

# Habitat Restoration and Green Infrastructure Planning for Staten Island's North Shore

Community Board 1  
March 1, 2018

NYC Parks Forestry, Horticulture, and  
Natural Resources

Funded by the NYS Department of Environmental  
Conservation, Hudson River Estuary Program



# Meeting Purpose and Agenda

- Grant Overview
- Present Draft Visions and Goals formulated during December Community Meeting
- Priority Restoration Opportunity
- Questions/How to get Involved





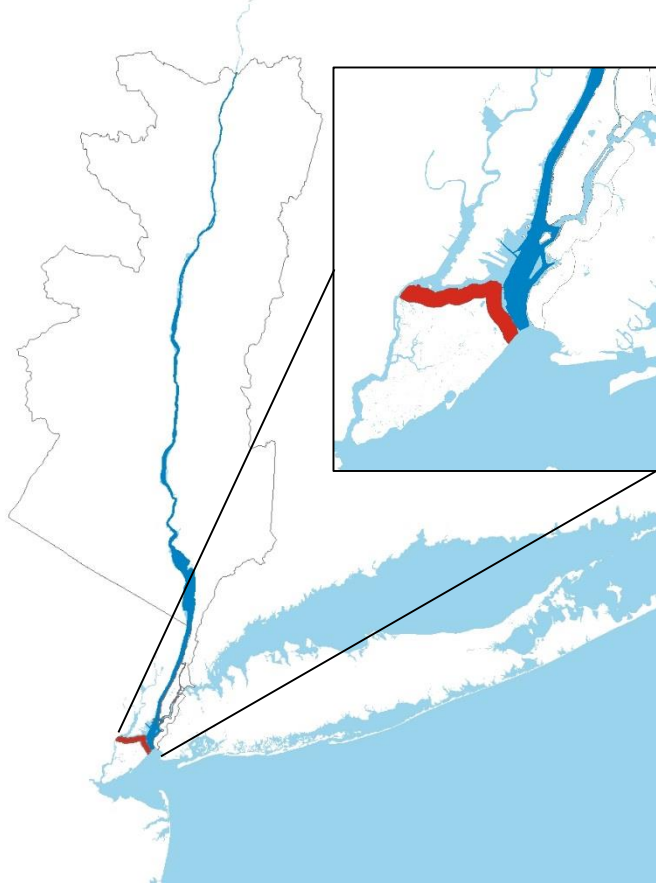
# Forestry, Horticulture, and Natural Resources



*”To conserve New York City's natural resources for the benefit of ecosystem and public health through acquisition, management, restoration, and advocacy using scientifically supported and sustainable research”*



# New York State Department of Environmental Conservation Hudson River Estuary Program



*“Created by state law in 1987, the Hudson River Estuary Program develops knowledgeable and effective stewards of the estuary and its ecosystem using an understanding of ecology as a foundation for all of its work.”*

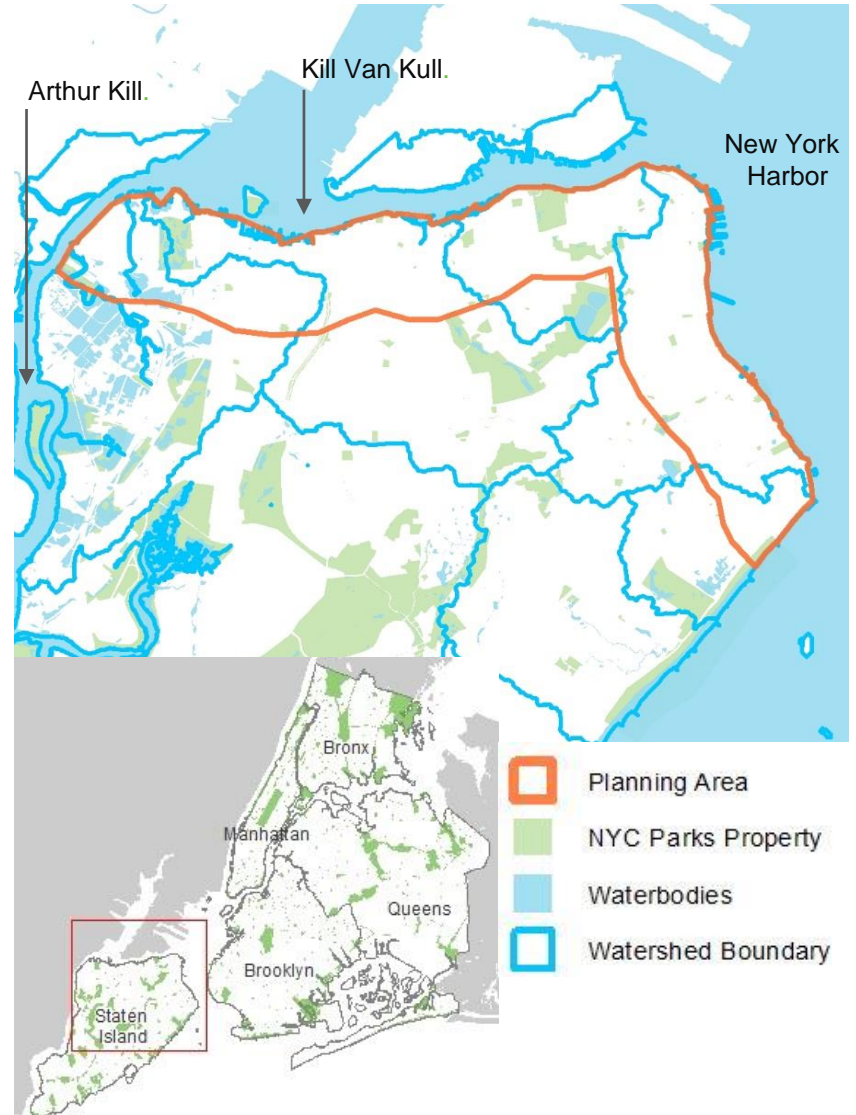


# Watershed Planning Process

- Differs from Master Planning

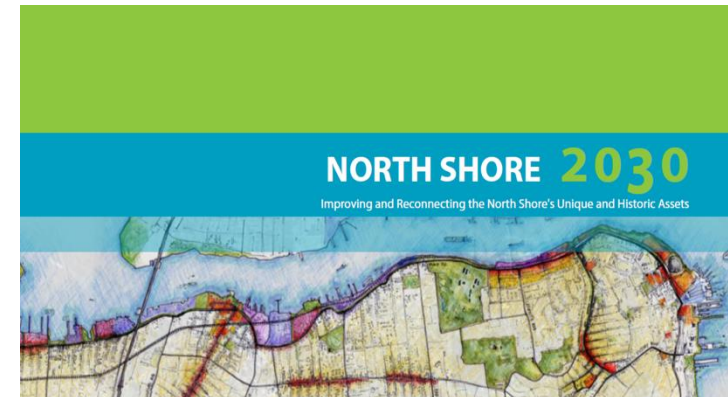
## *Planning Approach (2 years)*

1. Characterize the project area
2. Identify threats, targets, and opportunities on NYC Parkland
3. Prioritize projects
4. Develop implementation framework
5. Seek Funding



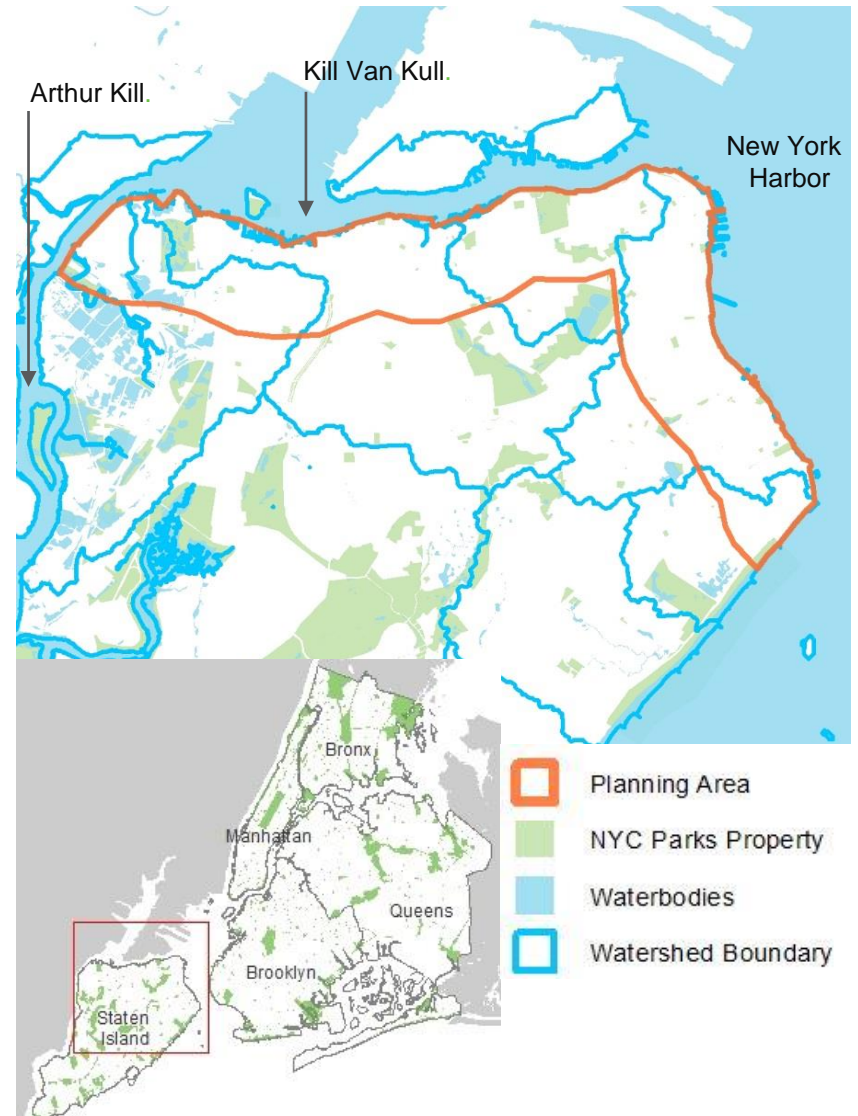
# Past and Current Planning

- Mariner's and Arlington Marsh Master Planning (NYC Parks, in progress)
- West Brighton Brownfields Opportunity Area Report (EDC, NYC DCP 2016)
  - Snug Harbor identified as a Strategic Site for revitalizing waterfront
- North Shore 2030 (NYC DCP, NYC EDC, WBCLDC 2016)
  - Snug Harbor a potential stormwater management site and as a hub for waterfront access and transportation
- Comprehensive Waterfront Plan Vision 2020
  - Bluebelt designation at Snug Harbor and enhancement of the site for greenway and waterfront access
- Staten Island's Gold Coast (NSWCSI, 2008)
  - Documents 21 contaminated sites on north shore and their affects on community



# Why the North Shore?

- Lack of dedicated natural resources planning
- Accelerated development
- Environmental Justice
- Two years of stewardship (2016-2017)
- Funding available



## Draft Vision Statement

*Staten Island's North Shore is a valued ecological, economic, and social resource, with the Snug Harbor Cultural Center and the Harbor Brook stream corridor, Mariner's and Arlington Marsh, and the waterfront of the Kill Van Kull which provide a wealth of social, recreational, educational, and environmental opportunities.*

## Draft Goals

- i. **Restore, protect, and enhance natural resources** to promote diverse, native ecological communities and low-impact nature based recreation such as birdwatching
- ii. **Manage stormwater** to alleviate local flooding, to improve water quality, and mitigate effects of storm surge
- iii. Through the Green Neighborhoods program and other Parks stewardship and outreach programs, **promote public engagement, educate** on the sustainable use of natural areas, and **invite stewardship.**



# Natural Resources Characterizations

- Land Cover Overview
- Uplands and Forests
  - What are they
  - Where are they
  - Threats
  - Restoration Opportunities
- Streams and Floodplain Forests
- Freshwater Wetlands and Ponds
- Salt Marshes
- Green Infrastructure
- Street Trees

# Natural Resources Characterizations

- Example Opportunity – Streams



*Deteriorated stream structure at Goodhue Park*



*Marine Debris at Arlington Marsh*

- Example Opportunity  
Salt Marsh

# Natural Resources Characterizations

- Example Threat – Uplands



- Example Opportunity  
Green Infrastructure

# Harbor Brook



# Harbor Brook – Habitat Restoration Opportunity

- Approximately 3.5-acres of degraded tidal creek and coastal forest
- Opportunity in numerous existing plans
- Leverage resiliency funding
- Opportunity to:
  - Remove invasive species
  - Remove historic fill and clean up dumping
  - Reduce erosion
  - Manage stormwater



*Potential Harbor Brook Restoration Site*

# Harbor Brook – Habitat Restoration Opportunity

Restoration at this site would:

- Replace invasive *Phragmites* with native marsh grasses
- Remove debris and dumping
- Enhance habitat for wildlife including blue crab, fish, and birds
- Improve views into natural area
- Opportunity to expand wetlands educational programming at Snug Harbor
- Opportunity to incorporate streetside Green Infrastructure

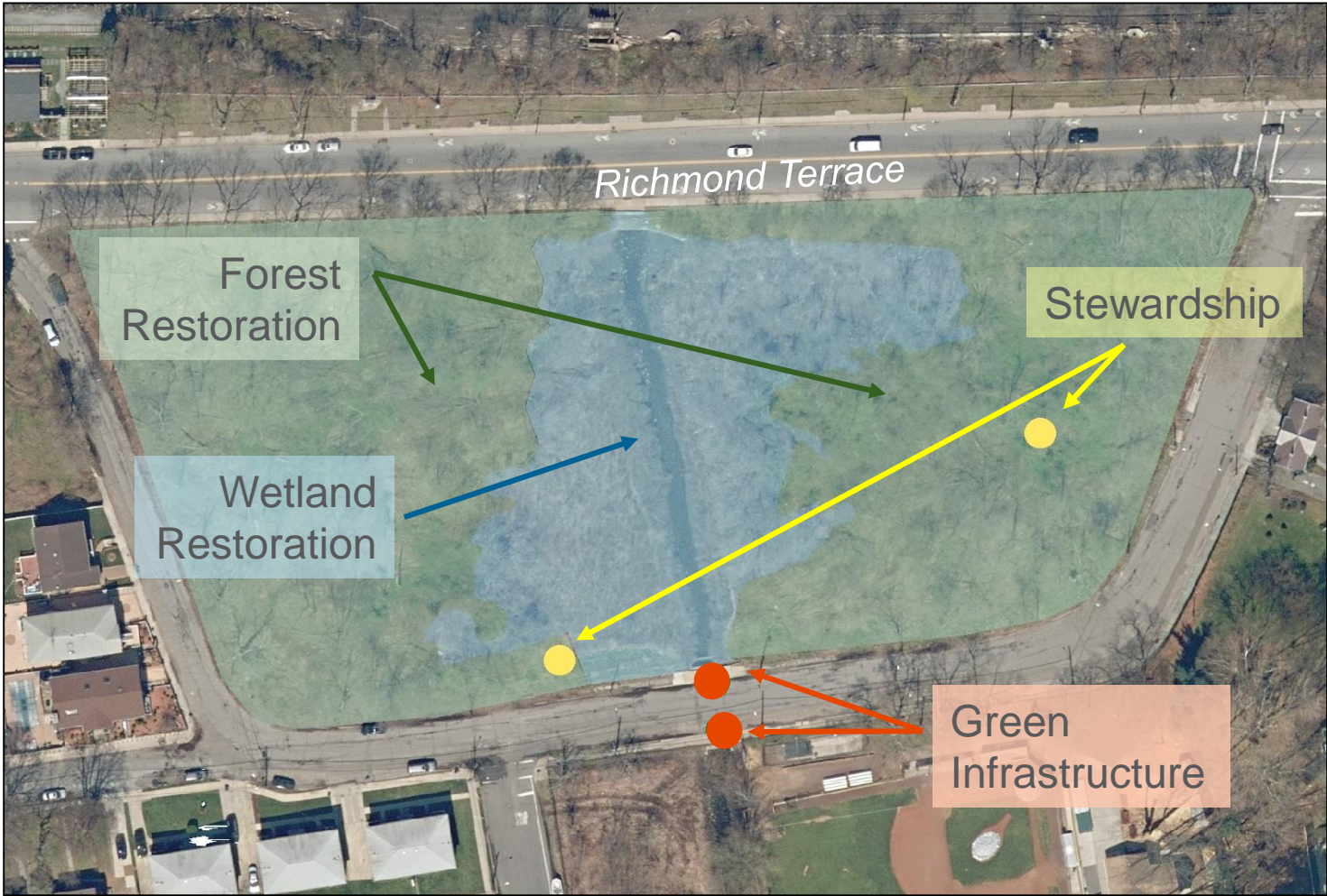


*Eroded banks and Phragmites australis growing along the tidal reach of Harbor Brook*



*Green Infrastructure opportunity to relieve local flooding and improve water quality*

# Harbor Brook Opportunities



## Next Steps

- Live webpage to help solicit feedback (Target: May 2018)
- Identify Green Infrastructure Opportunities (March - May 2018)
- Advance Harbor Brook Conceptual Design (May 2018)
- Second community meeting (Target: June 2018)
- Finalize plan and Harbor Brook Restoration (September 2018)





# Questions?



**View from Richmond Terrace Wetlands**

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