



**NYC Parks**

# **Practitioners' Experience NYC Parks**

November 17, 2025

NY/NJ Regional Dredge Team Meeting

# Almost Half of NYC is Green

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



Source: Natural Areas Conservancy Ecological Covertype Map, 2014.

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



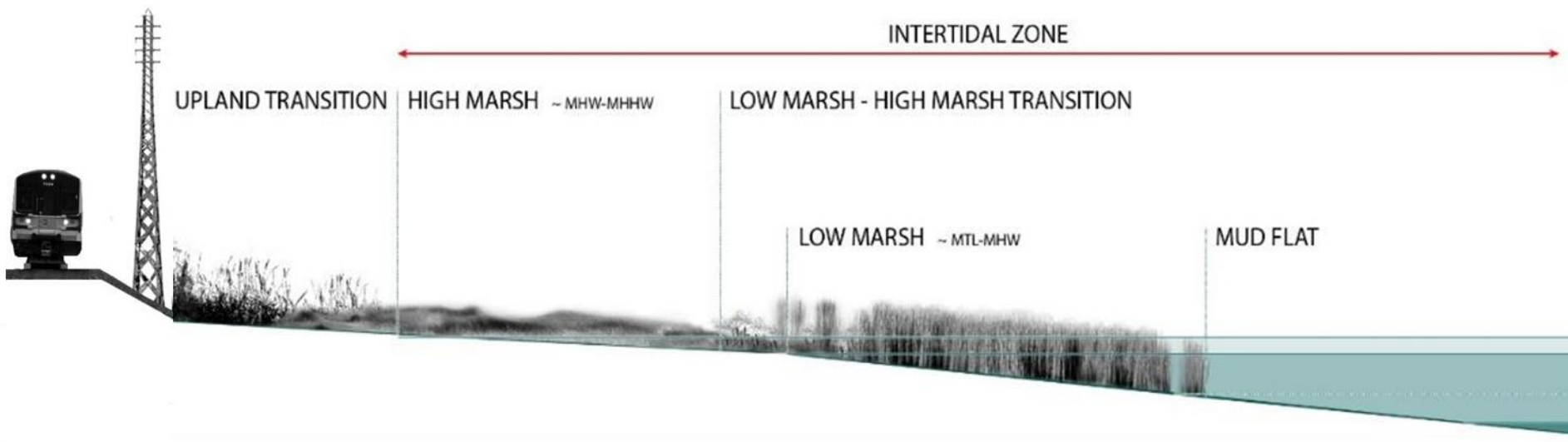
Source: Natural Areas Conservancy Ecological Covertype Map, 2014.

## Threats to NYC salt marsh

Citywide our marshes are vulnerable to shoreline and interior erosion due to sea-level rise, storm surge, sediment starvation, and high nutrient loads.

We want to address some of these threats through restoration including sediment placement and marsh edge restoration..

We have used sediment placement and marsh edge restoration in two sites in Queens in 2023 and one site in Brooklyn in 2025. We have plans to do more sites in the future.



# Goals and Approach

## Goals

- Raise marsh surface elevation and restore eroded marsh edge
- Enhance habitat for plants and breeding birds

## Approach

- Place sand onto marsh surface, eroded marsh edge, or after fill or debris removal
- Place sand with pump or machine
- Clean soil bank

## Challenges with using dredge materials

- Timing and location of restoration projects
- Storage and double handing of material
- Contractual mechanisms

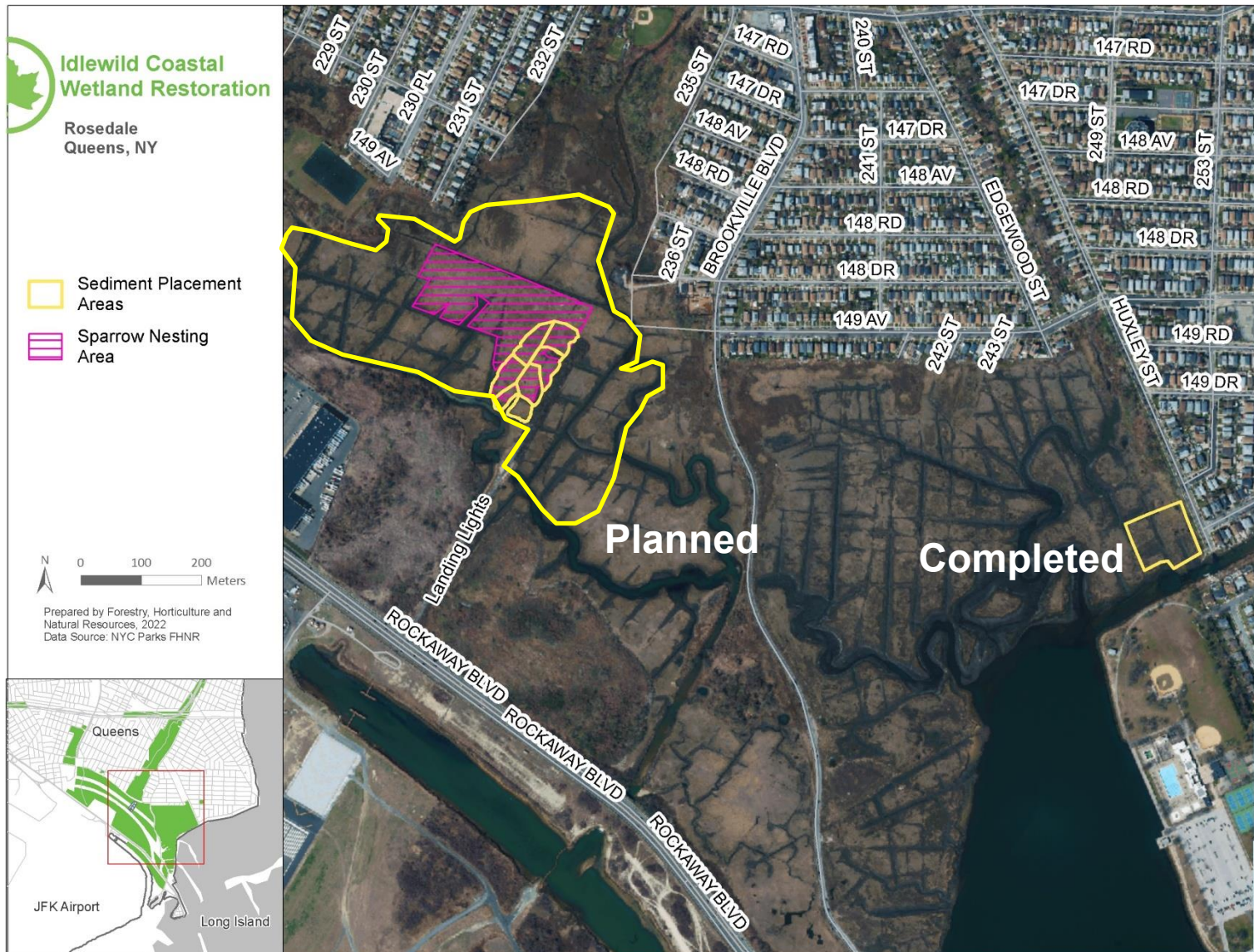


Salt marsh sparrow populations declining  
Photo source: National Audubon Society



Self-priming pump  
Photo source: Eddy Pump

# Thin Layer Sediment Placement in Hook Creek Park



# Construction



# Site photos



Before Restoration - December 2022



During Restoration - March 2023



After Restoration - October 2024

# Marsh Edge Restoration in Alley Creek

Phase I: Oyster castle installation in spring 2021

- Goal: Reinforced shoreline edge
- Approach: Installed four arrays of oyster castles made of eco-concrete

Phase II: Placed sand spring 2023, planted in summer 2023

- Goal: Restore eroded marsh
- Approach: Sand placement and planting in eroded area



Oyster castle installation with staff and volunteers – March 2021



Sand placement on mudflat using front loader – May 2023



March 2023



May 2023



Sept 2025




NYC Parks

## Four Sparrow Restoration

Brooklyn

 DDC Mitigation 2024

 NYC Parks Restoration 2025

Prepared by NYC Parks E&P  
Data Source: NYC Parks  
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Area A in April 2023 – before sand placement



Area A in April 2023 – before sand placement



Area A in June 2025 – after sand placement and planting



Area A in June 2025 – after sand placement and planting



Area B in April 2023 – before sand placement



Area B in April 2023 – before sand placement



Area B in June 2025 – after sand placement and planting



Area B in June 2025 – after sand placement and planting



# Spring Creek North Ecosystem Restoration Project

Brooklyn and Queens, NY

## Legend

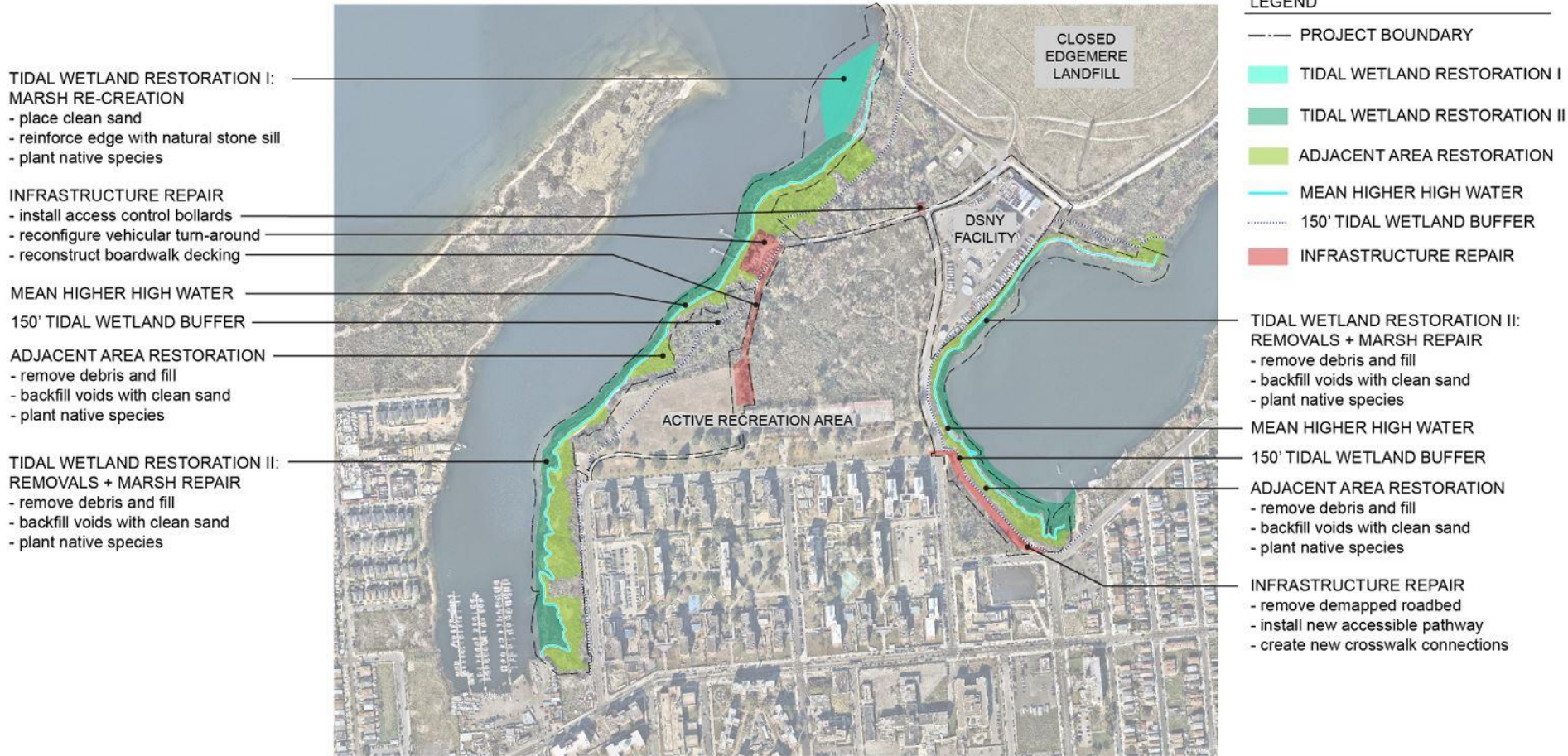
-  Parks Property
-  Upland Habitat Restoration
-  Upland Placement
-  Upland to Wetland Conversion
-  Thin Layer Placement



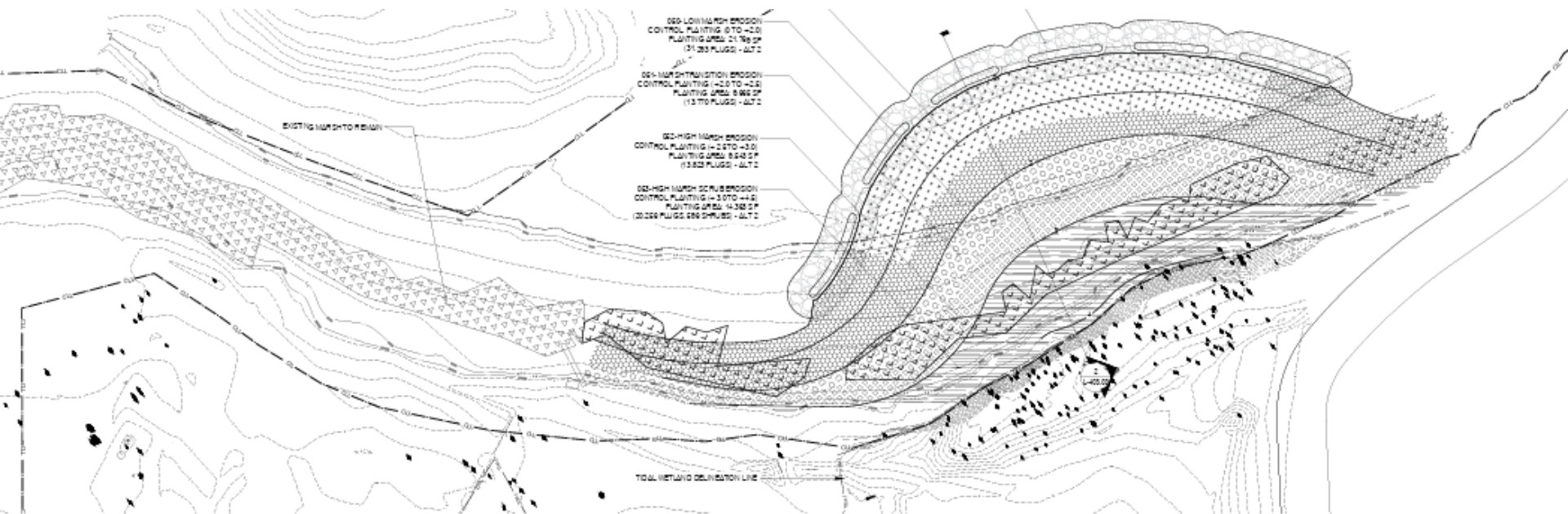
January 2025  
Data Sources: NYC Parks, Princeton Hydro  
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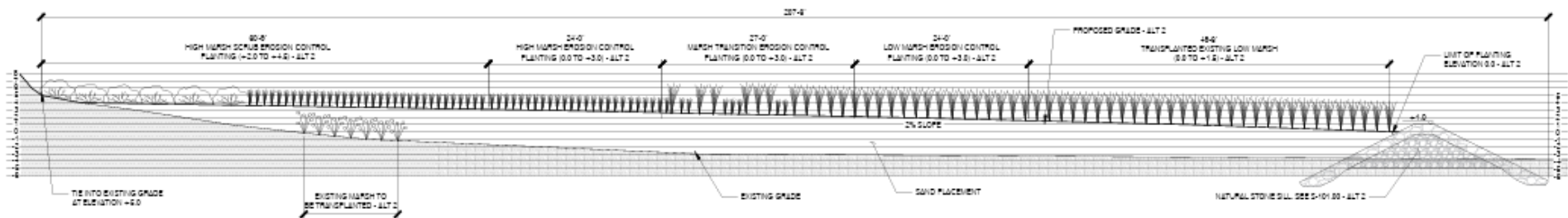
# Rockaway Community Park



# Rockaway Community Park



MARSH RESTORATION PLANTING AT COMMERVILLE BASIN - ALT 2  
SCALE: 1"=30'-4"



**Thank you!**



**Christopher Haight**

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