

RESTORATION PROGRESS 2016

Leveraged successes and
implementation challenges

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Wetlands

Target statement: Create and restore coastal and freshwater wetlands, at a rate exceeding the annual loss or degradation, to produce a net gain in acreage.

2020 goal: *create a total of 1,000 acres of freshwater and coastal wetland*

2050 goal: *continue creating an average of 125 acres per year for a total system gain of 5,000 acres*





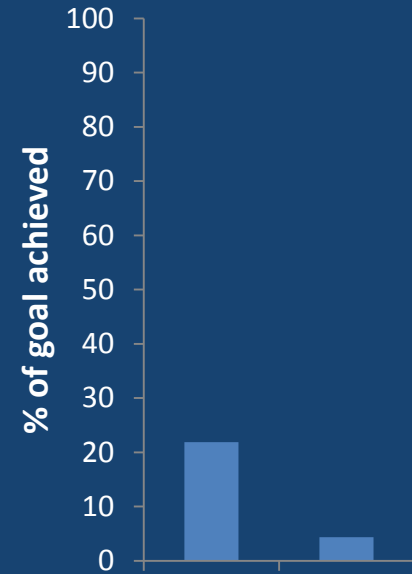
Wetlands



**Woodbridge Waterfront Park
(Woodbridge, NJ)**



Teaneck Creek (Teaneck, NJ)





Shorelines and Shallows

Target Statement: create or restore shoreline and shallow sites with a vegetated riparian zone, an intertidal zone with a stable slope, and illuminated shallow water.

2020 goal: *develop new shorelines sites in two HRE regions*

2050 goal: *restore available shoreline habitat in three HRE regions.*





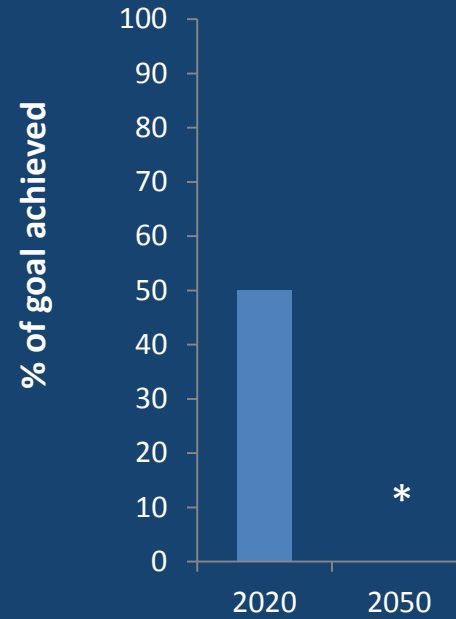
Shorelines & shallows



Brooklyn Bridge Park – Pier 4 Beach



Research





Oyster reefs

Target statement: Establish sustainable oyster reefs at several locations.

2020 goal: 20 acres of reef habitat across several sites

2050 Objective: 2,000 acres of established oyster reef habitat





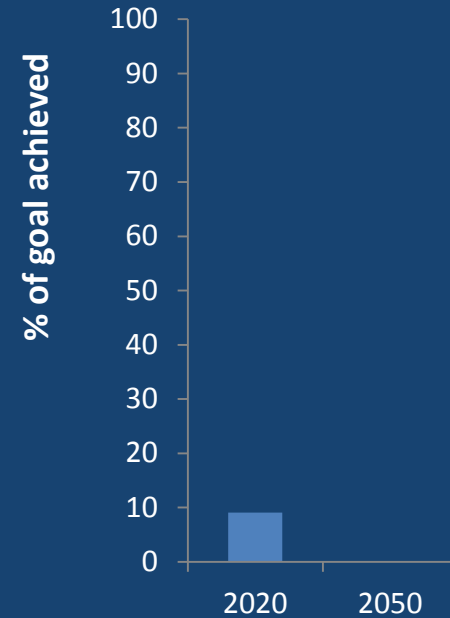
Oyster reefs



Naval Base Earle



Tappan Zee oyster mitigation research





Tributary connections

Target statement: reconnect and restore freshwater streams to the estuary to provide a range of quality habitats to aquatic organisms

2020 Objective: restore connectivity or habitat within one tributary reach per year

2050 Objective: continue rate of restoring and reconnecting areas

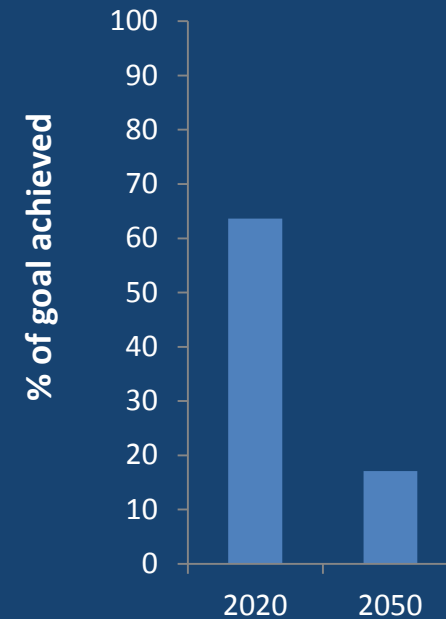




Tributary connections



182 St. dam fish passage





Coastal and Maritime Forests

Target statement: Create a linkage of forests accessible to avian migrants and dependent plant communities.

2020 Objective: Establish one new maritime forest of at least 50 acres and restore at least 200 acres among several coastal forest/upland habitat types

2050 Objective: 500 acres of maritime forest community among at least three sites and 500 acres of restored coastal forest/upland habitat





Coastal and Maritime Forests



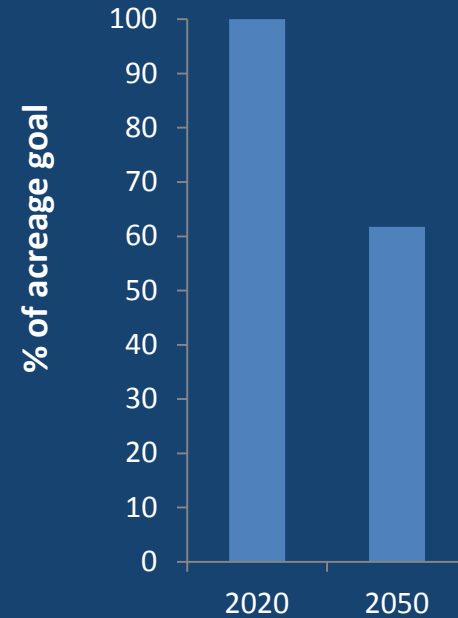
Alley Pond Park (NY)



Monmouth Beach (NJ)



Pelham Bay Park (NY)





Eelgrass beds

Target statement: Establish eelgrass beds at several locations in the HRE study area

2020 Objective: Create one bed in at least three HRE regions

2050 Objective: Three established beds in each suitable HRE region

Progress: multiple test beds, no sustained beds





Acquisition

Target statement: protect ecologically valuable coastal lands throughout the Hudson-Raritan Estuary from future development through land acquisition

2020 Objective: *acquire 1400 acres of habitat for protection*

2050 Objective: *continue to restore at a rate of 200 acres per year or 7,400 acres total*





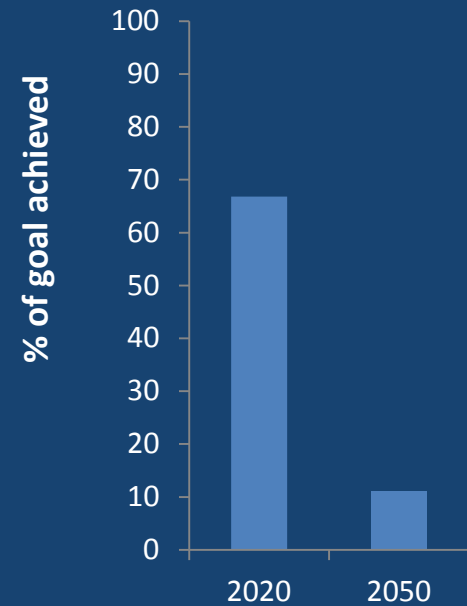
Acquisition



Swimming River Park (Middletown, NJ)



New York and New Jersey state flood-prone acquisitions



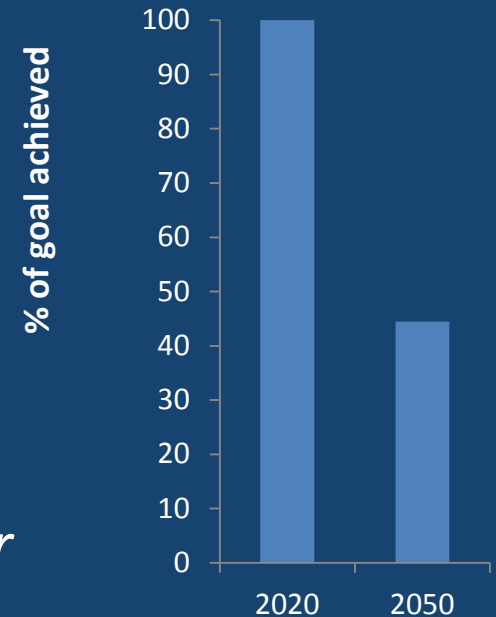


Habitat for Waterbirds

Target statement: restore and protect roosting, nesting, and foraging habitat (i.e. inland trees, wetlands, shallow shorelines) for long-legged wading birds.

2020 Objective: *enhance at least one island without an existing waterbird population in HRE regions containing islands and create or enhance at least one foraging habitat*

2050 Objective: *all suitable islands provide roosting and nesting sites and have nearby foraging habitat*





Public Access

Target statement: Improve direct access to the water and create linkages to other recreational areas, as well as provide increased opportunities for fishing, boating, swimming, hunting, hiking, education, or passive recreation.

2020 Objective: *create one access and upgrade one existing access per year*

2050 Objective: *all waters of the HRE are accessible*





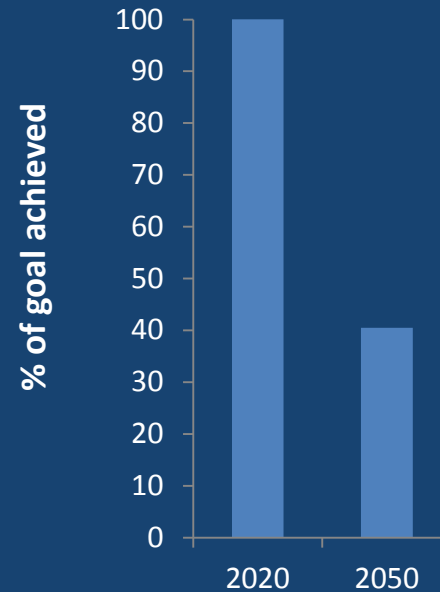
Public Access



Bush terminal piers park



New Stapleton Waterfront



Secaucus walkway (Secaucus, NJ)

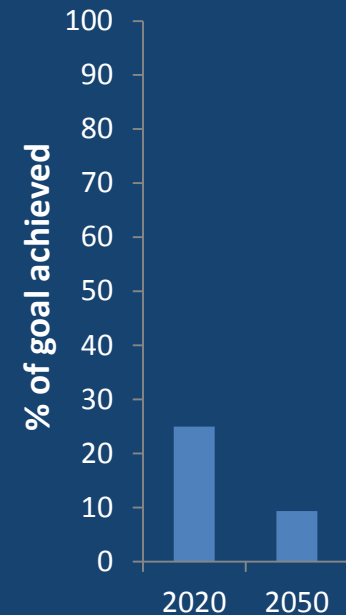


Habitat for Fish, Crabs, and Lobsters

Target statement: create functionally related habitats in each of the eight regions of the Hudson River Estuary.

2020 Objective: create one complex of at least two functionally-related habitats in each region.

2050 Objective: each region should have four habitat complexes of at least two related habitats.





Sediment contamination

Target statement: isolate or remove one or more sediment zone(s) that is contaminated until such time as all HRE sediments are considered uncontaminated based on related water quality standards, fishing/shell-fishing bans, or consumption advisories, and any newly-promulgated sediment quality standards, criteria, or protocols

2020 Objective: *isolate or remove at least 25 acres of contaminated sediment*

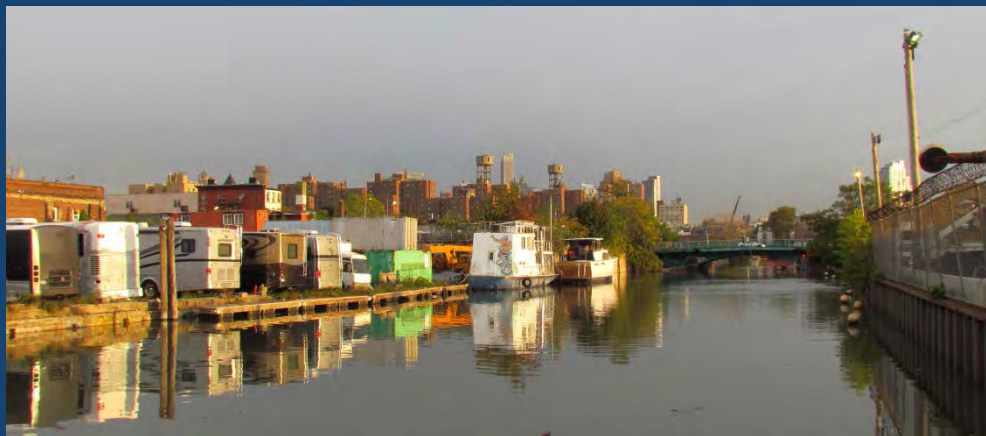
2050 Objective: *isolate or remove at least 25 acres of contaminated sediment every two years*



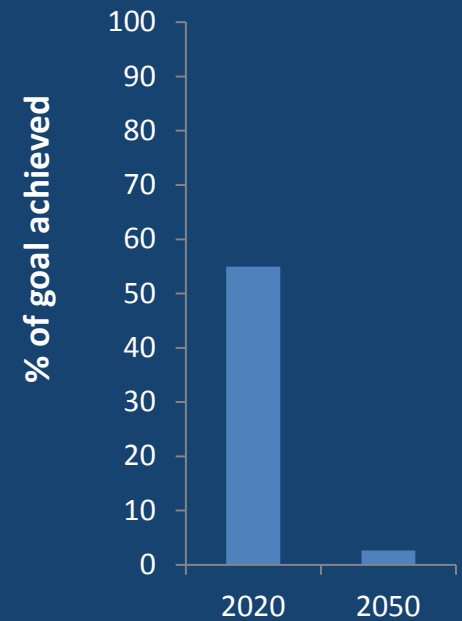
Sediment contamination



Horseshoe Road and Atlantic Resources (Sayreville, NJ)



Gowanus Canal (Brooklyn, NY)



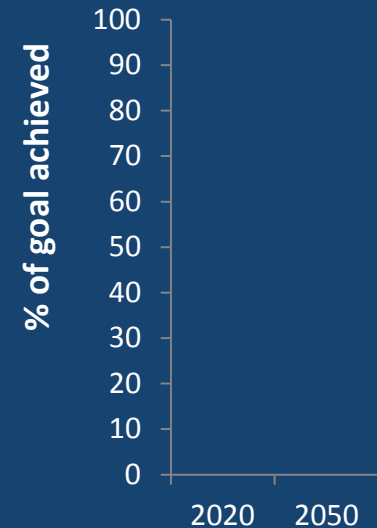


Enclosed and confined waters

Target statement: improve water quality in all enclosed waterways and tidal creeks within the estuary to match or surpass the quality of their receiving waters

2020 Objective: *improve the water quality or environmental conditions of eight confined water bodies to meet their current designated use classification*

2050 Objective: *improve the water quality or environmental conditions of eight confined water bodies to meet the criteria of receiving waters*



Paerdegat Basin (Brooklyn, NY)

Mapping progress and opportunities

the WATERS we SHARE HUDSON-RARITAN ESTUARY COMPREHENSIVE RESTORATION PLAN

Large modal

Opportunity

SPRING CREEK N&S

CRP ID: 104

MUNICIPALITY: NYC

COUNTY: Kings, Queens

STATE: NY

LAT, LON: 40.8572, -73.8614

ACREAGE: 151.6

DESCRIPTION: Spring Creek North is bounded by Stanley Ave., Belt Parkway, Crescent St., and 77th St. in Northern Jamaica Bay along the Queens-Brooklyn border. Spring Creek South is bounded by Flatlands Avenue, Flatlands Parkway, and Flatlands Avenue in Southern Jamaica Bay. (Size: North: 29 acres (Continuing Authorities Program [CAP]), South: (301 acres) 151.6 acres (Feasibility Study))

WATERSHED: Jamaica Bay

SUB-WATERSHED: Spring Creek

PLANNING REGION: JAMAICA BAY STUDY AREA

LAND OWNER(S): North of Belt Parkway: NYCDPR. South of Belt Parkway: NPS, GNRA.

TYPE OF LAND OWNER(S): Corporation/Organization Government

SITE SUMMARY: Headwaters of Spring Creek flow between the recently remediated and restored Pennsylvania Avenue and Fountain Avenue landfills. Spring Creek is a mostly tidal creek that flows between the recently remediated and restored Pennsylvania Avenue and Fountain Avenue landfills. Spring Creek is a mostly tidal creek that flows between the recently remediated and restored Pennsylvania Avenue and Fountain Avenue landfills. Spring Creek is a mostly tidal creek that flows between the recently remediated and restored Pennsylvania Avenue and Fountain Avenue landfills.

FLORA: The predominant cover types in the southern portion of Spring Creek North consist of low and high marsh dominated by *Spartina*. The uplands consist of disturbed upland areas dominated by *Urtica* and *Urtica*. Spring Creek South contains marsh, dune, grassland, and secondary woodlands that are dominated by invasives (e.g., common reed).

LAND USE: Active and passive recreation. Site is zoned vacant with federal lands. The surrounding land is zoned vacant, 1 & 2 and multi-family residential, commercial, and industrial.

SUMMARY OF RESTORATION OPPORTUNITIES ON SITE: Pre-Design Monitoring

TARGET ECOSYSTEM CHARACTERISTICS

Legend

- Restoration Opportunities & Initiatives
- Opportunity: Top Green
- Opportunity: Middle Green
- Opportunity: Bottom Green
- Opportunity: High Marsh
- Opportunity: Low Marsh
- Opportunity: Dune
- Opportunity: Wetland
- Opportunity: Forest
- Opportunity: Park, Open Land
- Opportunity: Wetland
- Opportunity: Forest
- Opportunity: Wetland
- Opportunity: Forest

OPPORTUNITIES 3 COMPLETED 3

Spring Creek N&S

- Spring Creek N&S
- Spuytten Duyvil
- St. Agnes
- St. Edward's Campground
- Steiners Marsh
- Stony Creek Marsh
- Stuyvesant Cove
- Submerged Rock Berm
- Sunset Park
- Teaneck Creek