



**Jamaica Bay -
Rockaway Parks
Conservancy**

**GANBASE | NbS Workshop
Coastal Nature-based Solutions**

June 20, 2025

Elizabeth Stoehr, Deputy Director





A public-private partnership dedicated to improving the 10,000+ acres of public parklands throughout Jamaica Bay and Rockaway Peninsula in Queens and Brooklyn, NYC



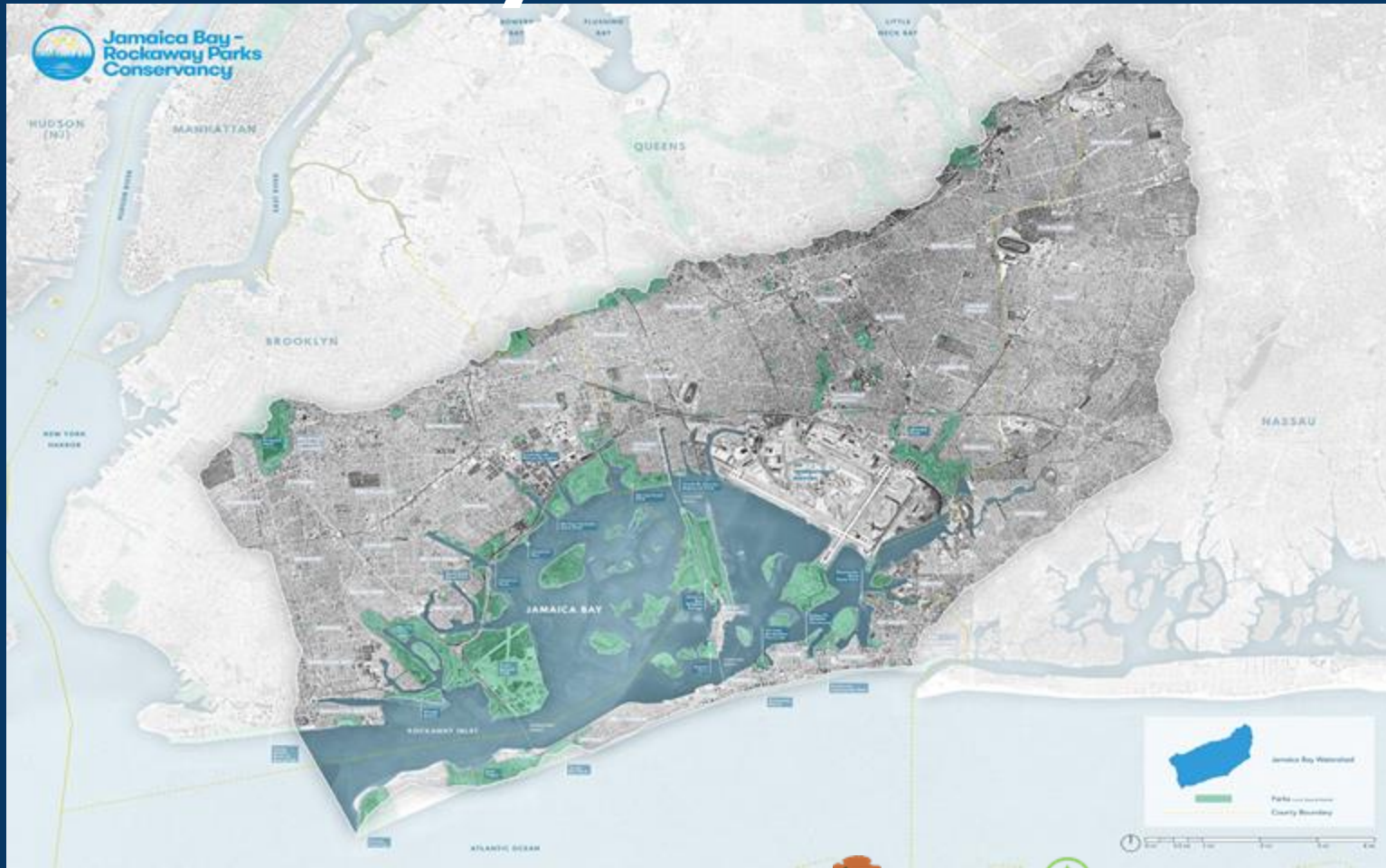




Jamaica Bay - Rockaway Parks Conservancy



The Jamaica Bay Watershed



Jamaica Bay -
Rockaway Parks
Conservancy



Parks, Recreation
and Historic
Preservation



NYC Parks



Credit: Don Riepe, American Littoral Society







Jamaica Bay: frontline for nature-based solutions



Credit: Erlend Bjørtvedt



Plan, Fail, Adapt, Repeat: Adaptive Innovation in Urban Shoreline Restorations



11/4/2012

Nov. 2012



May 2020



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JFK INTERNATIONAL AIRPORT

BIG JOHN'S POND

JAMAICA BAY WILDLIFE REFUGE

HISTORIC OUTFALL

WEST POND

LOW MARSH
HIGH MARSH

BLACK BANK
Sediment Marsh



MONARCH BUTTERFLY
Danais plexippus



SPARTINA ALTERNIFLORA
Smooth cordgrass



ATLANTIC HORSESHOE CRAB
Limulus polyphemus



RED KNOT
Calidris canutus



DIAMONDBACK TERRAPIN
Malaclemys terrapin

JAMAICA BAY



The Problem with “Success”



Photo: DEP

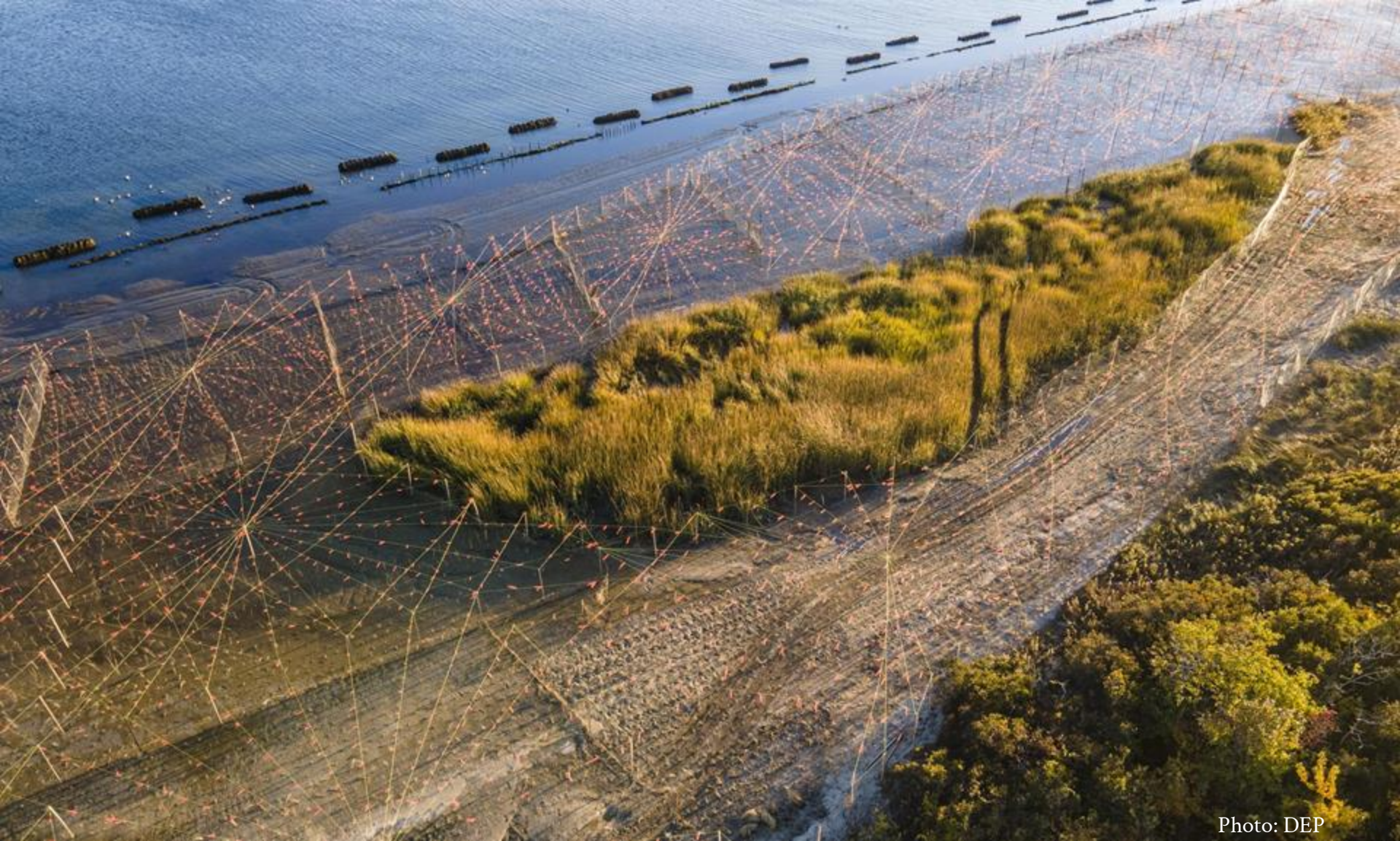


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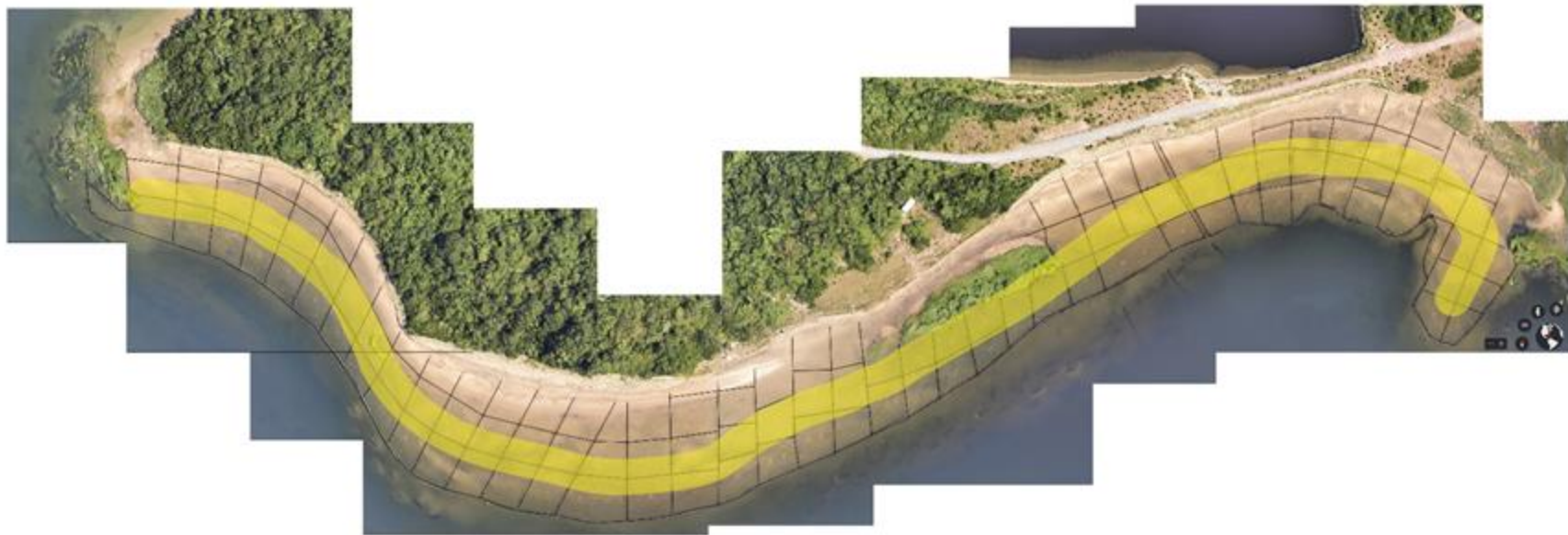


Forces of Nature – First Failures



Carefully constructed
Rapidly tested

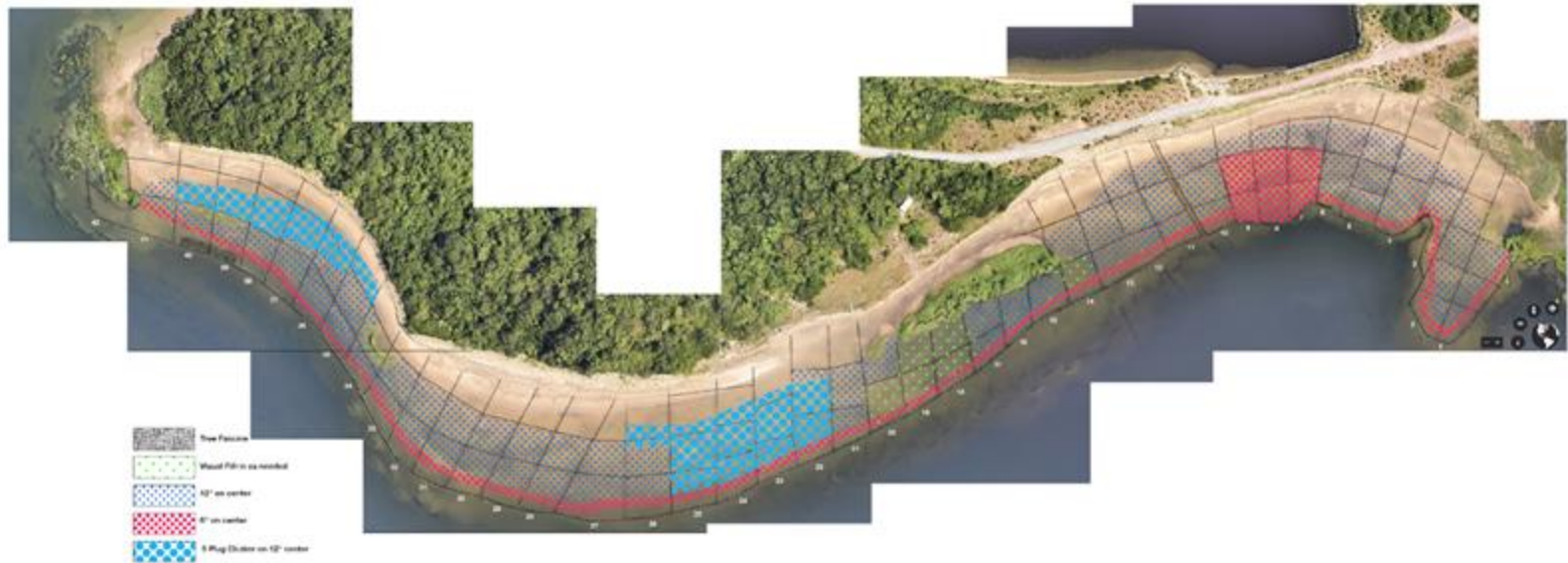




West Pond Living Shoreline Replanting Plan - May 2023



Planting Plan: Adaptive Management in Action



West Pond Living Shoreline Replanting Plan – June 2023



Pilots: Failure is Feedback



**Elevation Zone
Replanting**



Cluster Planting



**Burlap Sediment
Stabilization**

Pilot. Assess. Adapt. Repeat







Jamaica Bay Wetlands Fellowship



Rapid Survey: Real-Time Monitoring and Decisions

Field Inspection

- Observe and document current site-specific conditions
- Compare conditions to as-built drawings

Visual Vegetation Inspection

- Observe for vegetation stem height and coverage
- Assess performance of general vegetative growth

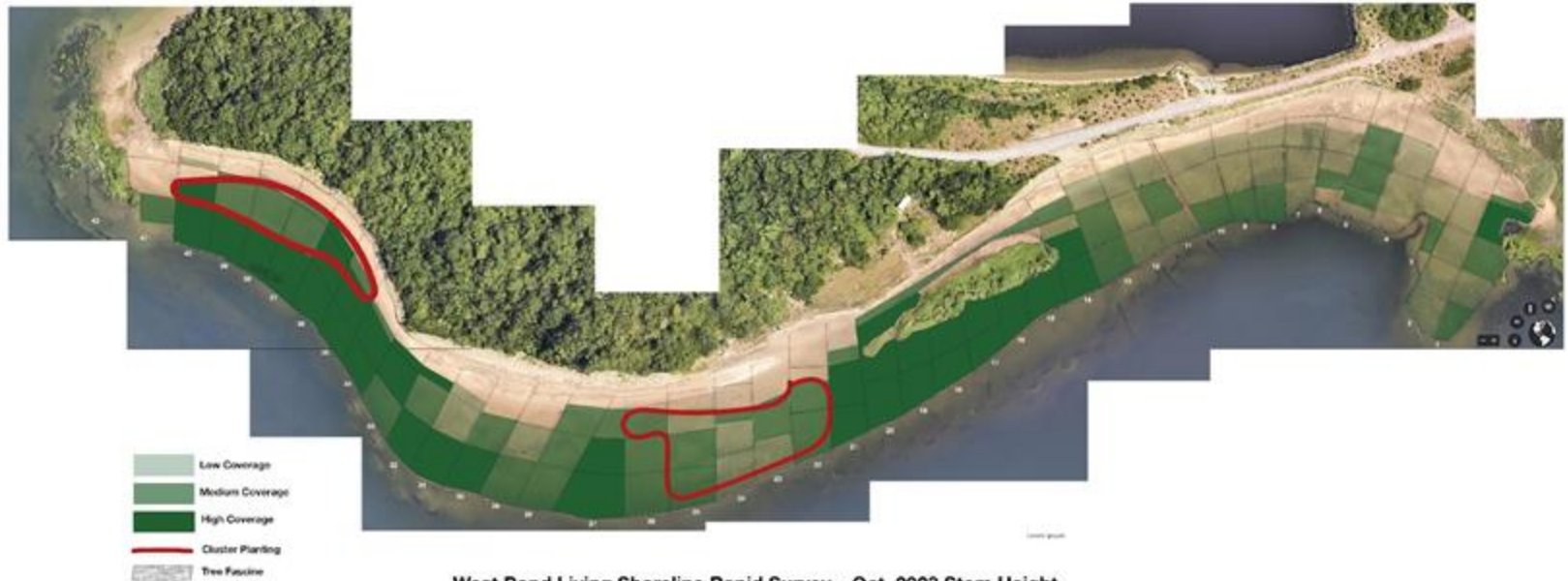
Visual Topography Inspection

- Observe for unusual and impactful site conditions
- Observe for alterations to natural, restored, and artificial physical features

Aerial Photography

- Accurate, high-resolution aerial images
- Analyze large-scale patterns and trends

Rapid Survey in Action



West Pond Living Shoreline Rapid Survey – Oct. 2023 Stem Height



What We're Learning

- Failure is feedback
- Monitor to act
- Plan for maintenance and adaptive management
- Permitting should allow adaptation





Adapting in Real Time is Innovation

November 2021

August 2024



Thank you!

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