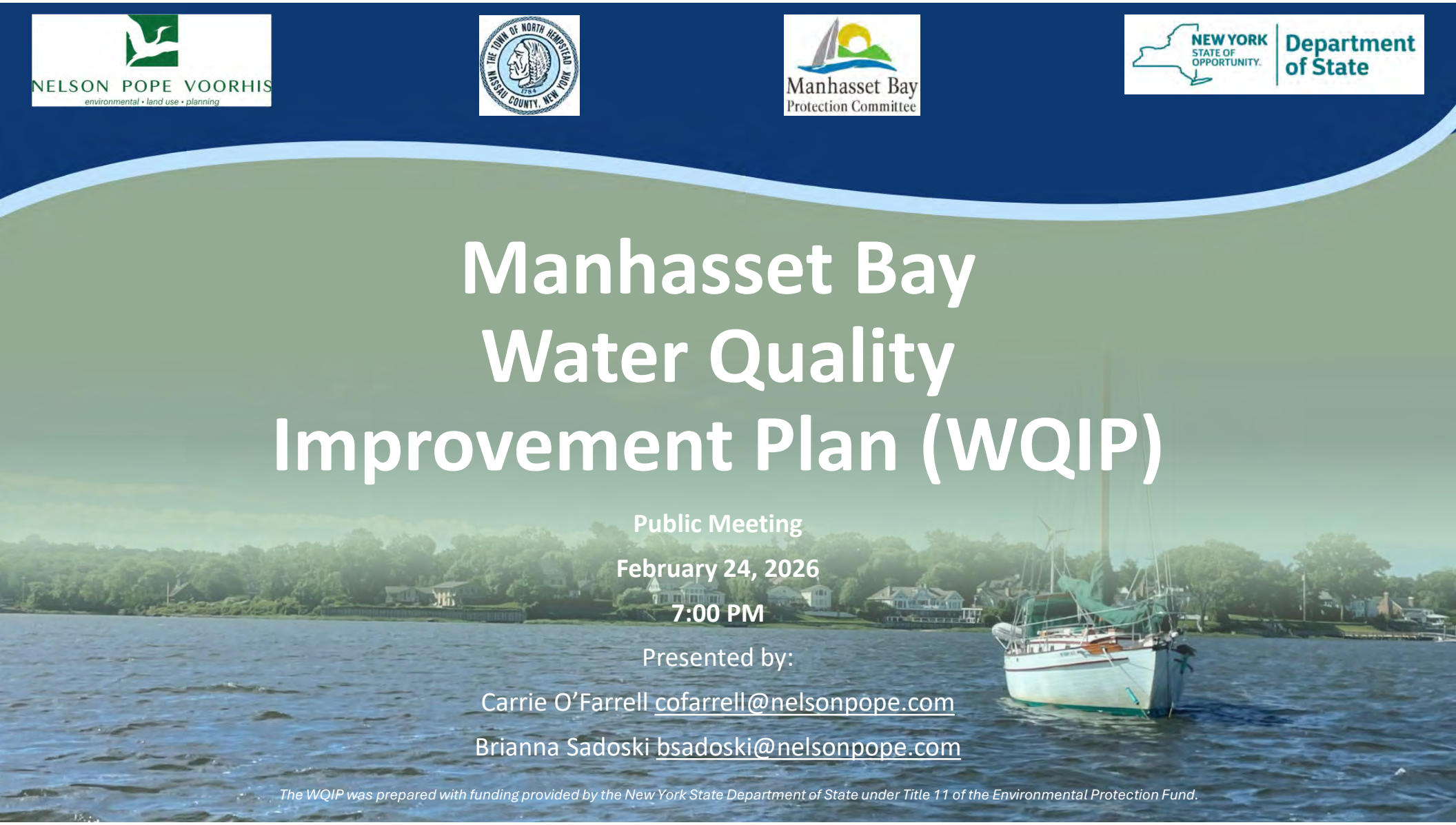


Manhasset Bay Water Quality Improvement Plan (WQIP)

Public Meeting

February 24, 2026

7:00 PM

Presented by:

Carrie O'Farrell cofarrell@nelsonpope.com

Brianna Sadoski bsadoski@nelsonpope.com

The WQIP was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.

Todays Agenda

1. Purpose of the MB WQIP
2. WQIP Status
3. Manhasset Bay WQIP Vision & Goals
4. Draft WQIP Overview
5. Recommendations & Projects
6. Prioritization
7. Next Steps
8. Public Feedback

Purpose of the Manhasset Bay WQIP

- A Water Quality Improvement Plan (WQIP) is a roadmap to reduce pollution and improve water quality
- The WQIP aims to update watershed conditions and progress made since 1999.
- Identify new projects and evaluate feasibility of incomplete past recommendations.
- Establish a 20-year vision for improving water quality, habitat health, and recreational use.
- Incorporate climate change and sea level rise into long-term planning.


Credit: Canva.com


Credit: MBPC

Manhasset Bay Sub Watersheds

ID	Name	Acreage
1	North East Shore	239.3
2	Sheets Creek N	357.9
3	Sheets Creek E	543.4
4	Mill/Baxter Ponds	1052.9
5	Stannard's Brook	374.3
6	Leeds Pond	2169.3
7	Plandome Heights	134.5
8	Whitney Pond	2388.6
9	Kensington	389.7
10	Kings Point Creek	826.7
11	Mitchell Creek	946.6
12	Kings Point Pond	168.5
	Total	9591.7

WQIP Status


Grant issued to update WQIP
Community Outreach/Participation Plan
Vision and Watershed Goals
Draft Characterization Report
Committee Review, Regulatory Assessment, + Address Data Gaps
First Public Meeting & Gather Public Input
Draft Characterization Report Comments
Develop Management Recommendation, Budgets + Implementation Strategy
Second Public Meeting + Public Input
MBPC/DOS/Public Review + Comment
Implementation Strategy and Schedule & Monitoring and Tracking
Draft WQIP
Third Public Meeting + Public Input
MPBC/DOS/Public Review + Comment
Final WQIP

Manhasset Bay WQIP Goals

- Minimize non-point and point source pollution
- Optimize local laws and regulations
- Support local government operations
- Restore and enhance wetlands
- Promote remediation of contaminated sites
- Maintain open space lands in the Bay
- Reduce pollution from marinas, boatyards, and waterfront activities
- Minimize sedimentation of the Bay
- Continue and expand water quality monitoring
- Enhance coordination of efforts
- Account for climate change
- Maintain relevance of WQIP

Draft WQIP Overview


Credit: Canva.com

- WATERSHED OVERVIEW
- COMMUNITY OUTREACH PLAN
- OTHER PLANNING EFFORTS
- WATERSHED CHARACTERISTICS
- ECOLOGICAL RESOURCES
- ESTIMATED RUNOFF AND POLLUTANT LOADS ANALYSIS
- CLIMATE VULNERABILITY
- REGULATORY REVIEW AND ASSESSMENT
- **WATERSHED MANAGEMENT RECOMMENDATIONS**
- IMPLEMENTATION STRATEGY, MONITORING, AND TRACKING
- FUNDING AND MONITORING

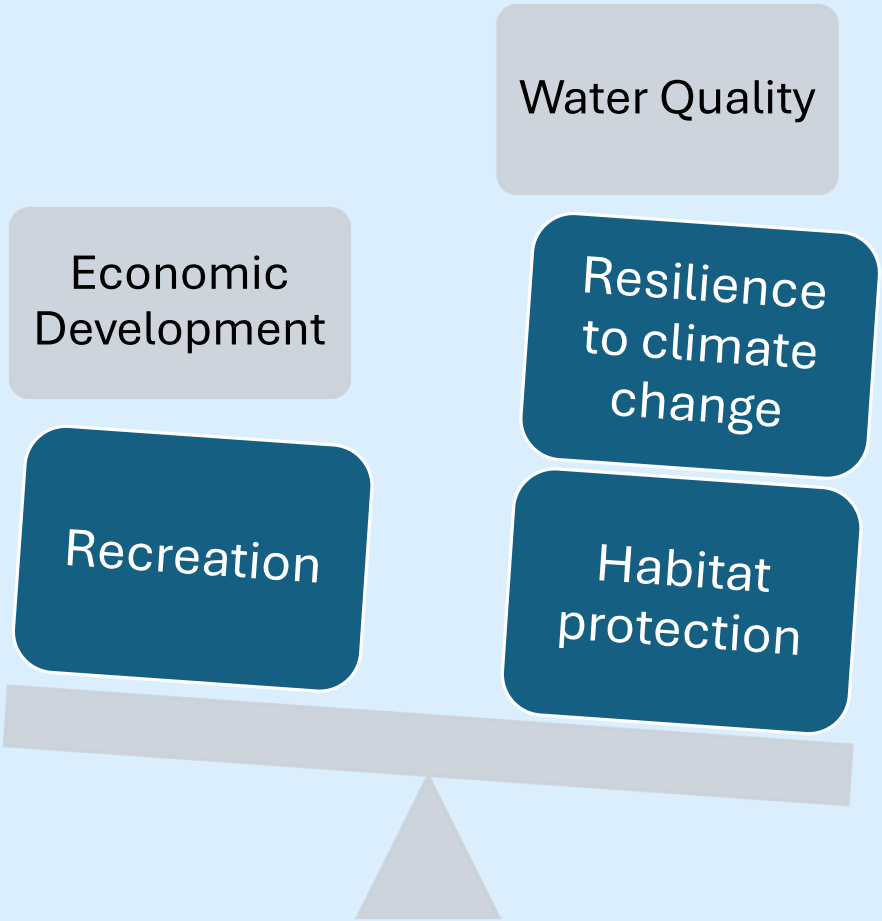

Credit: NPV


Credit: NPV

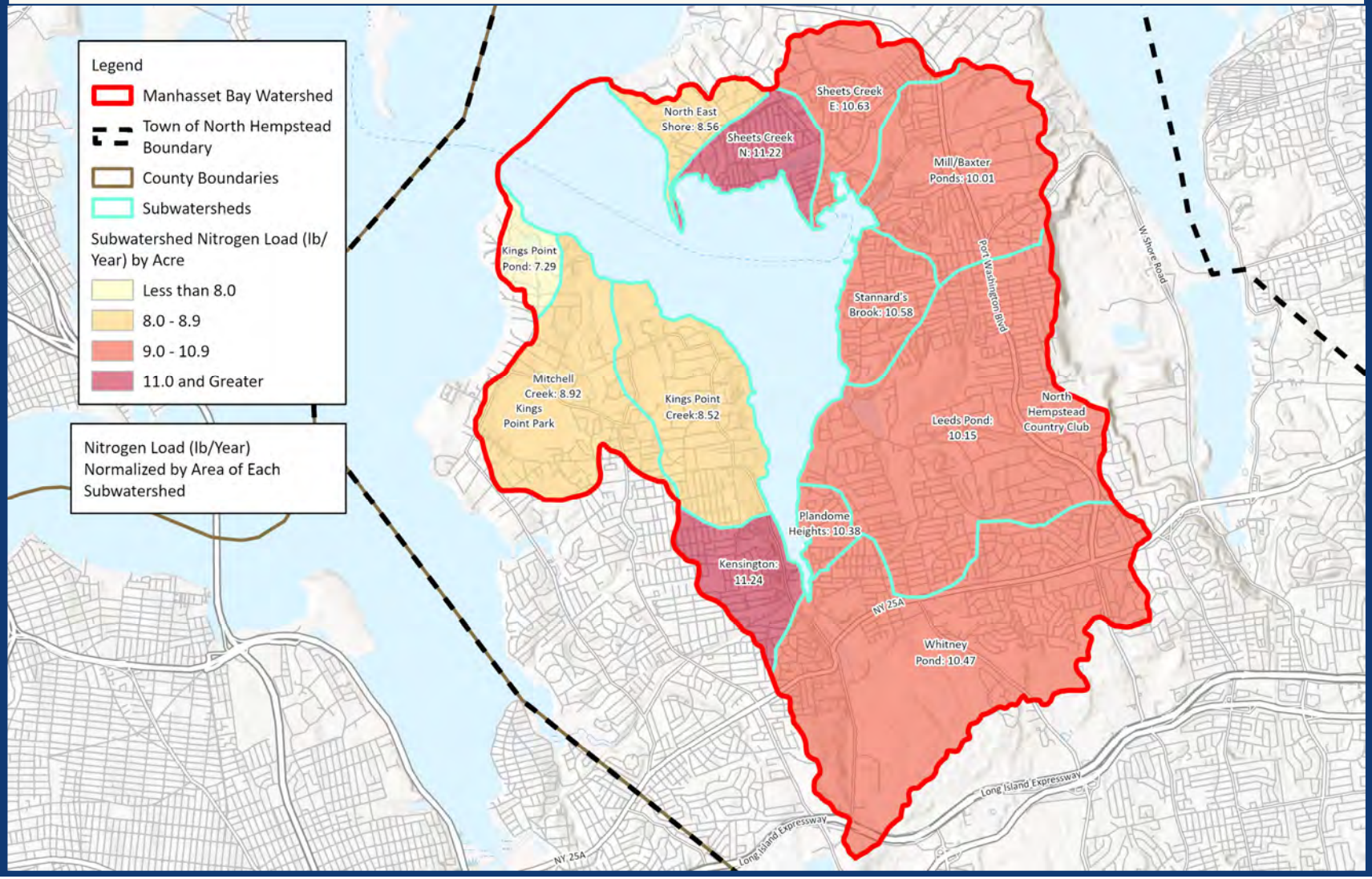

Credit: NPV

Identification of Recommendations & Projects

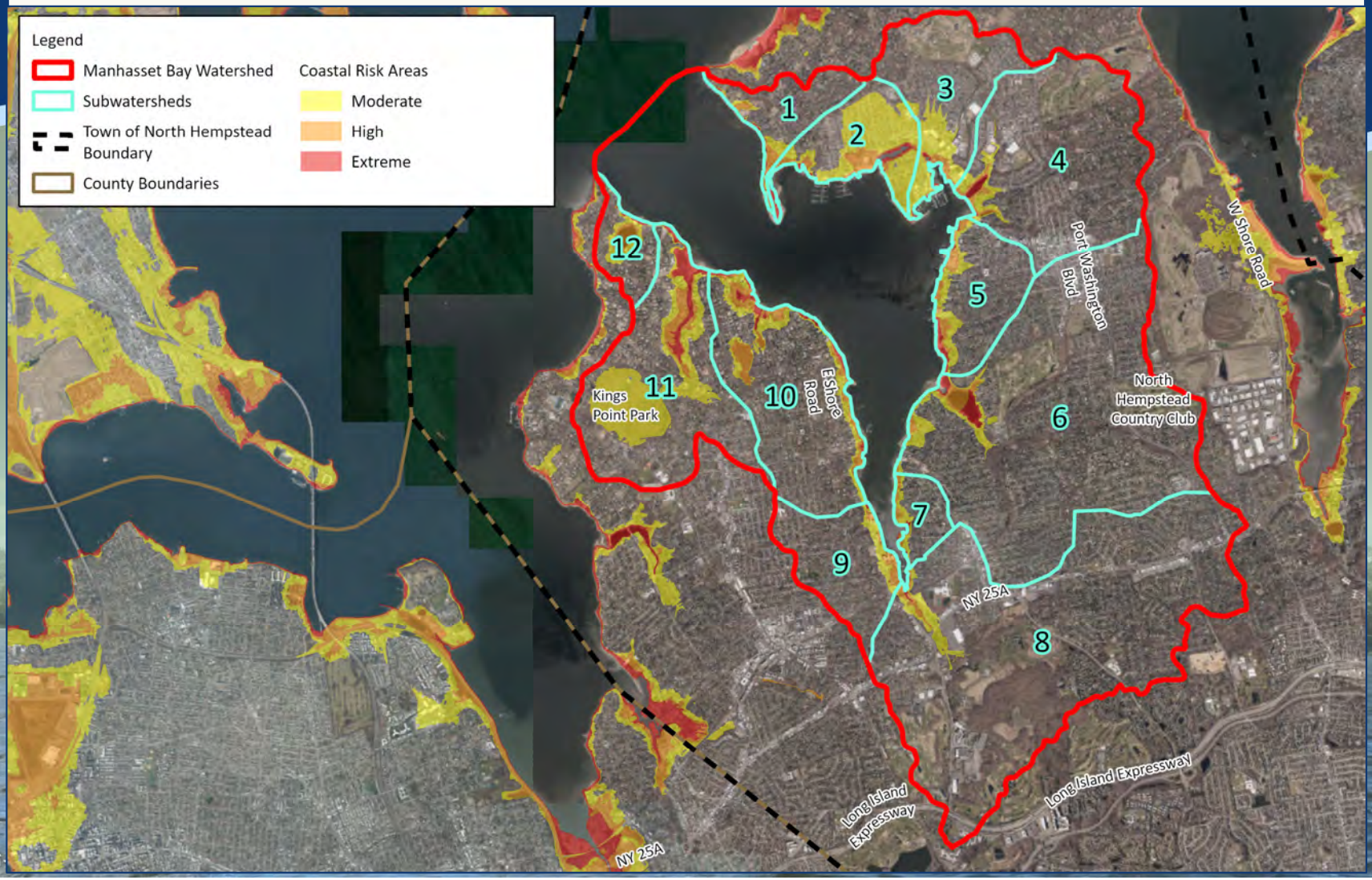
- Input from MBPC and the public
- Identification of hot spots/opportunities from Characterization Report
  - High-priority subwatersheds
  - Stormwater abatement
  - Natural resource restoration
- Regulatory considerations
- Maintain & expand availability for recreational uses while enriching quality of Bay Ecosystem



Manhasset Bay Stormwater Pollutant Loading



Manhasset Bay Coastal Risk Areas



Recommendations Categories

- General Bay-Wide Recommendations
- Stormwater Management
- Municipal Facilities
- Wastewater Management
- Natural Resource Management
- Water Quality Research & Monitoring
- Watershed Planning & Management
- Public Outreach & Stewardship

General (Bay-Wide) Recommendations

B-1	Comprehensive Water Quality Monitoring Program
B-2	Expand Water Quality Sampling to Include Pesticides
B-3	Investigate Septic System Contributions to Pollution
B-4	Feasibility Study to Evaluate Use of Aeration Systems in Stagnant Areas of the Bay
B-5	Support Shellfish Restoration Programs
B-6	Manage Waterfowl Populations and Pet Waste to Reduce Pathogen Inputs
B-7	Conduct a Tidal Flushing and Circulation Study for Manhasset Bay
B-8	Investigate Areas for Removal of Sediment from Manhasset Bay
B-9	Identify Areas for Open Space Preservation

Municipal Facilities Recommendations

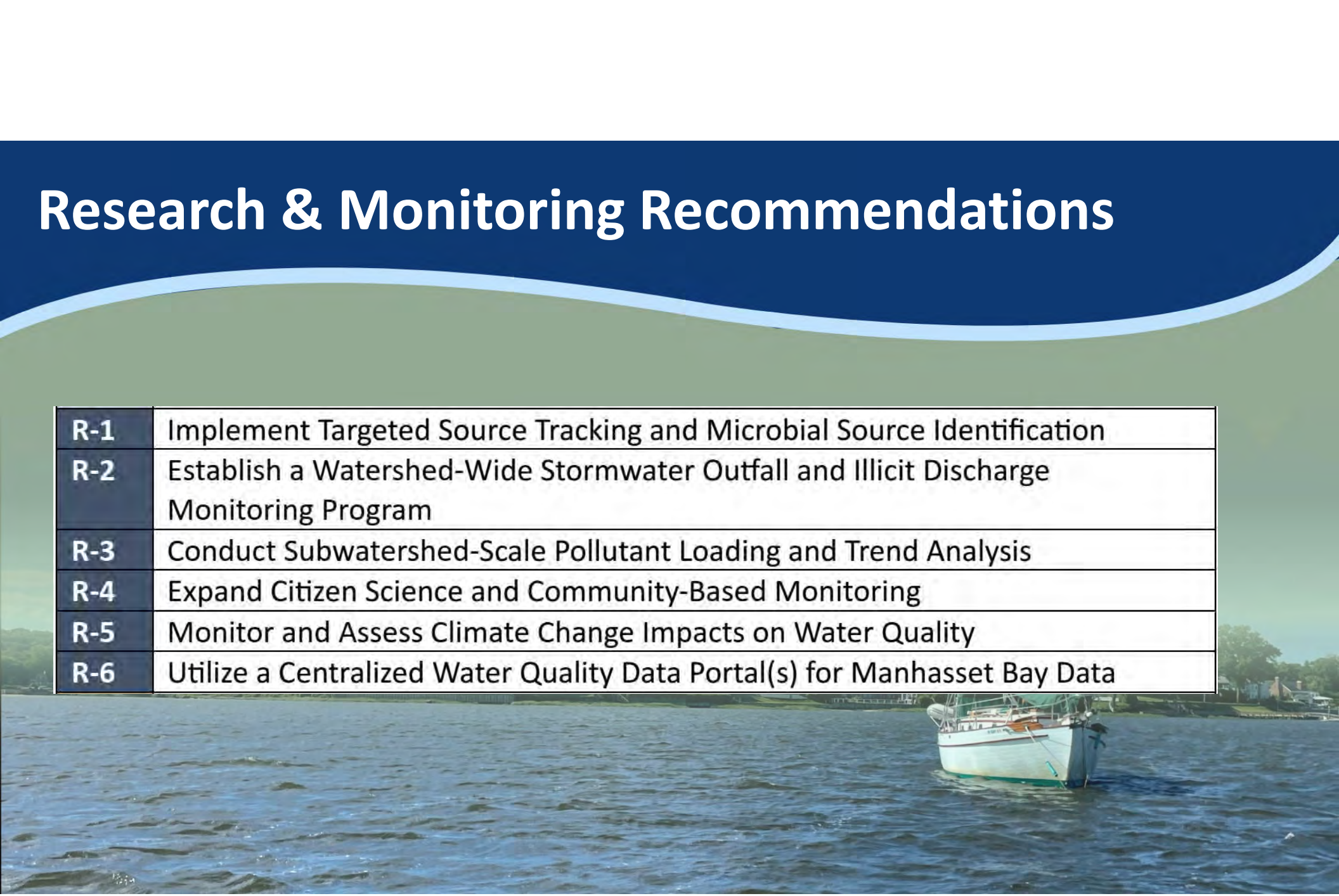
M-1	Complete a GIS-Based Mapping of the Stormwater Management System and Contributing Areas to the MS4 System.
M-2	Provide Training for Municipal Maintenance Personnel Regarding Stormwater Runoff and Water Pollution, Hazardous Materials Handling, Illicit Discharge Detection and Best Management Practices.
M-3	Provide Designated Areas in Municipal Facilities (DPW Yards, Police and Fire Stations, Vehicle Storage Yards, etc.) for Washing of Vehicles with Proper Filtration and Drainage to Prevent Toxic or Hazardous Materials from Entering the Watershed.
M-4	Ensure that All Municipal Operations within the Watershed Incorporate Best Management Practices (BMP)/Good Housekeeping Practices into Daily Operations.
M-5	Complete Regular Municipal Facility and Operations Audits.
M-6	Incorporate Projections Addressing Changing Climate into Municipal Facility Planning and Upgrades.
M-7	Enhance Municipal Trash Collection and Floatable Debris Control and Maintenance Across the Watershed.
M-8	Improve Public Access to Waterfront Areas through Infrastructure Upgrades and Recreational Amenities.

Wastewater Management Recommendations

W-1	Expand Sewer Connections and Eliminate Legacy Septic Systems
W-2	Incentivize and Require Upgrades to Innovative/Alternative Onsite Wastewater Treatment Systems (I/A OWTS)
W-3	Develop a Program and Update Town and Village Codes to Identify and Require Regular Maintenance of Septic Systems in Areas with Shallow Depth to Groundwater and Poor Integrity/Not Properly Functioning
W-4	Upgrade and Optimize Wastewater Treatment Plant (WWTP) Performance
W-5	Promote and Implement Water Reuse and Resource Recovery
W-6	Enforcement and Education of Boat Pump-Out Practices

Research & Monitoring Recommendations

R-1	Implement Targeted Source Tracking and Microbial Source Identification
R-2	Establish a Watershed-Wide Stormwater Outfall and Illicit Discharge Monitoring Program
R-3	Conduct Subwatershed-Scale Pollutant Loading and Trend Analysis
R-4	Expand Citizen Science and Community-Based Monitoring
R-5	Monitor and Assess Climate Change Impacts on Water Quality
R-6	Utilize a Centralized Water Quality Data Portal(s) for Manhasset Bay Data

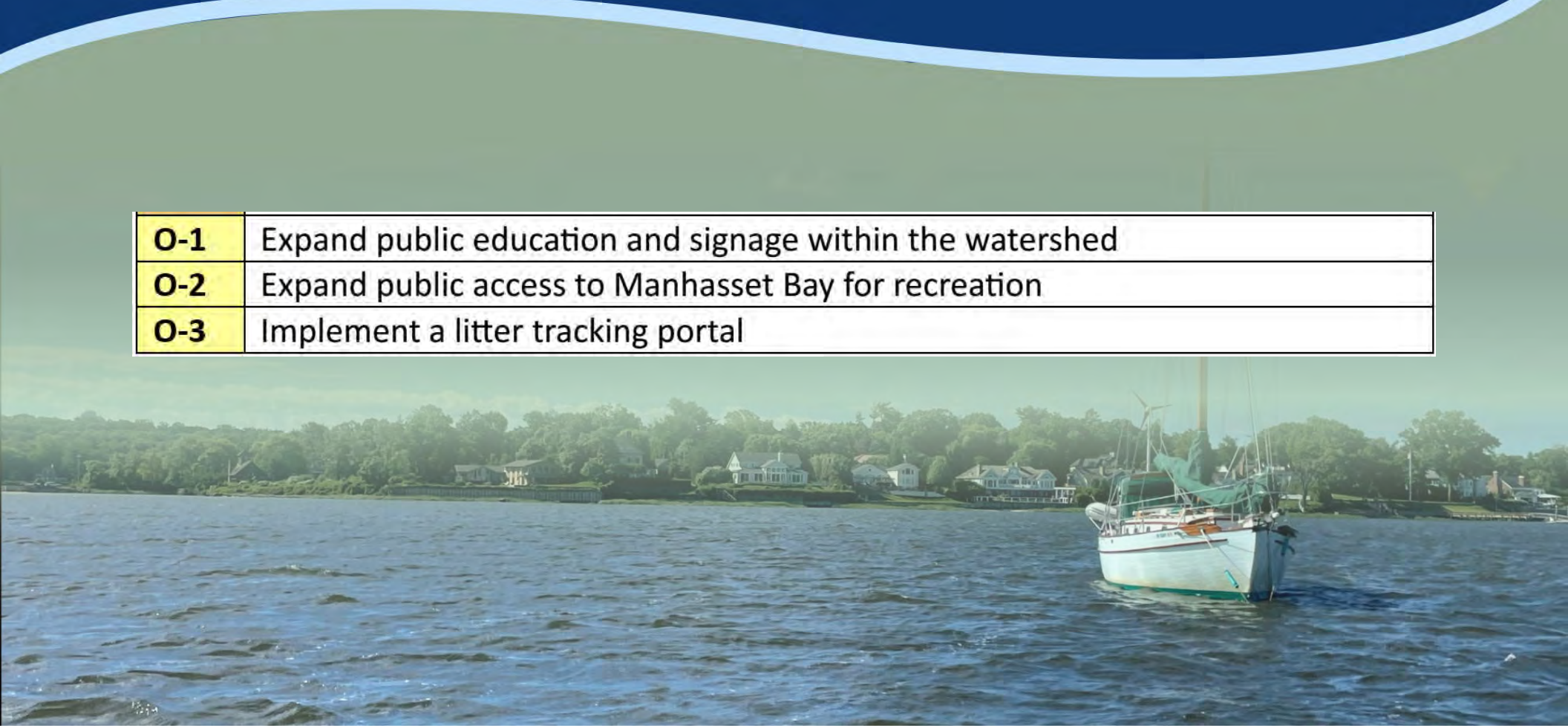


Planning & Management Recommendations

P-1	Encourage the Adoption/Update of Municipal Comprehensive/Master Plans
P-2	Strengthen Local Codes and Intermunicipal Coordination for Wastewater Management
P-3	Strengthen Local Codes and Intermunicipal Coordination for Protection of Wetlands Within the Watershed
P-4	Update Municipal Codes for Commercial and Industrial Redevelopment
P-5	Update Municipal Codes to Include Minimum Buffer Width Requirements
P-6	Strengthen Municipal Oversight of Marina Operations
P-7	Incorporate Municipal Code Amendments for Fertilizer and Pesticide Use Fertilizer-Dependent Vegetation Limits
P-8	Incorporate Municipal Code Amendments for Clearing Restrictions
P-9	Incorporate Litter Reduction Strategies
P-10	Enforce Illicit Discharge Ordinances

Public Outreach/Stewardship Recommendations

O-1	Expand public education and signage within the watershed
O-2	Expand public access to Manhasset Bay for recreation
O-3	Implement a litter tracking portal



Restoration Projects Types

- Removal of invasives
- Planting of native species
- Vegetated buffers
- Shoreline stabilization
- Living shorelines
- Wetland restoration
- Fountain installation
- Seeding of oysters and clams
- Dredging feasibility studies

Legend

- Town of North Hempstead Boundary
- County Boundaries
- Village Boundaries
- Manhasset Bay Watershed
- Subwatersheds
- Approximate Project Areas

ID	Subwatershed Name	Acreage
1	North East Shore	239.3
2	Sheets Creek N	357.9
3	Sheets Creek E	543.4
4	Mill/Baxter Ponds	1052.9
5	Stannard's Brook	374.3
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7	Plandome Heights	134.5
8	Whitney Pond	2388.6
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10	Kings Point Creek	826.7
11	Mitchell Creek	946.6
12	Kings Point Pond	168.5
	Total	9591.7

NPV

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FIGURE 9-3
NATURAL RESOURCE RECOMMENDATION LOCATIONS

Sources: ESRI Terrain Map, 2023; USGS Watershed Boundary, 2023; NYS Civil Boundaries, 2022;
Scale: 1 inch equals 3,000 feet

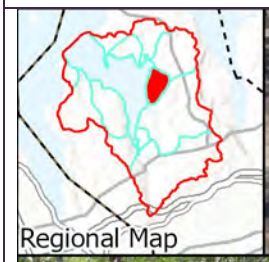
N

Manhasset Bay
Water Quality Improvement Plan

North Hempstead, NY

This document was prepared with funding provided by the New York State Department of State under title 11 of the Environmental Protection Fund

Project ID: N-7	Priority: Medium	Cost: $, $$-$$$$
Subwatershed: Stannard's Brook	**Location:** Stannard's Brook County Park	



Key Issues:

Nassau County completed a wholesale park and stream rehabilitation project within the park in 2011/12, but some issues still remain, such as: direct stormwater inputs, stream obstructions, etc. For information on work already completed at this site, see Table 3-2 in Section 3.1.

Project Description/Action (Cost Per Recommendation): *The numbers shown on the map above identify project locations and correspond directly to the numbered project descriptions and actions listed below.*

1. Removal of debris and stream obstructions, such as fallen trees and branches. $ (Short-term)
2. Installation & maintenance of floatables/debris traps on stormwater culverts from the adjacent streets to the north of Stannard's Brook. (Washington, Adams, and Jefferson streets). Roadway jurisdiction would have to be established Once installed, periodic monitoring and maintenance to ensure proper function and remove debris/floatables from the traps. $ (Installation, Short-term), $/Year (Maintenance, Long-term)
3. Removal/treatment of invasive species and replacement with native species. Annual monitoring and invasive plant treatment. This may be done with assistance from others who already conduct invasive removal in the area. $ (Installation, Short-term), $/Year (Maintenance, Short-term)
4. Explore the possibility of creating wetlands within the park to hold back runoff and capture sediments - $ (Planning, Short-term), $$$ (Construction, Mid-term), $/Year (Maintenance until established, Short-term)

Benefits:

- Removal of stream obstructions will allow existing check dams to function properly.
- Installation and maintenance of floatables/debris traps on the stormwater systems will prevent floatables/debris from entering Stannard's Brook and the associated waterways.
- Removal/treatment of monocultures of invasive species (Japanese knotweed (*Reynoutria japonica*)) around Stannard's Brook will increase biodiversity and promote native species growth.
- Implementation of shoreline stabilization features will eliminate shoreline erosion and degradation on the steep banks to the north of Stannard's Brook, which will reduce erosion of the shoreline and sedimentation into the Brook improving habitat and water quality.

Project ID: N-9	Priority: Low	Cost: $-$$
Subwatershed: Whitney Pond	**Location:** Whitney Pond Park	

Key Issues:
Severe erosion and sedimentation, degraded aquatic habitat, waterfowl overpopulation and nutrification, stormwater overflows, high turbidity, loss of native habitat and habitat connectivity, established invasives, sediment contamination.

Project Description/Action (Cost Per Recommendation): *The numbers shown on the map above identify project locations and correspond directly to the numbered project descriptions and actions listed below.*

1. Installation & maintenance of fountains at both locations.Annual maintenance to ensure proper function and cleaning of fountain components. $ (Installation, Short-term), $/Year (Maintenance, Long-term)
2. Removal/replacement of the dilapidated dock within Whitney Lake. $ (Short-term)
3. Water quality sampling to determine impacts of rust laden stormwater runoff and potential illicit discharges . $ (Short-term)
4. Feasibility study about right-sizing culverts or installing passage for wildlife where needed- $$ (Construction, Long-term)
5. Educational outreach & signage around the ponds and associated streams. $ (Short-term)
6. Education of municipal staff about proper maintenance techniques, illicit discharges, etc. - $ (Establish educational program, Short-term, then continual training, Long-term)

Benefits:

- Conversion of mowed areas into native wildflower meadows will increase biodiversity, promote pollinators, and decrease municipal maintenance efforts. It will also improve ground cover, stabilize the soil, and reduce the sediment loadings to the lake, stream and ponds.
- Development of a sediment sampling and classification plan will determine if there is contamination within the sediment in the ponds prior to sediment removal.

- Installation of a bioswale on the west side of the pond in Manhasset Valley Park will collect overland flow, including sediment and debris, prior to entering the pond. This will help remove pollutants from stormwater prior to entering the pond that will improve water quality.
- Installation of fountains will increase oxygen content and water movement while deterring overpopulation of waterfowl.
- Invasive species removal and replacement with native species will increase biodiversity and habitat for native fauna/flora as well as assisting in shoreline stabilization and erosional forces.
- The existing forebay is full of sediment and does not function properly as a sediment collection area for the pond. Preparation and adherence to a regular maintenance plan will allow for the existing forebay to function as intended.

Stormwater Projects Types

- Green Infrastructure
  - Rain gardens
  - Streambank stabilization
  - Bioswales along ROWs
  - Permeable pavement
- Outfall retrofits
- Pre-treatment practices
- Culvert & drainage maintenance

image sources: Rain Guardian

Legend

- Town of North Hempstead Boundary
- County Boundaries
- Village Boundaries
- Manhasset Bay Watershed
- Subwatersheds
- Priority Opportunity Areas

ID	Subwatershed Name	Acreage
1	North East Shore	239.3
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12	Kings Point Pond	168.5
	Total	9591.7

Long Island Sound
Middle Neck Road
Village of Sands Point
1
3
S-15
S-14
Village of Port Washington North
4
Village of Manorhaven
S-13
S-12
S-11
12
Manhasset Bay
5
Port Washington Blvd
W Shore Road
S-18
11
Village of Kings Point
E Shore Road
10
Village of Plandome Manor
S-9
S-10
6
Village of Flower Hill
Village of Plandome
Village of Great Neck
Village of Plandome Heights
S-17
Village of Munsey Park
Village of Roslyn
S-17
9
Village of Saddle Rock
Village of Kensington
NY 25A
Village of Roslyn Estates
S-16
Village of Great Neck Plaza
Village of Thomaston
8
S-8
S-16
Village of Great Neck Estates
Village of Russell Gardens
Village of North Hills
Long Island Expressway
Long Island Expressway
Village of Lake Success
NY 25A
Town of North Hempstead
QUEENS COUNTY
NASSAU COUNTY
Northern State Parkway

NPV

NEW YORK STATE OF OPPORTUNITY. Department of State

FIGURE 9-X
STORMWATER RECOMMENDATION LOCATIONS

Sources: ESRI Terrain Map, 2023; USGS Watershed Boundary, 2023; NYS Civil Boundaries, 2022;
Scale: 1 inch equals 3,000 feet

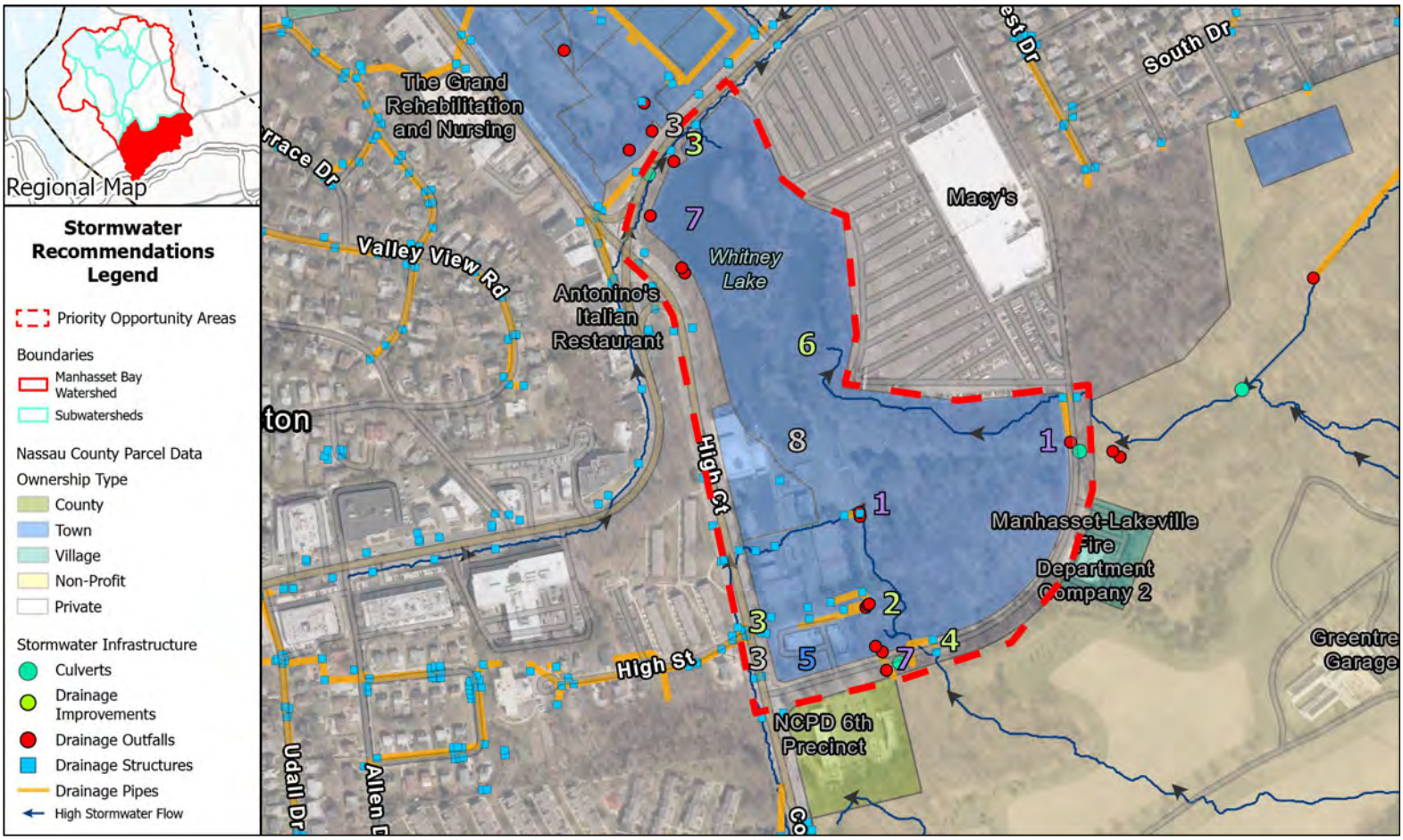
N

Manhasset Bay
Water Quality Improvement Plan

North Hempstead, NY

This document was prepared with funding provided by the New York State Department of State under title 11 of the Environmental Protection Fund

Project ID: S-8	Priority: High	Cost: $, $$
Subwatershed: Whitney Pond	**Location:** Whitney Pond/Whitney Pond Park	



Key Issues:

Stormwater runoff from roadways, commercial buildings and parking areas contributing pollutants either directly to Whitney Pond from outfall(s) or via overland flow, minimal stormwater pre-treatment or buffers around the Pond. Large commercial land-uses such as Macy's are in close proximity to the Pond with little stormwater management.

Project Description/Action (Cost Per Recommendation): *The numbers shown on the map above identify project locations and correspond directly to the numbered project descriptions and actions listed below.*

OUTFALL RETROFITS

1. Install native vegetative buffers by converting lawn to unfertilized native meadows within the Whitney Pond Park to reduce nitrogen/pathogen inputs from geese/waterfowl and improve pollutant removal before entering the waterbody. $ (Installation, Short-term). See **S-2** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)

GREEN INFRASTRUCTURE

2. Install rain gardens/bioswales within Whitney Pond Park and around the parking lot, roadsides, and buildings that outfall to Whitney Pond. $$ (Installation, Short-term). See **S-1/S-3** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)

GREY INFRASTRUCTURE

3. Install bioretention basins and additional leaching structures along right-of-ways to intercept stormwater runoff from commercial land uses and large parking lots $$ (Installation, Short-term). See **S-3** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)
4. Install bioswales along Community Drive E to intercept and treat stormwater prior to storm drains that connect to outfalls to Whitney Pond. $$ (Installation, Short-term). See **S-3** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)

PERMEABLE PAVERS

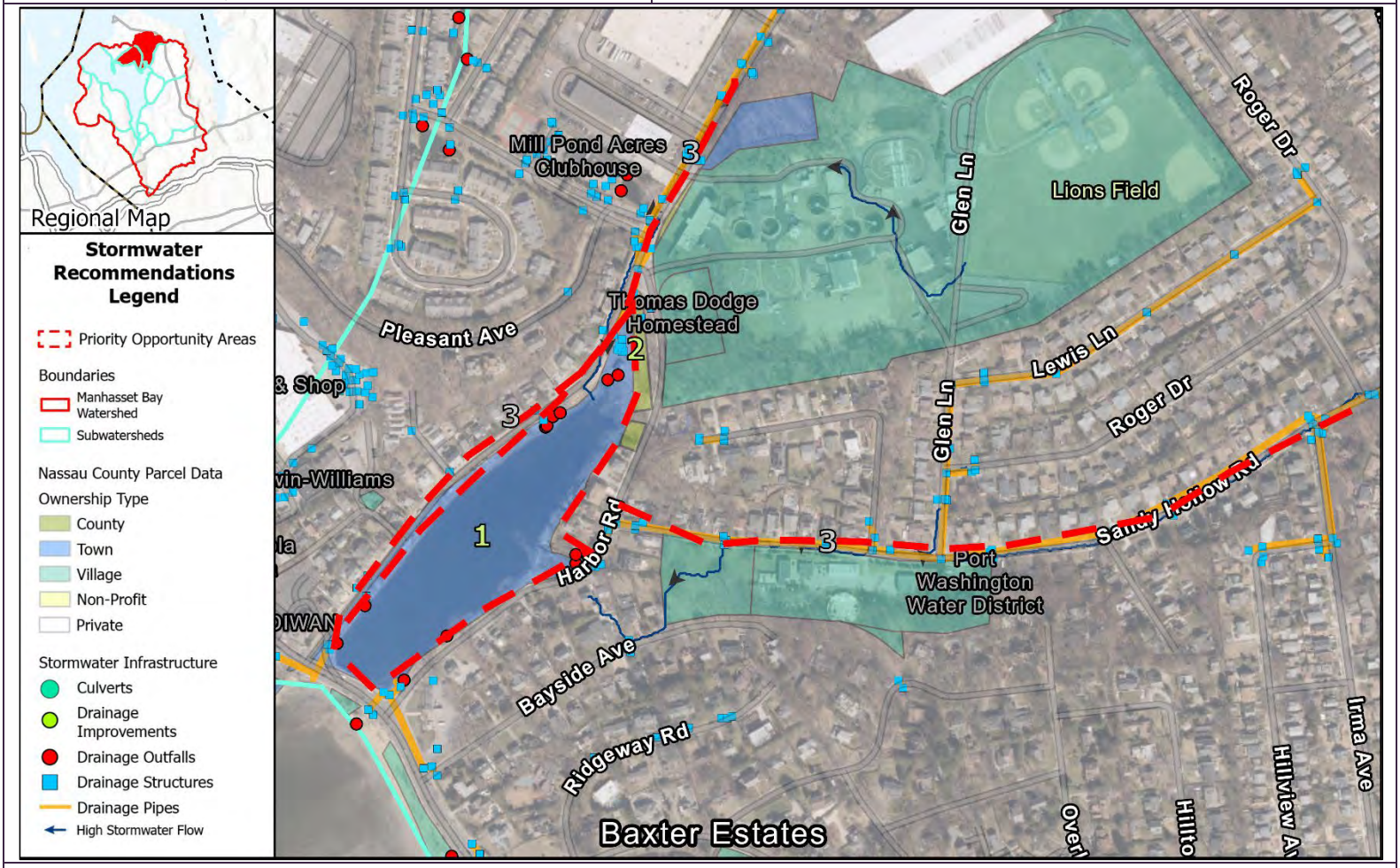
5. Install permeable pavement or green infrastructure/infiltration practices for nearby parking lots. $$ (Construction, Mid-term). See **S-4** for maintenance guidance. $/Year (Maintenance, Long-term).
6. Evaluate the need for streambank stabilization and additional shade tree installation. $$ (Construction, Mid-term)

7. Regularly repair and clean out outfalls into Whitney Pond (sediment and vegetation removal). $/Year (Initial maintenance, Short-term), See **S-7** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)
8. Evaluate feasibility of in-stream solutions through a subwatershed/engineering study of the Whitney Pond subwatershed. $ (Feasibility, Mid-term), $$$ (Implementation, Long-term)

Benefits:

- Increase infiltration and reduce pollutant loading (nitrogen, pathogens, sediment, chlorides, metals) from stormwater
- Improve buffers and shading around the Pond, reducing temperature, sediment inputs and summer algal blooms.
- Reduce flood risks and extend life of infrastructure through regular maintenance

Project ID: S-13	Priority: High	Cost: $, $$
Subwatershed: Mill/Baxter Pond	**Location:** Mill Pond Park	



Key Issues:
Large amounts of plastic and metal trash entering Mill Pond and invasive species surrounding the pond's edge.

Project Description/Action (Cost Per Recommendation): *The numbers shown on the map above identify project locations and correspond directly to the numbered project descriptions and actions listed below.*

GREEN INFRASTRUCTURE

1. Remove invasive species and revegetate with native wetland species. $ (Installation, Short-term). See **S-2** for maintenance/monitoring guidance. $/Year (Maintenance, Short-term)
2. Divert stormwater from Sandy Hollow Rd. and Harbor Rd. into rain gardens/bioswales with rain guardians at the open space northeast/east side of Mill Pond. $$ (Construction, Mid-term). See **S-3** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)

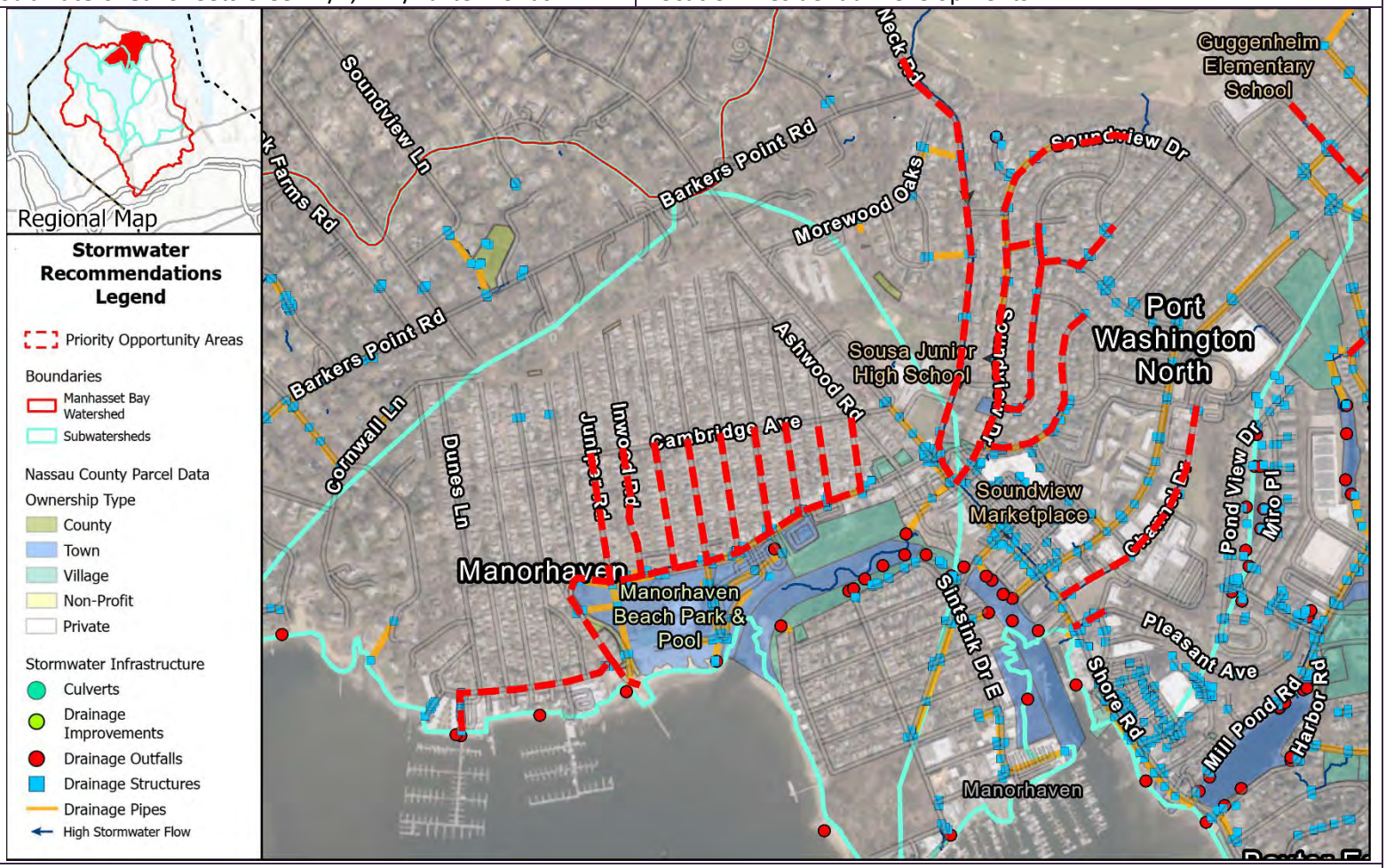
GREY INFRASTRUCTURE

3. Retrofit stormwater systems within Harbor Rd. and Sandy Hollow Rd. with hydrodynamic separators or drainage inlet media filters to remove pollutants from upland residential, park and commercial land uses. $$ (Construction, Mid-term). See **S-6** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)

Benefits:

- Improve water quality through the removal of debris and trash within Mill Pond.
- Increased infiltration and reduction of pollutant loads in stormwater runoff from upland residential and commercial land uses and roadways.
- An outfall water quality study will provide data to support future projects related to nutrient and contamination inputs from stormwater runoff after storm events.

Project ID: S-15	Priority: High	Cost: $$$
Subwatershed: Sheets Creek N/E, Mill/Baxter Ponds	**Location:** Residential Developments	



Key Issues:

Stormwater runoff, legacy high density/high impervious lot coverage, fertilizer/pesticide use, waterfowl/pet waste management, floatable debris, illicit discharges, and skeet shooting debris (associated with various clubs on the Bay).

Project Description/Action (Cost Per Recommendation): *The numbered project descriptions shown below apply to all priority opportunity areas shown on the map above.*

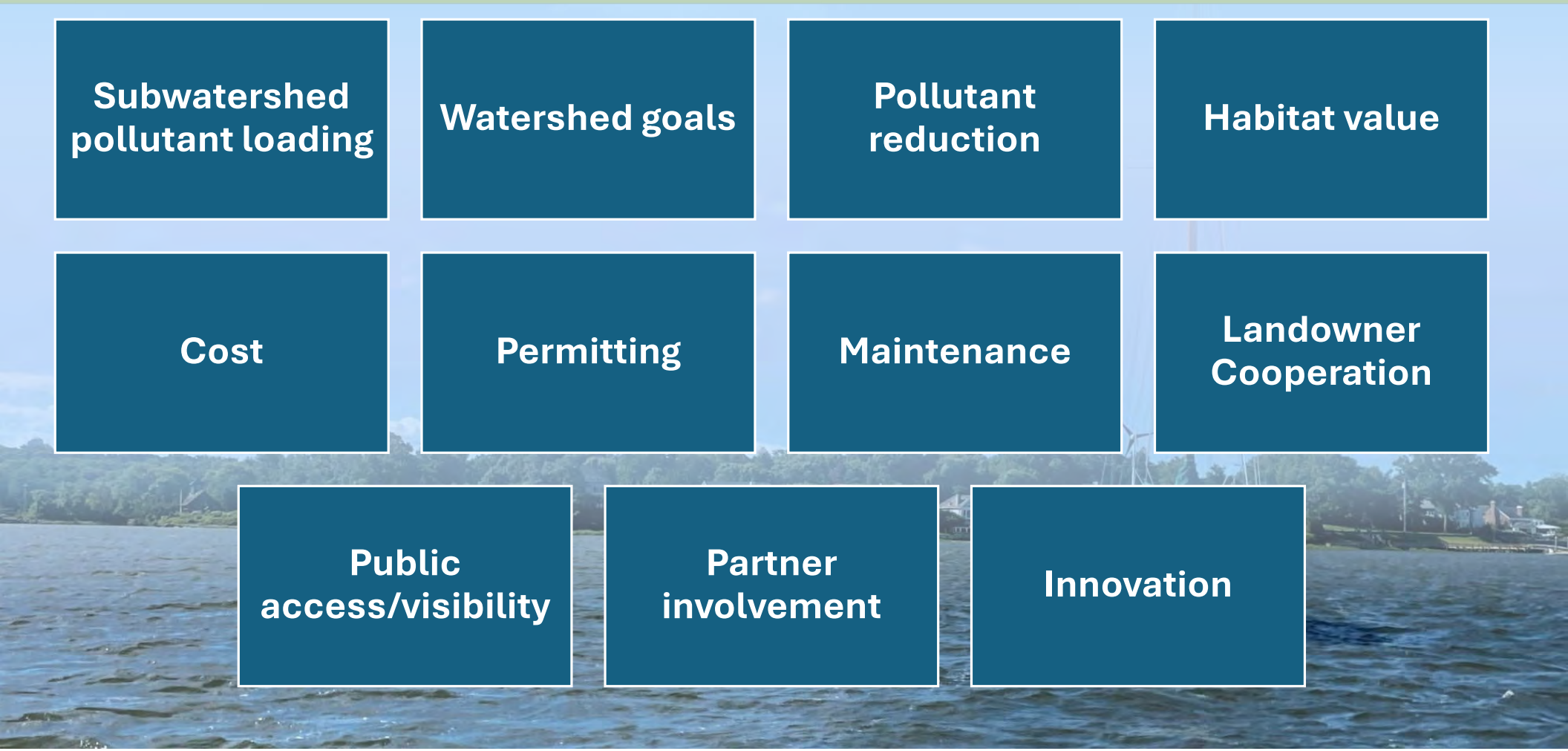
GREEN INFRASTRUCTURE

1. Create rain gardens and bioswales along rights-of-way where possible, or retrofit existing drainage systems with off-line hydrodynamic separators/media filter inlet inserts in above identified commercial and residential areas that directly discharge into Manhasset Bay. $-$$$ (Installation, Long-term). See **S-1/3/6** for maintenance/monitoring guidance. $/Year (Maintenance, Long-term)
2. Promote property owner/municipal BMPs (reducing fertilizer/pesticide use on lawn areas, educating the public on sustainable lawn maintenance and alternative landscapes, wetland buffers, native lawn alternatives). $ (Short-term)
3. Create and distribute educational materials to landscapers and landowners about the importance of proper fertilization practices and their effect on water quality. This recommendation links to Recommendations **P-7** and **O-1**. $ (Short-term)
4. Encourage volunteer cleanups along the shorelines, especially through yacht club youth clubs. $ (Short-term)
5. Continue and, where possible, expand programs such as the Town's Rain Barrel Program and others to capture rainwater from residences and other properties. $ (Short-term)

Benefits:

- Reduce pollutant loads, improve infiltration, and increase flood and erosion control
- Increase climate resilience through community engagement/stewardship programs. Support community awareness of water quality within their subwatershed.

Prioritization of Recommendations



Next Steps

1. Implementation Strategy

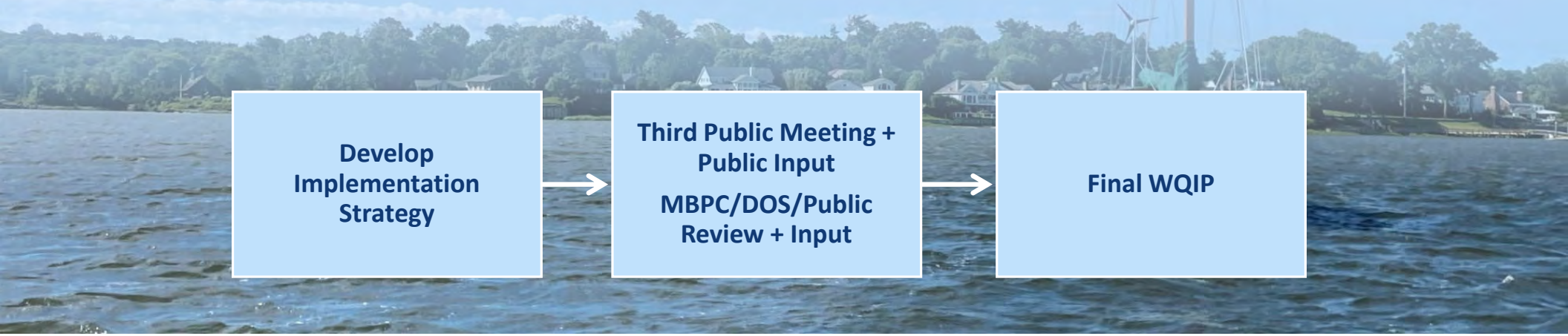
- Define cost estimates, funding sources, and implementation schedule.
- Outline roles, phases, and timeframes for each action.

2. Public Meeting & Input

- Host public meetings for feedback on management recommendations and prioritization.
- Incorporate public and Committee feedback into the WQIP.

3. Final WQIP Submission

- Submit final WQIP for Department approval, reflecting all revisions from reviews and public input.



More Information

For More Information and to review Draft Recommendations:
Please visit the website below or scan the QR Code
manhassetbay.net/wqip

Please feel free to send your comments to MBPC at baycomments@gmail.com

The WQIP was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.