

# Hammond Cove Shoreline Restoration Plan

Located south of Harding Ave between Pennyfield Ave and Longstreet Ave, at the confluence of the East River and the Long Island Sound, in the Borough of the Bronx

Community Meeting September 16, 2025

# **Agenda and Meeting Goals:**

- Introductions who we are and what we do
- Scope, goals, and timeline
- Review of existing conditions at Hammond Cove
- Proposal for ecological restoration work
- Discussion
- Next steps



### NYC's Land Cover: 41% of NYC Is Green

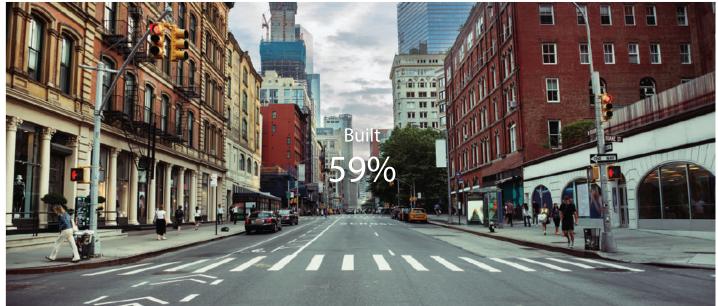
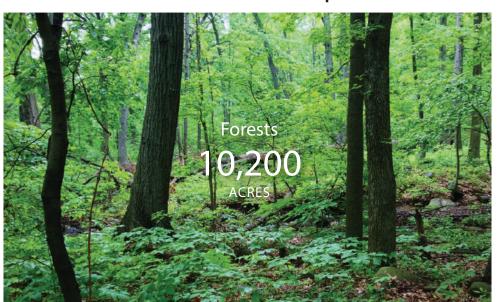


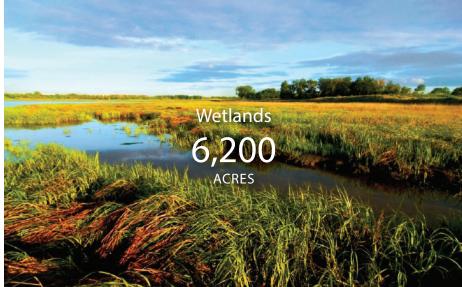




FIGURE 2

### NYC's Natural Areas Make Up 12% of the City





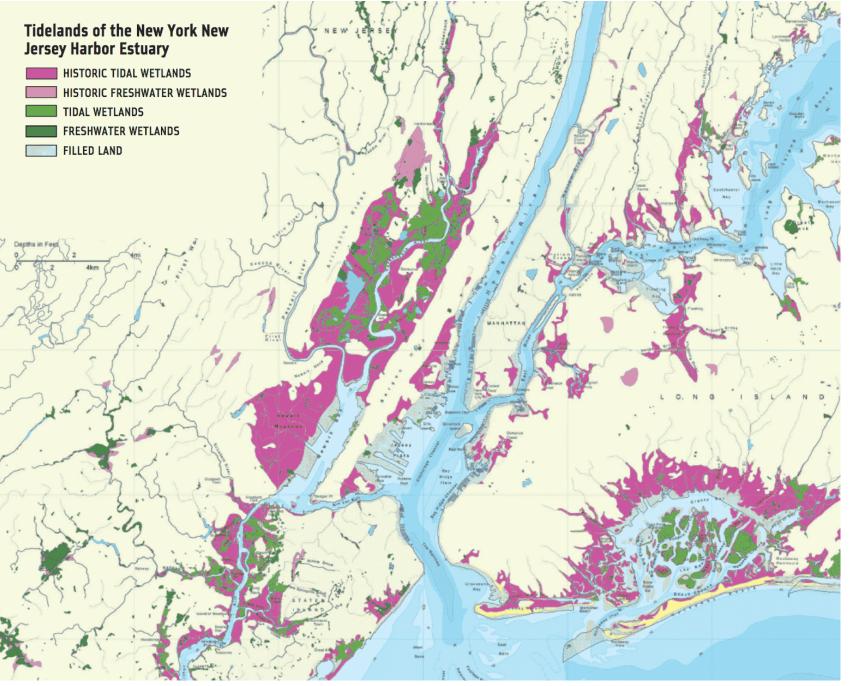




Half of NYC's Wetlands and Streams Are in NYC Parks

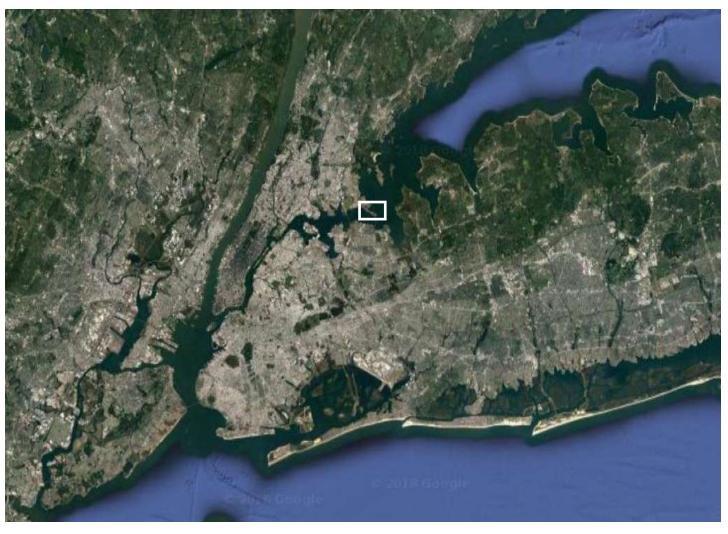












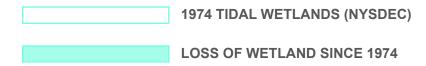


**5 miles** NYC PARKS PROPERTY



### Why Hammond Cove?

Hammond Cove was identified as a priority restoration opportunity in an ecologically important area.



Since 1974, low marsh has receded landward an average of more than 30 feet, and has become fragmented. The marsh edge is a steep bank that has been undercut in places.

The project area is located within a designated Special Natural Waterfront Area (SNWA). SNWA's are large swaths of complex habitats and natural resources along New York City's waterfront. This cove is one of the few remnants of original salt marsh along the otherwise armored and developed shoreline of the south-east Bronx.



2016 AERIAL









NYC PARKS PROPERTY 0'





NYC PARKS PROPERTY 0' 200'





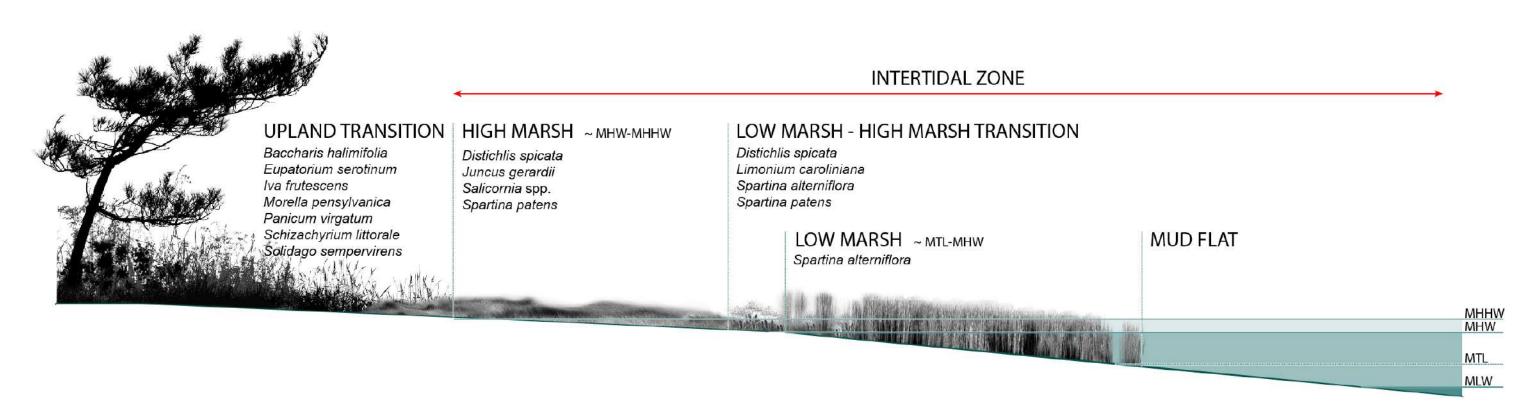




0' 200' 400'

#### **Wetland Habitat**

### Typical profile of salt marsh plant communities









































## What is a living shoreline?

A protected and stabilized shoreline that is made of natural materials such as plants, sand, or rock.

# Coastal Structures VEGETATION EDGING SILL BREAKWATER REVETMENT BULKHEAD Provides a buffer Added structure Parallel to (Vegetation Lays over the Vertical wall

Suitable for low wave energy environments.

to upland areas

waves.

and breaks small

Added structure holds the toe of slope in place.

Suitable for most areas except high wave energy environments. Parallel to vegetated shoreline, reduces wave energy, and prevents erosion.

Suitable for most areas except high wave energy environments. (Vegetation optional)
Offshore structures intended to break waves, reducing the force of wave action, and encouraging sediment accretion.

Suitable for most areas.

Lays over the slope of the shoreline and protects it from erosion and waves.

Suitable for sites with existing hardened shoreline structures.

Vertical wall parallel to the shoreline intended to hold soil in place.

Suitable for high energy setings and sites with existing hard shoreline structures.

source: NOAA





### LIVING SHORELINES SUPPORT RESILIENT COMMUNITIES

Living shorelines use plants or other natural elements—sometimes in combination with harder shoreline structures—to stabilize estuarine coasts, bays, and tributaries.



marsh stores the tidal waters. carbon equivalent of 76,000 gal of gas annually.



Marshes trap sediments from allowing them to fisheries habitat, grow in elevation as sea biodiversity, level rises.



Living shorelines improve water quality, provide increase and promote recreation.



Marshes and oyster reefs act as natural barriers to waves. 15 ft of marsh can absorb 50% of incoming wave energy.



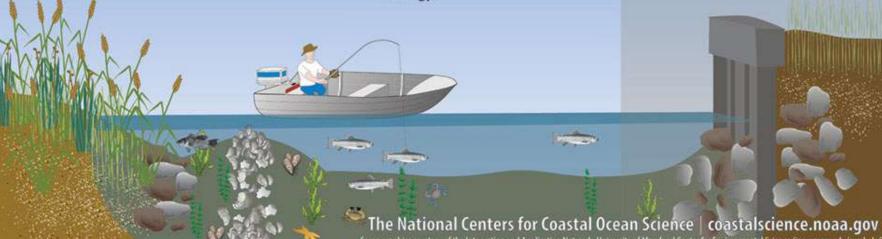
Living shorelines are more resilient against storms than bulkheads.



33% of shorelines in the U.S. will be hardened by 2100, decreasing fisheries habitat and biodiversity.



Hard shoreline structures like bulkheads prevent natural marsh migration and may create seaward erosion.



source: NOAA

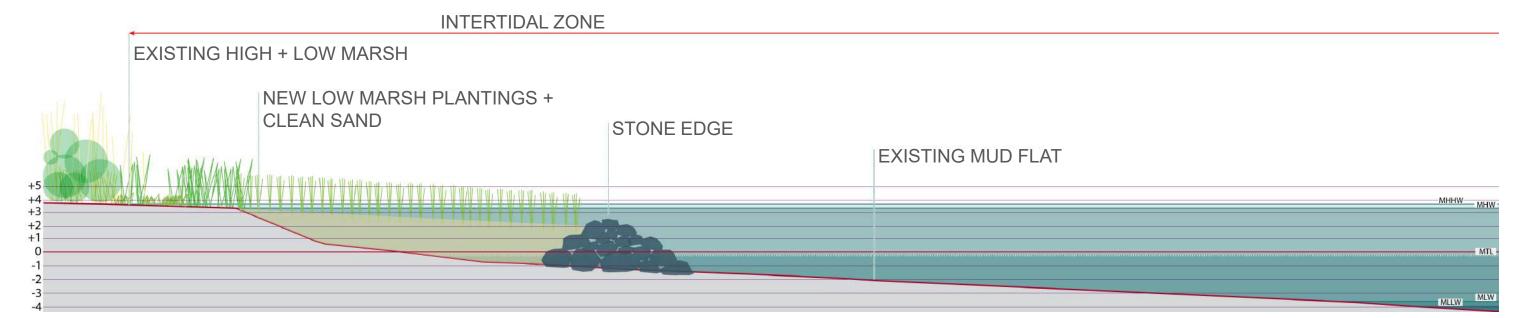






**EXISTING MARSH CONDITION** 

PLANTING WITH STONE EDGE Source: Southern Environmental Law Center





INSTALLATION OF CLEAN SAND, PLANTINGS, AND STONE EDGE TO STABILIZE ERODING SHORELINE

5' 10

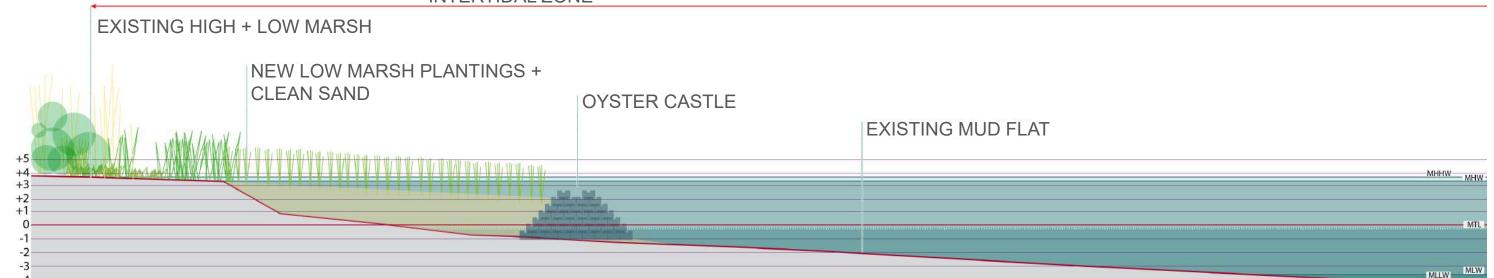






PLANTING WITH OYSTER CASTLES Source: National Science Foundation / Bo Lusk, TNC





INSTALLATION OF CLEAN SAND, PLANTINGS, AND OYSTER CASTLES TO STABILIZE ERODING SHORELINE



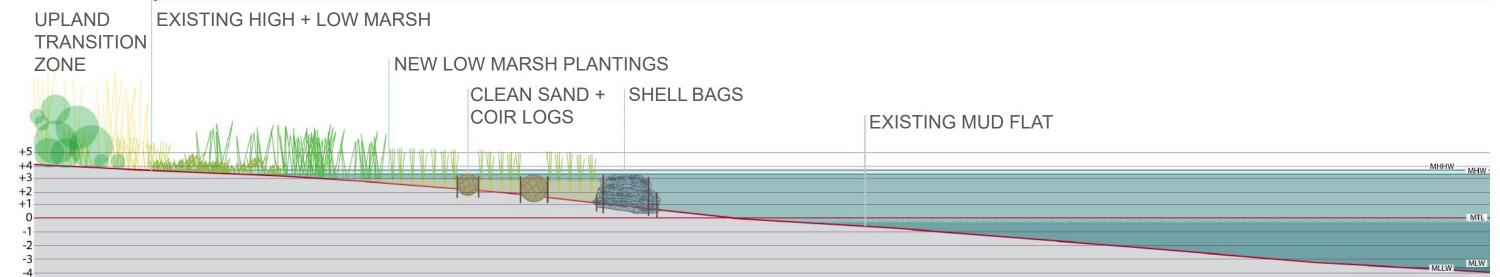






COIR LOG AND SHELL BAGS Source: DelawareLivingShorelines.org





INSTALLATION OF CLEAN SAND, PLANTINGS, COIR LOGS AND SHELL BAGS TO STABILIZE ERODING SHORELINE









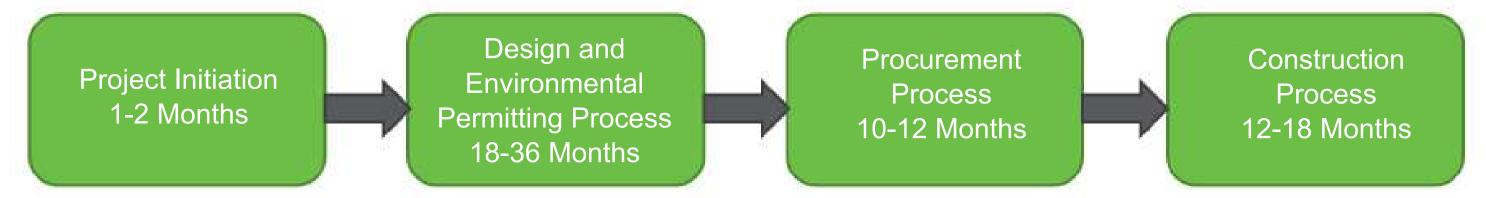
June 2010 June 2011 May 2010

# **Installation of coir logs to stabilize eroding shoreline** photo credit: Partnership for the Delaware Estuary



# Natural Areas Restoration Project Timeline

The timeline for a typical capital project is between 30-45 months. For projects requiring environmental permits, an additional 12-18 months may be added to the timeline.



- Fully funded
- Designer assigned
- Community Input meeting

- Conceptual design
- Schematic design
- Contract documents
- Approvals, reviews
- Preparation and reviews of environmental permits

- Legal reviews
- Bid reviews and determination
- Comptroller approval

- Pre-construction and on-site meeting
- Construction work date set
- Subcontractor approvals
- Change orders and overruns
- Inspections
- Planting windows and contractor warranties



# Volunteer with NYC PARKS STEWARDSHIP

Join NYC Parks Stewardship to explore and restore New York City's Natural Resources. Volunteers help to conserve and protect forests, wetlands and local street trees!

### **Contact Us:**

www.nycgovparks.org/reg/stewardship

Stewardship@parks.nyc.gov



Installation of coir logs to stabilize eroding shoreline photo credit: Mike Shanahan, CoastalResilience.org



Community based oyster restoration project, North Carolina photo credit: NOAA



# Thank you!

Any questions or additional thoughts, please reach out to:

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