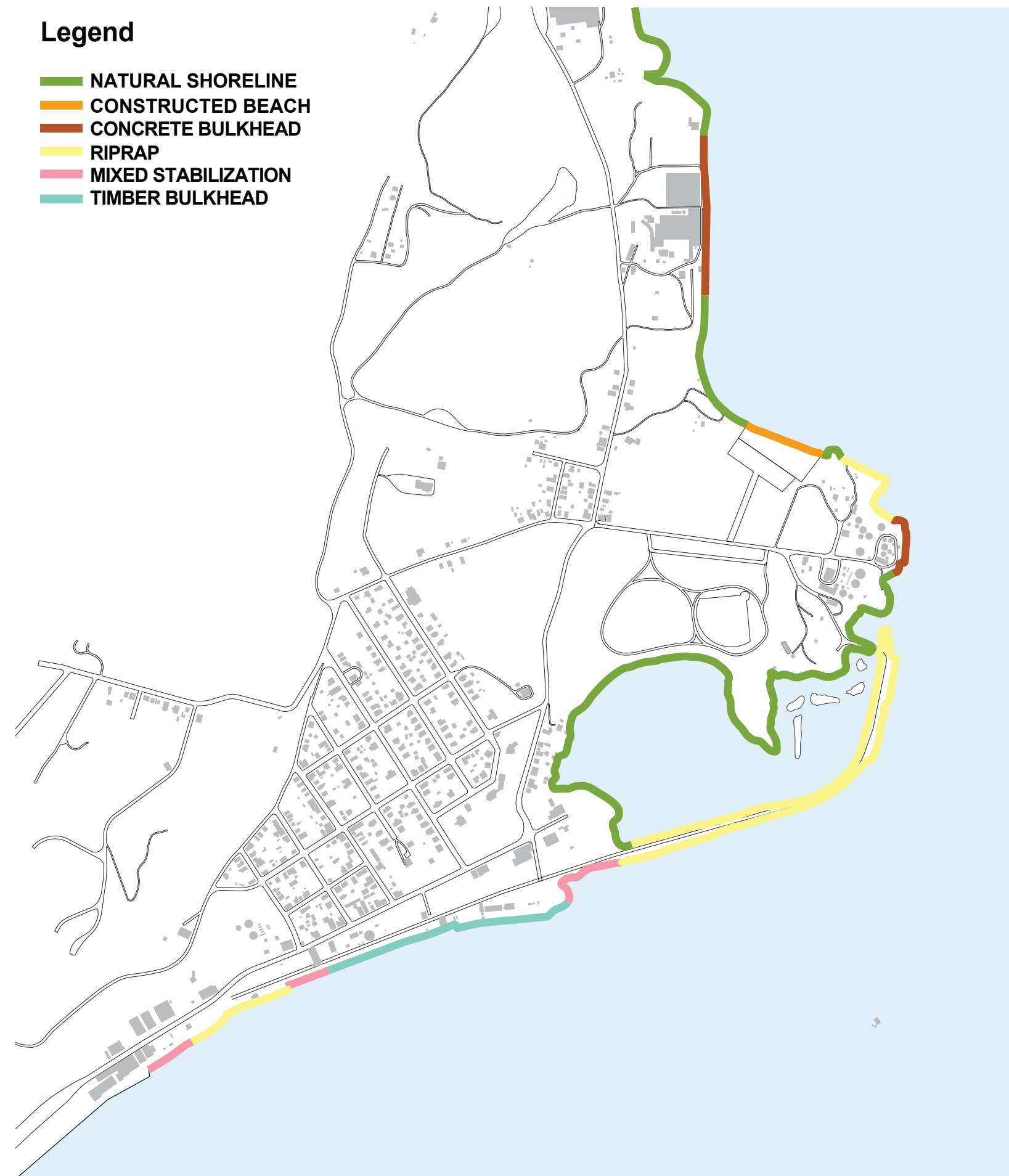
H: High Point
L: Low Point



SHORELINE TYPES

Legend

NATURAL SHORELINE
CONSTRUCTED BEACH
CONCRETE BULKHEAD
RIPRAP
MIXED STABILIZATION
TIMBER BULKHEAD



CIRCULATION/ACCESSIBILITY

Legend

Automobile Road
Path/trail
Trolley Line



SITE PROGRAM

Legend

Art & entertainment
Sports field
Playground
Marina/boat launch
Park
Public service



Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design Site Analysis - Citywide

KINGSTON CITY CIRCULATION/ACCESS ANALYSIS



KINGSTON CITY PROGRAM ANALYSIS



Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



Steven T. Noble
Mayor



A Program of the New York State Department of Environmental Conservation



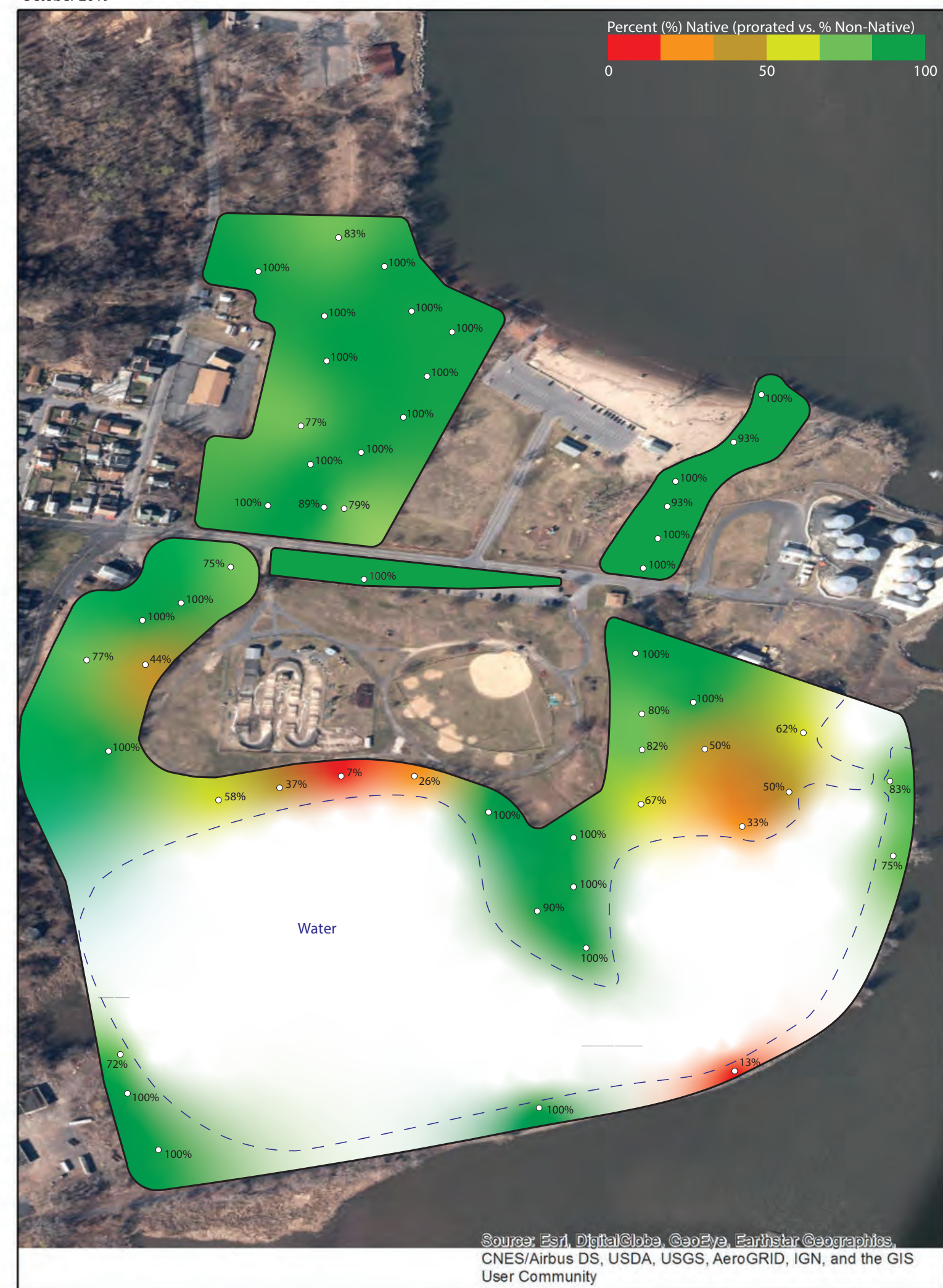
WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design Vegetation Survey: Percent Native Species

VEGETATION TYPE: FOREST & HERBACEOUS WETLAND
October 2019

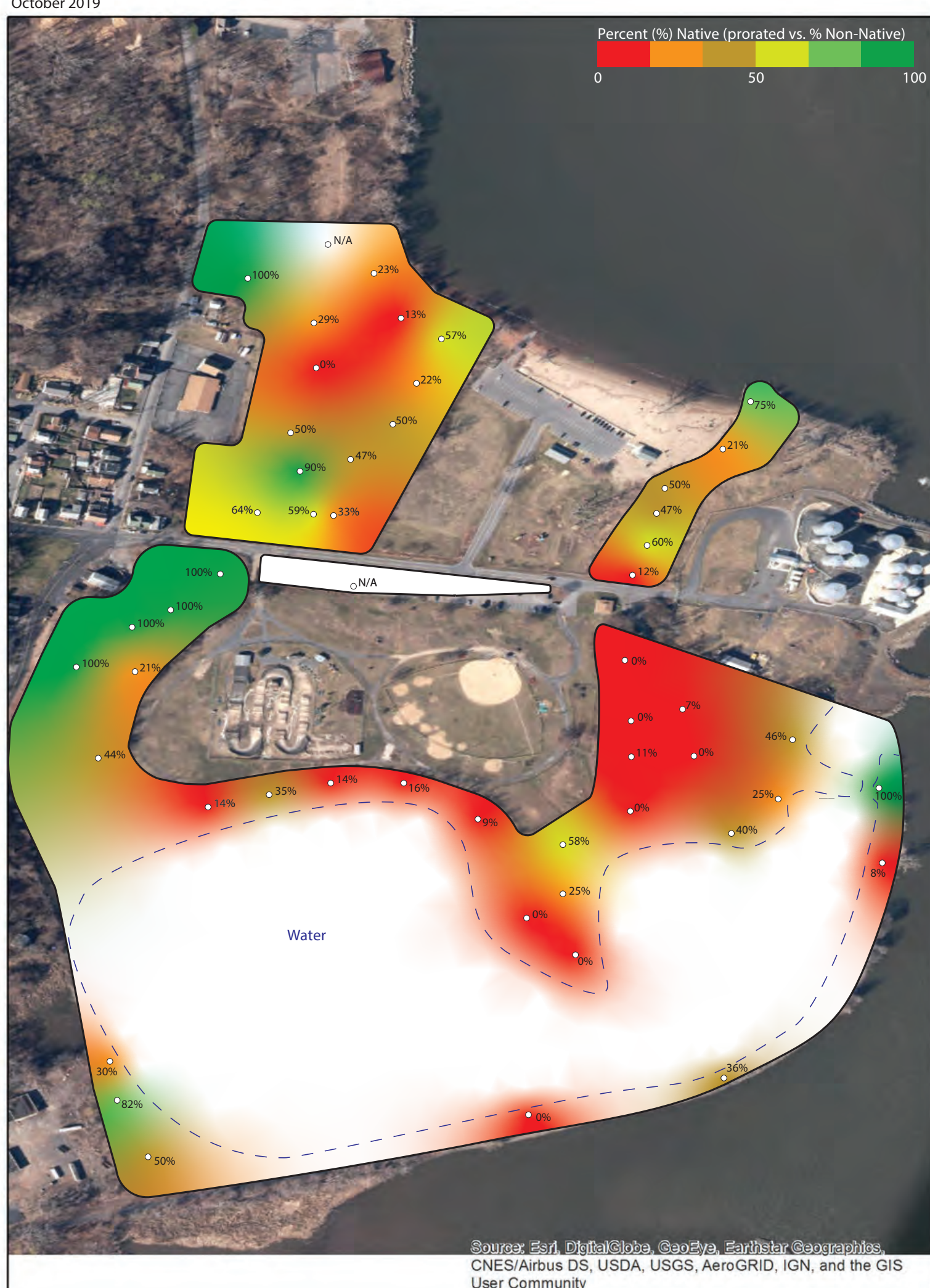


CANOPY
October 2019



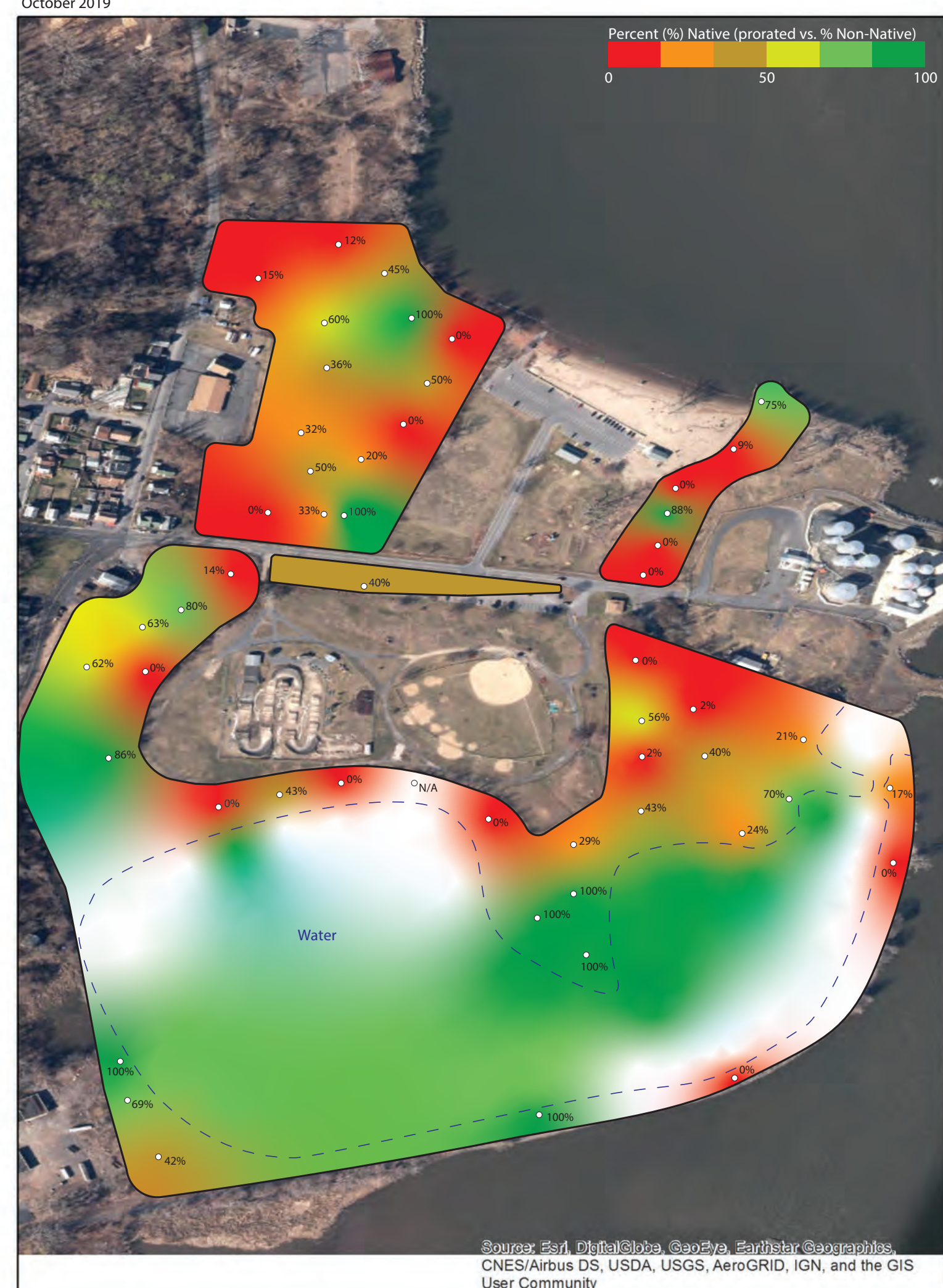
Note: native species were ranked, giving invasive, native species a value ranking of 50% of native, non-invasive species.

SHRUBS & VINES
October 2019



Note: native species were ranked, giving invasive, native species a value ranking of 50% of native, non-invasive species.

GROUNDCOVERS
October 2019



Note: native species were ranked, giving invasive, native species a value ranking of 50% of native, non-invasive species.

Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.





WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design

Vegetation Survey: Representative Species at Kingston Point

NATIVE & NON-INVASIVE SPECIES: PRESERVE

Canopy



Acer negundo
box elder



Acer rubrum
red maple



Fraxinus americana
white ash

Shrubs & Vines



Amorpha fruticosa
false indigo bush



Lindera benzoin
spicebush



Parthenocissus quinquefolia
virginia creeper

Groundcovers



Equisetum hyemale
rough horsetail



Impatiens capensis
orange jewelweed



Pontederia cordata
pickerelweed

NON-NATIVE SPECIES (INVASIVE & NON-INVASIVE): RESTORE

Canopy



Acer platanoides
Norway maple



Ailanthus altissima
tree of heaven



Morus alba
white mulberry

Shrubs & Vines



Celastrus orbiculatus
asian bittersweet



Lonicera japonica
Japanese honeysuckle



Rhamnus cathartica
buckthorn

Groundcovers



Alliaria petiolata
garlic mustard



Artemisia vulgaris
mugwort



Phragmites australis
common reed

NATIVE & INVASIVE SPECIES: MANAGE



Populus deltoides
eastern cottonwood



Robinia pseudoacacia
black locust



Typha latifolia
common cattail

Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.



WW WEAVING THE WATERFRONT KINGSTON

Kingston Point Climate Adaptive Design Preliminary Framework



Funding for these projects has been provided by the New York State Department of State and the New York State Office of Parks, Recreation, and Historic Preservation under Title 11 and 9 of the Environmental Protection Fund, and by the New York State Department of Environmental Conservation, in cooperation with the New England Interstate Water Pollution Control Commission and Hudson River Estuary Program.

