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Available online at www.nyc.gov/waterfront

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# The New York City Waterfront Vision and Enhancement Strategy

Vision 2020 is part of the Mayor's interagency initiative to create a new sustainable blueprint for the city's more than 500 miles of shoreline. The Waterfront Vision and Enhancement Strategy, includes two core components: Vision 2020, The New York City Comprehensive Waterfront Plan that will establish long-term goals for the next decade and beyond, and the New York City Waterfront Action Agenda that will set forth priority initiatives to be implemented within three years. Together, the initiatives will provide a blueprint for the City to balance competing critical uses and conservation.

## INTRODUCTION

Vision 2020 is a plan to enhance New York City's waterfront and waterways, one of the city's most valuable assets. The plan's recommendations will set forth a ten-year vision, recognizing the diversity of the waterfront and balancing the city's many needs including public access, recreation, the natural environment, maritime industries, housing, and commercial activity.

Since the first Comprehensive Waterfront Plan was issued in 1992, the city has made tremendous strides expanding public access to the waterfront, connecting neighborhoods to the waterfront, cleaning our waterways, and supporting economic development on the working waterfront. Eighteen years after that first plan was completed, the Department of City Planning has reexamined our waterfront and waterways in order to formulate a vision for the future. Based on extensive community input, with a total of eight public meetings including a workshop in every borough, this document contains the preliminary recommendations, prepared for the purpose of fostering further public discussion. These recommendations are subject to—and are expected to—change, based on additional input from the public.

Vision 2020 is part of the New York City Waterfront Vision and Enhancement Strategy, a citywide initiative that will create a new sustainable blueprint for the more than 500 miles of the city's shoreline, which Mayor Bloomberg and City Council Speaker Christine Quinn formally launched in April 2010.

The preliminary recommendations are in two sections:

#### I. Programmatic Recommendations (pages 3-16):

Recommendations for citywide policy and programmatic changes.

#### *II. Reach Recommendations (pages 17-65):*

Goals and policy recommendations for specific sites and areas along the 22 reaches or segments of the city's waterfront.

A public meeting on these draft recommendations will be held on:

#### Tuesday, October 12th, 2010, 6 p.m.

Rosenthal Pavilion, NYU Kimmel Center for University Life 60 Washington Square South, 10th Floor, New York, NY

A presentation by the Department of City Planning on the plan's goals and draft recommendations will be followed by an opportunity for public comment. Comments may also be submitted online at www.nyc.gov/waterfront or through email at waterfrontplan@planning.nyc.gov.

The deadline for public comments on the draft recommendations is 5 p.m. on *November 12th, 2010*. The final plan is expected to be completed by the end of the year.





### PROGRAMMATIC RECOMMENDATIONS

The programmatic recommendations are organized by the goals of the Comprehensive Waterfront Plan and intended to highlight the policies and programs that should be enacted to further these goals.

GOAL #1 PAGE 5

Expand public access to the waterfront and waterways on public and private property for all New Yorkers and visitors alike and enliven the waterfront with attractive uses, high-quality public spaces, and publicly oriented water-dependent uses, integrated with adjacent upland communities.

**GOAL #2** PAGE 7

Support economic development activity on the working waterfront.

GOAL #3 PAGE 9

Restore degraded natural waterfronts, protect wetlands, and shorefront habitats, and improve the environmental quality of our water bodies.

GOAL #4

Enhance the public experience of the "Blue Network" by expanding waterborne transportation, on-water recreation, as well as water-oriented educational and cultural activities.

GOAL #5 PAGE15

Pursue strategies to increase the City's resilience to climate change and sea-level rise.

**GOAL #6** PAGE 16

Increase the efficiency of waterfront construction and operations.





Expand public access to the waterfront and waterways on public and private property for all New Yorkers and visitors alike and enliven the waterfront with attractive uses, high-quality public spaces, and publicly oriented water-dependent uses, integrated with adjacent upland communities.

Parks, piers, esplanades, beaches and other kinds of publicly accessible spaces on the waterfront provide opportunities for waterfront recreation, sight-seeing, events and other activities that allow visitors and residents alike to experience New York City as a waterfront city. The City has dramatically expanded the amount of publicly-accessible waterfront spaces since 1992, when the last Comprehensive Waterfront Plan was issued, yet many opportunities remain to take full advantage of the city's coastal geography. And while there are many places in the city people can reach the water's edge, places where people can access the water itself remain limited. Increasing access onto the water requires coordinated planning to explore opportunities throughout the city where access points are possible, with care to avoid conflicts with commercial water traffic and poor water quality.

The revitalization of the city's waterfront is not complete without promoting the waterfront as a destination. Welldesigned places with active uses draw people to the water and increase the public's awareness and enjoyment of the waterfront. Integrating these spaces with upland communities through wayfinding, transportation improvements, and inviting upland connections link more people with the coastline, promoting the role of the waterfront in the everyday life of the city. Creating new parks with diverse and attractive uses and improving the quality of existing public spaces requires funding and operational support. Through exploring new funding mechanisms and streamlining permitting and operational oversight of public spaces, the City can further enhance and activate the public waterfront.

#### **RECOMMENDATIONS:**

#### 1. Create a more connected waterfront.

- Establish criteria for providing more public access to the waterfront including designing routes to public waterfront sites for mass transit, car, foot, bicycle, and boat and adapt recommendations of the *Hudson Raritan Estuary Comprehensive Restoration Plan* regarding public access for New York City.<sup>1</sup>
- Assess opportunities to expand public access for all waterfront developments where feasible such as view corridors, point access, or walkways through the mechanism of Waterfront Access Plans.<sup>2</sup>
- Seek to establish and extend borough-wide *Waterfront Greenways* in all five boroughs wherever feasible. As part of this analysis, explore on a site-specific basis the opportunities and means of creating a larger setback from the water's edge for waterfront development to facilitate the creation of a greenway where connectivity to other portions of the greenway is possible. Where appropriate, explore opportunities for the greenway route to celebrate the use of the waterfront for maritime and other water-dependent uses while recognizing the safety, security, and operational needs of some waterfront properties.<sup>3</sup>
- Improve wayfinding from upland areas to waterfront public spaces and from one waterfront public space to another. Consider establishing a citywide waterfront signage program to make wayfinding easier and more consistent throughout the city.
- Consider appropriate alternatives to the zoning requirement for opaque fences around open industrial uses, to facilitate public views of the working waterfront.

 <sup>2</sup> Waterfront Access Plans (WAPs) are a zoning tool to tailor the public access requirements of waterfront zoning to the specific conditions of a particular waterfront. See more information at the Department of City Planning's website: <a href="https://www.nyc.gov/html/dcp/html/waterfront/index.shtml">www.nyc.gov/html/dcp/html/waterfront/index.shtml</a>
 3 A Waterfront Greenway is a multi-use pathway for non-motorized transportation adjacent to the waterfront along a linear space such as parklands, esplanades, rail corridors and, where necessary, city streets.



<sup>1</sup> Building on the work of the NY-NJ Harbor Estuary Program (HEP), the Hudson Raritan Estuary Draft Comprehensive Restoration Plan (CRP) is a vision and strategy for ongoing ecosystem restoration in the N.Y./N.J. Harbor. It also includes recommendations on enhancing public access to waterfront areas. The plan, in draft form currently, was produced by the U.S. Army Corps of Engineers and The Port Authority of New York & New Jersey, in collaboration with Federal, State, municipal, non-governmental organizations and other regional stakeholders. Available online at <a href="https://www.nan.usace.army.mil/harbor/crp.">www.nan.usace.army.mil/harbor/crp.</a>

#### 2. Improve inspection, maintenance, and operations funding for the public waterfront.

• To support the particularly high maintenance costs of waterfront public spaces, the City should explore the implementation of potential revenue sources, such as the incorporation of revenue-generating uses, special assessment districts or other innovative mechanisms.

#### 3. Protect historic resources on the waterfront.

- Consider opportunities for preservation of historic sites along the waterfront along with potential means of preserving and reusing these structures. While many historic uses have moved away from the waterfront, there are historic structures that remain with architectural, engineering, or cultural importance. However, substantial challenges can exist in adapting these structures to contemporary uses.
- Establish new—and strengthen existing—policies to further protect historic resources along the waterfront including exploring a range of historic preservation mechanisms.
- Prevent shoreline erosion in locations where it would jeopardize historic properties.

#### 4. Spur reinvestment in the waterfront.

- Continue to identify opportunities for redevelopment and consider locations appropriate for allowing a wider range of uses on certain properties to spur reinvestment in underutilized waterfront properties and infrastructure.
- Encourage the integration of water-dependent and water-enhancing uses within developments on the waterfront.
- Support the Mayor's Office of Environmental Remediation efforts to clean and incentivize the redevelopment of waterfront brownfield sites.

#### 5. Provide a varied experience on the waterfront.

• Encourage a mix of uses, as appropriate, to activate public waterfront spaces, such as temporary programming (movie screenings, craft fairs, etc.) of publicly owned waterfront parking lots during off-peak times and other under-utilized sites.

#### 6. Ensure high quality public open spaces.

• Seek mechanisms to guide the design of public and private waterfront open space projects to ensure a high quality public experience.

#### Support economic development activity on the working waterfront.

The port and other maritime industries are valuable assets to City's commercial shipping industry. Through targeted city's economic prosperity, providing 31,000 direct and indirect jobs and generating \$1.3 billion in tax revenue. Looming changes in the port industry, such as the expansion of the Panama Canal, creates both opportunities and challenges for New York

incentives and recruitment, and coordinated regulatory policies, the City can enable maritime businesses to adapt to the industry's future and continue to grow and prosper.

- 1. Analyze and promote policies to support maritime and industrial businesses.
  - Support the expansion of container shipping within the Ports of New York and New Jersey.
  - Actively market city-owned properties to provide for the expansion of waterborne freight movement.
  - Consider establishing maritime easements for the sale or long term lease of public property where appropriate. These easements would ensure the future use of the property for "water-dependent uses" and "water-enhancing uses."
  - Review Significant Maritime and Industrial Areas (SMIAs) individually to determine the best approach to promoting and enhancing maritime businesses through land use, zoning, business incentive programs, and other policies. 1
  - Create more targeted programs to support and strengthen water-dependent businesses, including mechanisms to spur public and private investment in waterfront infrastructure such as piers and bulkheads. This must include studying the effectiveness of existing taxing and financing programs.
  - Promote and enhance tax abatement programs for maritime-businesses.
  - Consider incentives for incorporating water-dependency and the provision of maritime infrastructure into new development projects.
  - Consider legal notice requirements for new residential developments near SMIAs to protect maritime businesses from lawsuits and complaints.
  - Examine opportunities to allow a wider range of uses on upland portions of properties to spur investment in waterfront infrastructure.
  - Explore opportunities for providing additional bulkhead or pier frontage for tie-up space, including incentives to incorporate workboat tie-up space in non-industrial developments.
  - Expedite the review process to give priority to bulkhead repair and replacement projects in SMIAs.
- 2. Encourage green technologies and practices to make waterfront industrial areas and ports throughout the city more environmentally sensitive and to reduce negative impacts on neighboring residential areas. These include consideration of the following:
  - Maximize the applicability of financial incentives for green energy technologies to the waterfront.
  - Pursue changes to existing New York State fuel tax structure to encourage the use of low-sulfur and biofuels and penalize the use of bunker and high-sulfur fuels.
  - Work with the State and other partners to identify resources to increase infrastructure at the waterfront to provide

<sup>1</sup> Significant Maritime and Industrial Areas (SMIAs) are designated zones throughout the city that are characterized by many industrial and maritime businesses. They are mapped by the New York City Waterfront Revitalization Plan (WRP), the city's principal tool for coastal zone management as authorized by federal and state policies. In these zones, the city's coastal policy is to protect and encourage working waterfront activities. More information on the WRP and the SMIAs is available at www.nyc.gov/html/dcp/html/wrp/wrp.shtml.



- pump-out stations for larger vessels. 2
- Support the Port Authority of New York and New Jersey's *Clear Air Strategy* initiatives, including truck replacement, engine retrofits, and low-sulfur fuels incentive programs, and work with City, State, and Federal partners to advance such strategies.<sup>3</sup>
- Encourage the use of shore-based power sources for ships at dock to reduce idling of diesel engines—a process known as "cold-ironing".
- 3. Encourage maritime training and recruitment programs.
  - Support academic institutions that train residents for careers in the maritime industry (SUNY Maritime, Kingsborough Community College, the Harbor School, Seaman's Institute).
  - Link new jobs in the maritime industry to local residents through City employment programs.
  - Identify resources for greater vocational training for city residents in maritime trades (such as welding, machinery, cargo handling, Commercial Driver's license, warehouse operations).
  - Coordinate with local development corporations to recruit residents for waterfront jobs.
- 4. Create maritime "hubs" to support workboat operations in geographically strategic areas. These hubs could consolidate maritime support activities such as repair and refueling.
  - Pursue development of city-owned and private properties for maritime support services.
- 5. Prioritize dredging projects to support industrial uses in navigable and formerly navigable channels adjacent to Significant Maritime and Industrial Areas.
- 6. Collaborate with partners in the New York-New Jersey-Connecticut region to promote short sea shipping and barging by leveraging federal funding opportunities and other strategies, including:
  - Identify resources to develop barge facilities and roll-on/roll-off ferries.
  - Consider using vessels that are capable of handling both freight and passengers.
  - Follow through on the goals of the Mayor's Solid Waste Management Plan (SWMP) to move solid waste via the waterways.<sup>4</sup>
- 7. Establish buffers adjacent to significant waterfront infrastructure for security and safety.

<sup>2</sup> Recent New York State legislation bans the discharge of treated or un-treated graywater into the state's waters. In order to comply, additional locations where ships can pump out graywater are necessary, particularly ones that can accommodate large vessels.

<sup>3</sup> The Port Authority's Clean Air Strategy for the Port of New York and New Jersey presents a guide to future actions for the Port Authority and industry leaders to reduce diesel and greenhouse emissions. Available online at <a href="http://www.panynj.gov/about/pdf/CAS-FINAL.pdf">http://www.panynj.gov/about/pdf/CAS-FINAL.pdf</a>

<sup>4</sup> The New York City Comprehensive Solid Waste Management Plan was approved in 2006 by the City Council and the New York State Department of Environmental Conservation. The plan established a strategy for transitioning from the use of trucks to move solid waste, to more environmentally sound practices such as rail and barge. The full plan is available at <a href="https://www.nyc.gov/html/dsny/html/swmp/swmp-4oct.shtml">www.nyc.gov/html/dsny/html/swmp/swmp-4oct.shtml</a>

# Restore degraded natural waterfronts, protect wetlands and shorefront habitats, and improve the environmental quality of our waterbodies.

New York City's waterfront and waterways support a diverse array of living organisms in addition to people. Tidal wetlands are found throughout the city, such as Jamaica Bay in Brooklyn and Queens, and provide year-round and migratory habitat for significant bird populations. The waterways themselves are home to over 300 species of fish. The City has the opportunity to enhance the natural waterfront by identifying specific opportunity sites for ecological restoration as well as guiding citywide policies and programs to better protect and improve ecological systems.

Water quality has improved immensely throughout the city's waterbodies over the last half-century. These advancements have enabled significant fish and shore bird populations to reestablish themselves in the city and have allowed for the tremendous growth in popularity of all forms of water recreation. The City is continuing to advance the heath of the harbor and tributaries for the benefit of all users of the water through addressing ongoing challenges to better water quality, such as contaminated sediments, stormwater run-off, and CSO's.

- 1. Establish a citywide plan and policies for wetlands and coastal habitats and designate an office or agency to track and coordinate citywide wetland and coastal habitat improvements.
- 2. Develop programs such as wetland banking and in-lieu fees to expand the tools available in mitigating significant and unavoidable impacts to sensitive wetland resources.
- 3. Target City-owned wetlands for restoration opportunities.
  - Support the recommendations of the Wetlands Transfer Task Force.
  - Assess levels of degradation of currently-mapped tidal wetlands and prioritize for protection and restoration by the New York City Department of Parks and Recreation (DPR), provided funding is made available for additional work.
- 4. Complete current New York City Department of Environmental Protection (DEP) projects to upgrade Water Pollution Control Plants to increase the system's capacity and the level of treatment of discharged water.
- Promote sustainable stormwater management strategies on a watershed basis to improve water quality, including maximizing the use of green infrastructure and other controls, such as:
  - Reduce runoff from new and existing development by capturing runoff in combined sewer overflow (CSO) watersheds through detention and infiltration techniques.
  - Encourage on-site treatment followed by direct discharge of cleaned stormwater for waterfront sites.
  - Encourage blue roofs, green roofs, permeable surfaces, planted groundcover and other low-impact strategies where opportunities exist for stormwater detention and retention.
- 6. Promote ecological restoration projects that encourage biodiversity with a focus on native species.

<sup>1</sup> The Wetlands Transfer Task Force was assembled by Mayor Bloomberg and the City Council to assess the feasibility of the transfer of city-owned properties containing wetlands to the Department of Parks and Recreation for protection and management, as described under Local Law 83. 700 acres were recommended for special review or transfer to the DPR. 250 acres were specifically highlighted for transfer. More information available at <a href="http://www.nycgovparks.org/sub\_about/parks\_divisions/nrg/wttf/index.html">http://www.nycgovparks.org/sub\_about/parks\_divisions/nrg/wttf/index.html</a>



# 7. Adapt the recommendations of the *Draft Comprehensive Restoration Plan* (CRP) for the Hudson Raritan Estuary.<sup>2</sup> Strategies from the CRP for consideration include:

- a) Seek opportunities to restore and create wetlands.
  - Partner with the U.S. Army Corps of Engineers (USACE) and other City, State, and Federal agencies to prioritize wetlands restoration efforts identified in the CRP.
  - Focus ecological restoration projects in regionally significant ecosystem areas, e.g. Jamaica Bay.
  - Work with the all appropriate Federal, State, and City stakeholders to create new wetlands in areas where fragmentation has decimated historic habitat complexes.
- b) Seek opportunities to promote local shorebird population.
  - Continue efforts to monitor and enhance habitat at known nesting sites.
  - Create/expand islands with the beneficial reuse of clean dredged materials.
  - Coordinate wetland restoration and preservation in proximity to known nesting sites.
  - Promote local stewardship and appreciation for NYC shorebirds.
- c) Seek opportunities to restore coastal and maritime forests.
  - Engage in coastal and maritime forest restoration and creation in protected coastal areas of the city.
  - Restore upland forest associated with coastal and maritime forests.
  - Collaborate with Federal and State authorities to locate and coordinate restoration opportunities.
  - Update citywide soils maps to improve ability to restore coastal and maritime forests.
- d) Seek opportunities to improve habitat for oysters, fish, and other aquatic species.
  - Engage in large-scale pilot oyster reef creation and encourage local oysterculture and stewardship. Consider experiments with alternatives such as blue mussels.
  - Engage in small-scale eelgrass pilot projects over a spectrum of different site conditions and installation techniques. Continue monitoring pilot eelgrass program in Jamaica Bay and consider expansion.
  - Install in-water habitat structures (reef balls, textured bulkheads etc.).
  - Remove derelict vessels and degraded bulkheads where feasible.
  - Explore opportunities to install riparian vegetation demonstration gardens/buffers along waterfront parklands and greenways.
  - Cluster complimentary habitat creation efforts such as shorebird islands and wetland creation and concentrate habitat creation/enhancement in protected ecological complexes such as those areas identified in the Waterfront Revitalization Program (WRP) as Special Natural Waterfront Areas.<sup>3</sup>
- e) Evaluate opportunities to improve tributary connections for aquatic species.
  - Further analyze freshwater streams in New York City where new connections could be made either by barrier removal or passage creation, such as removing the impoundment on the lower Bronx River.
- f) Evaluate opportunities to improve water quality in enclosed and confined waters by re-contouring bathymetric depressions using dredge spoils.
- g) Remediate contaminated sediments.

<sup>2</sup> Building on the work of the NY-NJ Harbor Estuary Program (HEP), the *Hudson Raritan Estuary Draft Comprehensive Restoration Plan* (CRP) is a vision and strategy for ongoing ecosystem restoration in the NY/NJ Harbor and provides a good platform for the City's plans for ecosystem restoration. The plan, in draft form currently, was produced by the U.S. Army Corps of Engineers and The Port Authority of New York & New Jersey, in collaboration with Federal, State, municipal, non-governmental organizations and other regional stakeholders. Available online at <a href="https://www.nan.usace.army.mil/harbor/crp">www.nan.usace.army.mil/harbor/crp</a>.

<sup>3</sup> The Waterfront Revitalization Program (WRP) is the city's principal tool for coastal zone management as authorized by Federal and State policies. The WRP designates and maps Special Natural Waterfront Areas, where the city's coastal policy is protect and enhance concentrations of valuable natural resources. More info on the WRP is at <a href="https://www.ci.nyc.ny.us/html/dcp/html/wrp/wrp.shtml">www.ci.nyc.ny.us/html/dcp/html/wrp/wrp.shtml</a>

- Adopt initiatives outlined in the Regional Sediment Management Plan.<sup>4</sup>
- Prioritize contamination hotspots in New York City area for remediation.
- Develop standards for beneficial reuse of clean dredged sediments.

# 8. Consider modification of the *Waterfront Revitalization Program* (WRP) to include additional designation of sites of ecological importance. Areas to be evaluated include:

- The Upper Bronx River, Arverne, Plumb Beach, Southern portion of the Arthur Kill shoreline, portions of the Raritan Bay Shoreline (Conference House Park Paw Paw Wood Butler Manor Mount Loretto-Lemon Creek Park Wolfe's Pond Park Blue Heron Park), Staten Island Greenbelt, Staten Island South Shore Bluebelts.
- Areas highlighted by other lists such as the Natural Areas Initiative of New York City Audubon & New Yorkers for
  Parks, NYS Significant Coastal Fish & Wildlife Habitats, State & Federal wetlands, Islanded Nature and Buffer the Bay
  Reports, Harbor Estuary Program Habitat Workgroup / Comprehensive Restoration Plan sites.

<sup>4</sup> The Regional Sediment Management Plan was produced in 2008 by a workgroup of the NY-NJ Harbor Estuary Program representing professionals at the federal, state, and local levels. The plan calls for the creation of regional advocates to facilitate cooperation between New York and New Jersey on sediment management, including remediation and the beneficial use of clean dredge materials. More info at <a href="https://www.harborestuary.org/rsm.htm">www.harborestuary.org/rsm.htm</a>.



# Enhance the public experience of the "Blue Network" by expanding waterborne transportation, on-water recreation, as well as water-oriented educational and cultural activities.

The Blue Network, or the waterways that surround the city, is one of the city's greatest resources. Waterfront planning seeks to engage all city residents and visitors with the Blue Network through expanding waterborne transportation options, promoting in-water recreation that is safe and accessible to all, and creating the necessary waterfront infrastructure to maximize the use of the waterways for cultural activities, historic events, and educational programs. Throughout the city there are unrealized opportunities to connect people with the water—physically, visually, and culturally—and realize the city's potential as a great waterfront city.

Recent improvements in waterfront access and water quality have made on-water recreation a more accessible and popular activity for residents and visitors to New York City. Boating, fishing, and, in the long term in some areas, even swimming can be part of the recreational options available. Providing access to the water requires careful, coordinated planning that takes into account best usage standards (set by the New York State Dept. of Environmental Conservation), short term decreases in water quality after some rain events, potentially dangerous currents, supervision, as well as shipping channels and industrial activity.

- 1. Promote on-water recreation in suitable locations by establishing access points, docks, and onshore facilities.
  - Explore ways to attract more recreational boat traffic by building more or expanding existing marinas and facilities. This includes exploring:
    - Opportunities to promote smaller marinas city-wide and the opportunities to construct one or more super marina somewhere in the city with mariner center for repairs, leasing, etc.
    - Priority locations and siting criteria for town docks and eco-docks.<sup>1</sup>
    - Funding sources for construction and maintenance of public boating facilities.
    - Encouraging public boathouses at launch sites on private and public property.
    - Reducing or eliminating fees for educational/non-profit uses of public marinas, docks, etc. where feasible.
    - Dredging needs for recreational boat traffic.
    - Minimizing conflicts with other uses on the waterfront and in the waterways.
  - Establish criteria and explore opportunities for new human-powered boat launches taking into account water quality and potential conflicts with commercial boats; and explore means of providing upland space at launch sites for boat storage containers.
  - Explore ways to create a centralized insurance program for boathouses.
  - Explore opportunities to create a waterfront swimming area in Manhattan.
  - Allow human-powered boat launches on public beaches.
- 2. With input from stakeholders, establish design guidelines for in-water construction projects, such as piers and bulkheads, to meet structural and ecological goals and accomodate a wide variety of uses. Guidelines should include the following considerations:

<sup>1</sup> *Town Docks* are docks available for use by the general public. *Eco-docks* are docks designed to minimize harmful impacts on aquatic habitat through features such as minimal shading, floating platforms, etc.

- Establish design guidelines and location criteria for "soft" waterfront edges that create habitat, facilitate water access, manage stormwater, mitigate flooding and control wakes.
- Develop new pier and bulkhead design guidelines with hardware and structural standards.
- Develop new pier and bulkhead design guidelines that integrate ecosystem-enhancing treatments, such as oyster baskets.
- Design bulkheads and piers with metal rungs in the sea wall for getting in and out of the water where appropriate.
- Create design standards for piers and docks that are functional for multiple types of vessels.
- Include consideration of shade and seating in design guidelines.
- Support the creation of workshops and other training and educational courses for waterfront designers, architects, landscape architects, engineers and planners regarding appropriate design of waterfront public spaces.
- Incorporation of the design standards into the *Waterfront Revitalization Program* and State coastal permitting, where appropriate. <sup>2</sup>

# 3. Clarify and enhance regulatory and organizational mechanisms to ensure safety of in-water recreation in order to reduce the potential conflict between the various users of the waterways. This may include:

- Explore the establishment, working with the Coast Guard and other key partners, of a *Harbor Management Plan*, or other mechanism to guide water uses based on appropriate criteria including water quality, adjacency of sensitive infrastructure (such as wastewater treatment facilities) and other compatible uses. <sup>3</sup>
- Consider mandating boater certification and licensing at the State level.
- Working with the Coast Guard, consider creating a centralized data center for incident reporting, conflicts between recreational and commercial boats, and dangerous areas and conditions.
- Use existing boathouses and marinas to promote boater safety education.

#### 4. Increase public knowledge and awareness of our waterfront and waterways.

- Create website with information on public access locations, including type of access (launch, dock, esplanade etc.), water quality, depth, currents, and tides.
- Encourage growth of programs for water-related education for youth and school programs, including swimming classes.

#### Explore renewable energy opportunities at our waterfront and in our waterways.

- Explore opportunities for renewable energy generation along the waterfront and marine-based alternative energy, such as the Roosevelt Island Tidal Energy project.
- Explore options for increasing City oversight of off-shore wind projects.

#### 6. Increase waterborne public transportation.

- Implement ferry policy based on forthcoming EDC Comprehensive Citywide Ferry Study. 4
- Examine long term opportunities for increased ferry and water taxi service.
- Encourage potential ridership by creating public destination and residential populations at appropriate locations.
- Seek opportunities for improved intermodal connections to waterfront transportation, such as MetroCard

<sup>4</sup> The forthcoming *Comprehensive Citywide Ferry Study* by the New York City Economic Development Corporation (EDC) evaluates the feasibility of selected ferry routes and makes recommendations on priority routes.



<sup>2</sup> The Waterfront Revitalization Program (WRP) is the city's principal tool for coastal zone management as authorized by Federal and State policies. The program provides a framework to evaluate all City, State, or Federal discretionary actions.

<sup>3</sup> A Harbor Management Plan is a means to coordinate regulation of various uses and functions related to the water. They are most commonly found in areas much smaller than New York Harbor, but could provide a useful model of a means to mitigate possible conflicts between users of the harbor. More info at <a href="https://www.nyswaterfronts.com/waterfront\_working\_harbormgmt.asp">www.nyswaterfronts.com/waterfront\_working\_harbormgmt.asp</a>

integration, etc.

- 7. Support New York City Office of Emergency Management's creation of a plan for waterborne emergency evacuation to supplement other means of emergency evacuation, including the following considerations:
  - Increase the number and size of ferry landings adequate for emergency evacuation.
  - Modify waterfront infrastructure to allow for emergency ferry access, such as providing openings in railings and docking capacity.
  - Improve coordination between emergency response administrators and private ferry operators.
- 8. Increase environmental stewardship of the waterways.
  - Work with the State and other partners to identify resources to increase infrastructure at the waterfront to provide pump-out stations for larger vessels. 5

<sup>5</sup> Recent New York State legislation bans the discharge of treated or un-treated graywater into the state's waters. In order to comply, additional locations where ships can pump out graywater are necessary, particularly ones that can accommodate large vessels.

#### Pursue strategies to increase the city's resilience to climate change and sea-level rise

While *Vision 2020* is focused on the next ten years, the plan recognizes the need to plan for a much longer timeframe as well. The New York City Panel on Climate Change has projected that sea levels are expected to rise anywhere from 12 inches to 55 inches by 2080. In addition, severe storms and the floods associated with them are expected to occur more frequently. As a coastal city, many New York neighborhoods experience flooding and storm surges. These risks are expected to increase as the

affects of climate change are felt. The Department of City Planning is working with other City agencies on assessing the risks associated with sea level rise in order to develop strategies for the city to increase its resilience. Strategies include regulatory and other measures to improve the flood resistance of new and existing buildings, as well as exploring soft infrastructure approaches to coastal protection.

- 1. Explore a range of options that can be used where appropriate to protect against sea level rise and storm surges e.g. raising the land, levees, wave attenuating features, soft edges. This includes consideration of:
  - Design waterfront infrastructure with anticipation of sea level rise.
  - Explore changes to building codes and zoning for waterfront areas to improve resilience of new buildings to coastal flooding and storm surges.
  - Create structural protection measures to protect waterfront areas and utility and transportation infrastructure from water damage.
  - Identify strategies for retrofitting of existing buildings to protect from flooding.
- 2. Conduct a citywide strategic planning process for climate resilience.
  - This process would include outreach to a range of stakeholders, highlight efforts to assess the risks, costs, and potential solutions for building climate resilience; and outline an ongoing, dynamic, risk-based planning process that can take advantage of new information and projections as they become available
- 3. Analyze urban design implications of more stringent flood protection standards for buildings.
- 4. Work with U.S. Federal Emergency Management Agency (FEMA) to update flood maps to reflect increased coastal flooding risks.
- 5. Modify *Waterfront Revitalization Program* (WRP) to include policies for increasing climate resilience.<sup>1</sup>

<sup>1</sup> The Waterfront Revitalization Program (WRP) is the city's principal tool for coastal zone management as authorized by Federal and State policies. The program provides a framework to evaluate all City, State, or Federal discretionary actions.



#### Increase efficiency of waterfront construction and operations

The city's waterfront is a dynamic, fluctuating entity requiring constant maintenance, repair, and oversight. Today, the complex regulatory process for in-water construction inhibits the ability of private and public owners of waterfront property to build and maintain necessary structures. To implement the improvements to the waterfront envisioned in this plan, property owners and developers must be enabled to meet their needs

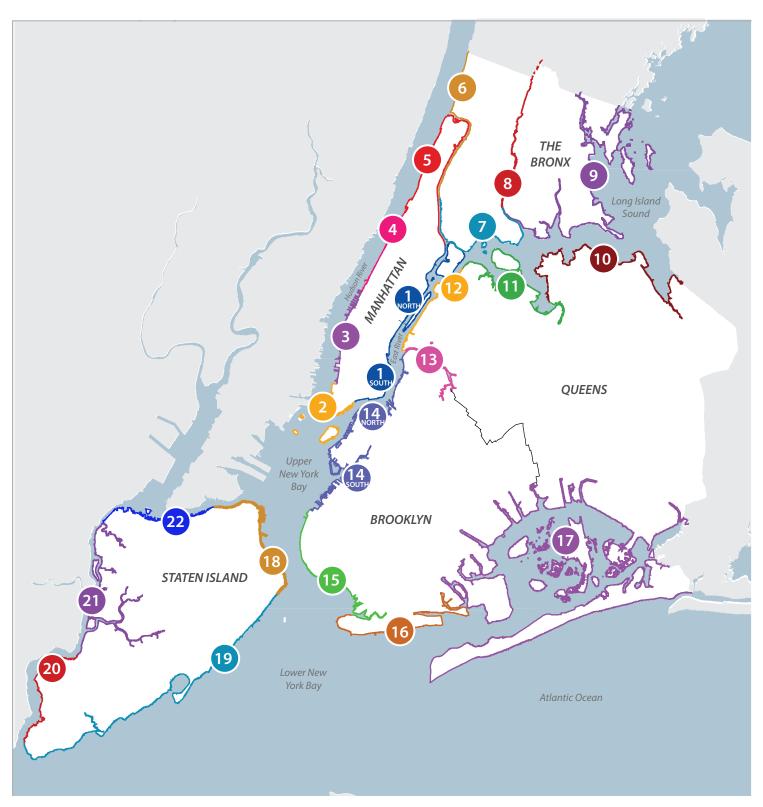
and to prepare for future challenges. Governance of the waterfront is managed by multiple agencies, each with disparate mandates. In order to enhance the waterfront for all the uses we imagine - public access, recreation, the natural environment, maritime industries, housing, and commercial activity – we need better coordination at all levels of government.

- Improve regulatory predictability and efficiency for waterfront permitting.
  - Establish a permitting liaison to assist applicants in filing applications.
  - Create a coordinated process, or one-stop shop, for waterfront permitting.
  - Establish task force to work with Federal, State, and Local agencies and stakeholders to reform in-water permitting processes.
  - Support integration of Coastal Zone Policies with Clean Water Act regulatory permit actions and clarify *Waterfront Revitalization Program* policies encouraging "water-enhanced" uses. <sup>1</sup>
- 2. Analyze the options to streamline City operational procedures dealing with the waterfront and consider the establishment of a City office to oversee all operational matters of the waterfront.
- 3. To make our waterways more usable for all forms of transport and keep them navigable, pursue long-term dredged material management strategy.
  - Clarify role of various agencies in managing dredged material and establish project coordination.
  - Work with State regulators to reclassify dredge as non-hazardous material, based on chemical analysis.
  - Ensure New York Harbor receives fair share of Federal funding for dredging projects.
  - Support bi-state partnership with New Jersey to bundle dredging projects of maritime firms to make dredging more cost effective.
  - Identify new sites to beneficially place dredged materials for non-HARS suitable material. <sup>2</sup>

<sup>1</sup> The Waterfront Revitalization Program (WRP) is the city's principal tool for coastal zone management as authorized by Federal and State policies. The program provides a framework to evaluate all City, State, or Federal discretionary actions.

<sup>2</sup> The *Historic Area Remediation Site* (HARS) is an area in New York Bay where uncontaminated dredged material is placed to remediate the potential contamination caused by the historic dumping of dredged material.

## REACH RECOMMENDATIONS



For the purposes of the Comprehensive Waterfront Plan, the city's waterfront was divided into 22 reaches, or segments. For each reach, the plan identifies a set of site-specific recommendations of how to improve the use of the waterfront - for public access, maritime industry, water recreation, environment, new development, etc. These recommendations are based on the Department of City Planning's studies, as well as extensive input from local stakeholders at public workshops held in each borough. Like the programmatic recommendations, these are in draft form, and presented for the purposes of fostering further public discussion.

# **REACH 1-EAST RIVER NORTH**

**Location:** Manhattan's East River waterfront from E. 59th St. to E. 125th St., including Roosevelt Island, and Randall's and Ward's Islands

Upland Neighborhoods: Upper East Side, East Harlem

#### **Summary of Preliminary Recommendations**

#### **East River Greenway**

1

- Form a long-term management strategy to design, fund and maintain the East River esplanade
- Improve quality of existing esplanade (widen where possible, provide noise barriers, seating, lighting, dedicated paths, drainage, ADA access) and improve maintenance and current conditions of esplanade
- Explore alternative edge conditions and opportunities for in-water recreation in configurations that ensure boater safety and minimize conflicts with commercial shipping, such as "faux-coves"
- Repair bulkhead prior to esplanade improvements

#### East River Greenway- E. 111th St.

1.a

 Work with DDC to ensure that their planned reconstruction of the pedestrian bridge at E. 111th St. maximizes the Greenway and provides for a closer relationship to the waterfront

#### East River Greenway- E. 90th St.

1.6

- Improve pedestrian connection across FDR Dr. to 90th St. Pier to facilitate access to water. Accommodate pedestrians carrying boats by widening pedestrian bridge
- Provide safe ladder and gates for the existing row boating at E. 90th St.

#### East River Greenway- E, 73rd to E. 75th St.

**(1.c** 

 Explore areas of the waterfront that can be made publicly accessible while maintaining the steam plant's facility needed for plant operation

#### Queensboro Bridge Area

2

- Facilitate pedestrian upland access to the waterfront from E. 59th to E. 60th Streets, as recommended by Community Board 8's 197-a plan. Direct people to the waterfront through streetscape improvements, signage, landscaping, artistic or design elements which indicate proximity to the waterfront
- Advance proposed Andrew Haskell Green Park

#### Randall's and Ward's Island

3

- Provide in-water recreation such as a boat launch in the cove
- Improve access via Ward St. bridge, including better maintenance and increased hours of operation
- Support planned Renewable Energy Park and education center
- Support Randall's Island Sports Foundation's plans to complete waterfront pathway completely around the island
- Support Randall's Island Sports Foundation's plan to create a soft edge in areas where the bulkhead has deteriorated

#### Roosevelt Island

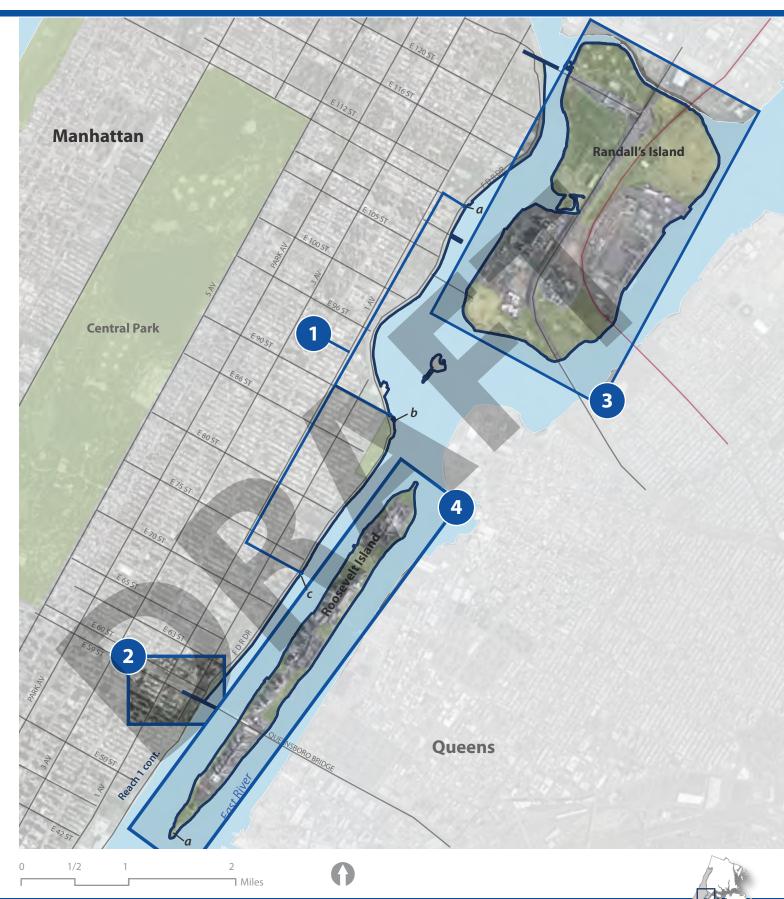
4

- Support continued evaluation of effectiveness of tidal energy and strengths of river currents
- Provide in-water recreation access, such as a boat launch

#### Roosevelt Island, Southern End

**(4.**a

Support an improved Southpoint Park with a waterfront esplanade





# **REACH 1-EAST RIVER SOUTH**

Location: Manhattan's East River waterfront from the Brooklyn Bridge to E. 59th St.

Upland Neighborhoods: Lower East Side, Midtown East

#### **Summary of Preliminary Recommendations**

#### **East River Greenway**

1

- Form a long-term management strategy to design, fund and maintain the East River esplanade
- Explore alternative edge conditions and opportunities for in-water recreation in configurations that ensure boater safety and minimize conflicts with commercial shipping, such as "faux-coves"
- · Provide concessions for boaters and other visitors

#### East River Greenway - E. 53rd to E. 59th St.

**1.**a

 Build esplanade on existing out board piles between E.53rd and E. 59th St.

#### **East River Greenway - United Nations**

1 h

 Study options for UN Consolidation building in exchange for funding of park improvements and waterfront esplanade

#### East River Greenway - E. 38th to E. 41st St.

(1.c

- Improve former ConEd waterfront platform for public access
- Study pedestrian access options from upland areas to the waterfront pier

#### East River Greenway - E. 23rd to E. 34th St.

(1.d

- Explore long-term opportunities for maximizing water-dependent and water-enhancing uses along the waterfront
- Upgrade esplanade to continuous, consistent design with amenities
- Study opportunities for additional temporary uses of the 34th St. Heliport

#### East River Greenway - E. 25th St.

(1.e

 Improve signage at Waterside Plaza from southern esplanade entrance at E. 25th St.

VISION 2020: THE NEW YORK CITY COMPREHENSIVE WATERFRONT PLAN

· Make bridge at E. 25th St. ADA accessible

#### East River Greenway - E. 13th to E. 15th St.

1.*f* 

- Explore opportunities to improve bicyle and pedestrian connections in the area where the path narrows adjacent to the steam plant, including better lighting, screening, and signage to advise users of the limited right-of-way
- Improve upland access to East River Park, especially ADA access at E. 14th Street

#### Stuyvesant Cove

2

Support Solar 2 and expansion of environmental educational center

#### Pier 42

- Study for use as a park with water-dependent community uses
- · Explore potential for emergency access

#### Pier 36

3.

 Support plans to create public waterfront area as part of Basketball City development

#### Pier 35

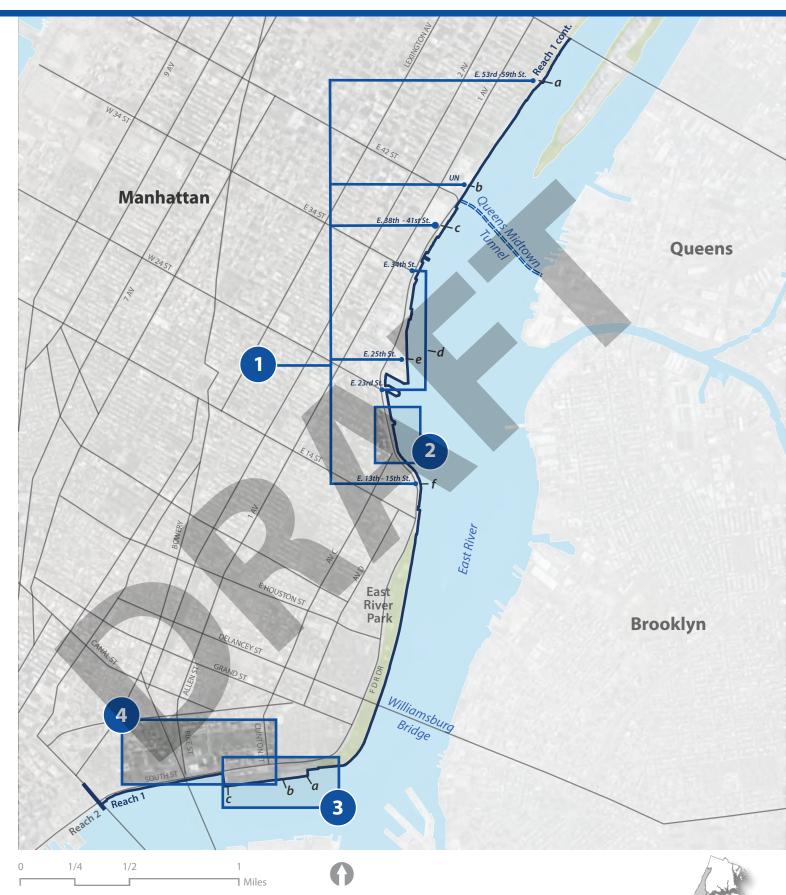
3.*c* 

Support plans to create public pier with an eco-park component

#### Lower East Side

4

 Improve upland streetscape connections, along Montgomery, Rutgers, and Catherine Streets, as described in the East River Waterfront master plan





# **REACH 2-LOWER MANHATTAN**

**Location:** Southern tip of Manhattan, from the Brooklyn Bridge on the East River to Chambers St. on the Hudson, including Governors, Ellis and Liberty Islands

Upland Neighborhoods: South Street Seaport, Financial District, Battery Park City

#### **Summary of Preliminary Recommendations**

#### Brooklyn Bridge Area

1

- Explore path alternatives and improve upland connections to the waterfront
- Improve west side of South St. sidewalk through widening tree plantings, seating, signage, art, and paving to provide safer access to waterfront

#### **New Market Building**

**(2.**a

- · Support redevelopment for interim or permanent use
- · Provide public waterfront access and amenities
- Evaluate for historic significance

#### Pier 17 and TIN Building

2.b

- · Improve waterfront access and connectivity
- Encourage water dependent uses as part of a mixeduse development

#### Pier 16

2.0

- · Improve with seating, railing, and landscaping
- Create infrastructure to allow for future possibility of various in-water recreation activities, provided there are necessary measures to ensure safety

#### Pier 13

**2**.d

- Advance construction of pier before permit expires
- Provide in-water recreation, educational resources, passive recreation, or other water-dependent uses

#### The Battery

3

- Create continuous waterfront access from East River esplanade to Hudson River esplanade
- Study means to improve pedestrian connectivity between Peter Minuit Plaza and the Lower Manhattan East River Esplanade - options include moving the Battery Tunnel entrance further north or creating a plaza above the existing entrance in front of the Battery Maritime Building

#### **Battery Maritime Building**

3.0

· Provide elevated views to waterfront

#### **Coast Guard Station**

3.b

Reconsider for water dependent use or incorporate with esplanade

#### Esplanade at the Battery

3.0

· Relocate Liberty Island screening tents

#### Pier A

(**3.**a

- Coordinate with Battery Park City Authority to determine appropriate use
- Ensure public access and amenities

#### Governor's Island

4

- Advance Governor's Island Park master plan
- Support planned development of the Harbor School
- Encourage adaptive re-use of buildings
- Explore possibility of boat tie-ups
- Provide ball fields, active recreation space, and community gardening





# **REACH 3-LOWER WEST SIDE MANHATTAN**

Location: Hudson River from Chambers St. to W. 59th St.

Upland Neighborhoods: TriBeCa, SoHo, West Village, Chelsea, Clinton

#### **Summary of Preliminary Recommendations**

#### Pier 40

 Given need for revenue to support maintenance of Hudson River Park, evaluate Pier 40 for commercial uses with waterfront access and in-water recreation, possibly including a mooring field

· Repair and stabilize existing structure

#### Piers 32 and 46

Promote substantially deteriorated "ghost piers" as wildlife habitat

#### Pier 52

Provide perimeter waterfront access around new waste-transfer station

#### Pier 57

- Advance plans made by Hudson River Park Trust for a multi-use pier including public market, art gallery, and rooftop park
- · Provide in-water recreation

#### W. 30th St. Heliport

• Explore opportunities for site redevelopment after vacated

#### W. 49th to W 52nd St.

Explore creation of elevated viewing deck overlooking cruise terminals

Improve pedestrian and bicycling paths along cruise terminals

#### Piers 92 & 94

 Support DOT and Merchandise Mart plans to reconfigure drive lanes and pedestrian paths in front of Piers 92 and 94 to facilitate pedestrian access to Piers 92, 94 and 96 and Clinton Cove Park

#### Pier 97

4

 Support relocation of Department of Sanitation parking and development with active recreation uses and ship berths





# **REACH 4**-UPPER WEST SIDE MANHATTAN

Location: Hudson River from W. 59th St. to W. 125th St.

Upland Neighborhoods: Upper West Side, Morningside Heights

#### **Summary of Preliminary Recommendations**

#### Reachwide

- Improve access through enhanced streetscape, better signage, and more wayfinding to and within Riverside Park and Riverside Park South
- Explore opportunities for waterborne emergency access

#### Riverside Park South

• Explore tunneling of the Miller Highway

#### Riverside Park

· Create dedicated pedestrian and bike pathways

- Evaluate for commercial uses on the waterfront, such as restaurants and other forms of retail
- Provide additional access points from Riverside Park to the waterfront through bridges over the highway or other means









# **REACH 5**-NORTHERN MANHATTAN

Location: Harlem and Hudson River north of 125th St.

Upland Neighborhoods: Manhattanville, Hamilton Heights, Washington Heights, Inwood, Harlem, East Harlem

#### **Summary of Preliminary Recommendations**

#### 135th St. Marine Transfer Station

· Find appropriate use for the dormant station

#### 181st St. to Dyckman

 Extend pedestrian greenway to connect from George Washington Bridge to Dyckman St.

#### Dyckman Street Marina

**2.**b

3

· Support proposal for small marina with a concession facility

#### Baker Field

- Provide enhanced waterfront public access
- Provide public boat launch
- Preserve soft edge and tidal mud flats

#### E. 125th to E. 135th St.

#### W. 215th & W. 216th Streets

4

 Provide street-end waterfront parks and explore possible remediation of natural environment

Sherman Creek

- Study for redevelopment possibilities
- · Preserve natural habitat and wetlands
- Reopen Academy St. for continuous waterfront access and develop with waterfront park and esplanade
- Provide waterfront access via 9th Ave. at wedgeshaped property at 208th St. and ensure tidal mudflat preservation

#### Harlem River Speedway

 Improve maintenance, signage and wayfinding throughout the Harlem River Speedway (especially at southern entrance)

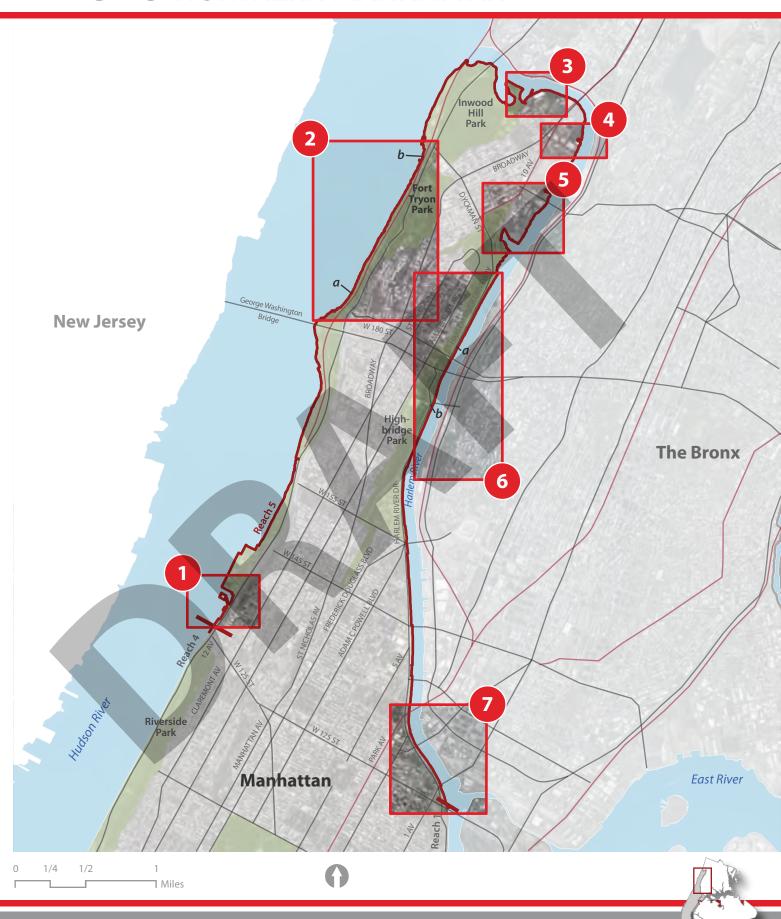
#### 181st St. Pedestrian Bridge

 Work with DDC to ensure that the planned reconstruction of the pedestrian bridge at E. 181st St. maximizes connections to the waterfront

#### High Bridge, E.173rd St.

- Support plans to create connection to the Bronx through re-opening of the bridge
- Create a connection to the Harlem River Speedway

- · Complete Greenway connection to Harlem River Park at E. 135th St.
- Improve upland connections between the existing park and the future waterfront esplanade
- · Consider future uses for DOT staging area



# **REACH 6-NORTHWEST BRONX**

Location: Harlem and Hudson Rivers from Yonkers city line to Macombs Dam Bridge

Upland Neighborhoods: Riverdale, Spuyten Duyvil, Kingsbridge, Marble Hill, University Heights, Morris Heights, Highbridge

#### **Summary of Preliminary Recommendations**

#### North of University Heights Bridge

**(1.***a* 

 Create a Waterfront Action Plan (WAP) that would include this City-owned site and privately owned property to promote the redevelopment of this area, including the creation of Regatta Park

#### South of University Heights Bridge

(1.t

 Study redevelopment potential for residential or parkland to connect to Roberto Clemente State Park to the south and the Regatta Park to the North

#### High Bridge

**2.**a

 Develop access point to Manhattan through rehab of the High Bridge

#### Ped. Bridge over Major Deegan at 161st St.

3

 Improve connectivity to Mill Pond Park over the Major Deegan pedestrian bridge by removing barriers impeding pedestrian crossing

#### Depot Place / Harlem River Promenade

2

- Improve access to waterfront by creating upland connections with appropriate crossings
- Explore public recreational opportunities on Cityowned site and on privately owned site
- Explore connecting Depot Place to Roberto Clemente State Park with a possible connection to Westchester County greenway through the development of the Putnam rail right-of-way





# **REACH 7-SOUTH BRONX**

**Location:** Harlem River, Bronx Kill, East River and Bronx River from the Bronx Terminal Market to the Bruckner Boulevard Bridge

Upland Neighborhoods: Mott Haven, Port Morris, Hunt Point

#### **Summary of Preliminary Recommendations**

#### Lower Concourse / Harlem River WAP

1

 Support the development of the waterfront including required waterfront access and open space

#### *Pier V (Former Velodrome Site)*

**1.**a

· Develop land for public use and open space

#### 144th St.

1.b

 Fund acquisition and construction of proposed 2-acre park dependant on the redevelopment of the site north of the proposed park

#### 138th St. Bridge (Padded Wagon Site)

1.

 Plan for residential and commercial development of site (lease comes up in 2014)

#### Expansion of Harlem River W.A.P.

2

 Rationalize and improve public access with redevelopment between Park and Lincoln Avenues, including provisions for improvements to street-ends

#### Park Ave Street End

2.0

Explore possibility of public waterfront access and possible non-motorized boat launch

#### **Hunts Point**

3

- Support implementation of the South Bronx Greenway Plan
- Identify opportunities to attract tall ships and other educational programming to the waterfront

#### **Bronx Kill**

3.0

 Explore improvements to support habitat restoration and, where feasible, the navigability of the Bronx Kill for kayaks and canoes.

#### 132nd St. / 134th St.

**3.***l* 

Study street ends for recreational or industrial purposes

#### **Hunts Point South**

3.c

Study corrections site for potential redevelopment opportunities

#### Farragut St. End & Marine Transfer Station

**3.**a

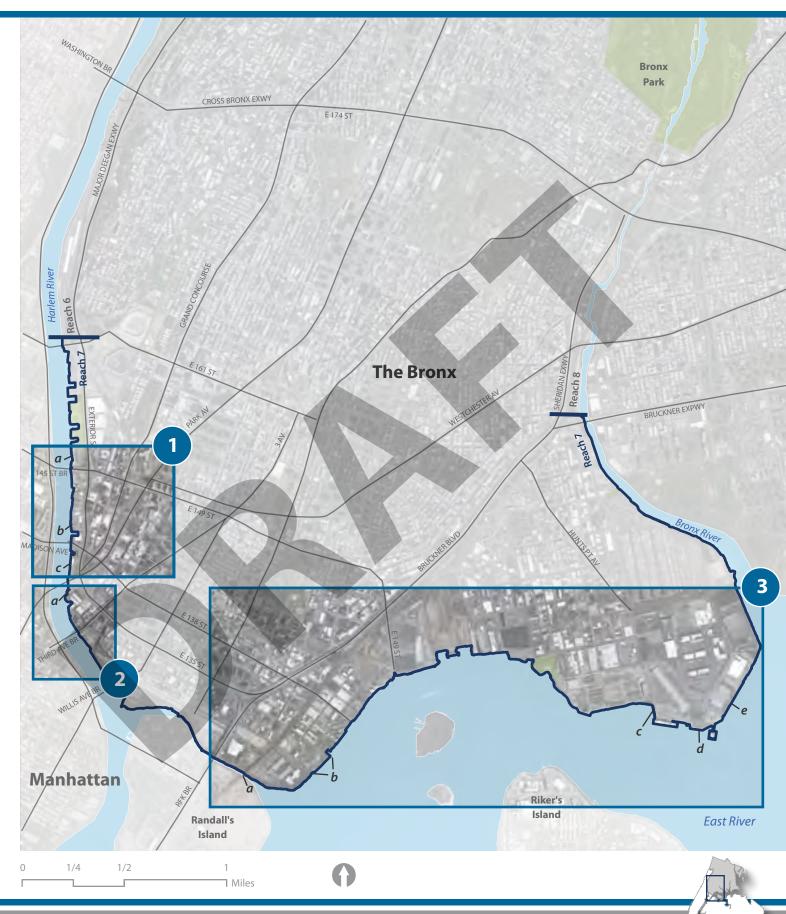
- · Support improvements at Farragut St. end
- Balance needs of city's waste management with those of the community

#### **Hunts Point Market**

3.6

 Explore waterborne transportation modes for the movement of goods to the Food Distribution Center, as well as supporting infrastructure, such as a pier for fishing vessels and freight ferries







# **REACH 8-BRONX RIVER**

Location: Bronx River from Westchester County border to Bruckner Boulevard

**Upland Neighborhoods:** Woodlawn, Wakefield, Bronxdale, Williamsbridge, West Farms, Bronx River, Crotona Park East, Hunts Point, Soundview

#### **Summary of Preliminary Recommendations**

#### Bruckner/Sheridan Interchange

1

- Support the continued success of the Hunts Point Market by improving access
- Identify improvements to waterfront access and open space connections along the Bronx River in conjunction with the State's Bruckner-Sheridan Interchange projectaccess and open space connections along the Bronx River

#### Trash Boom

1.a

Coordinate maintenance to minimize unsightly trash collection at this location

#### 172nd St.

1.b

· Create connection for bike bridge next to Amtrak site

#### Starlight Park

1.0

· Restore the shoreline in Starlight Park

#### **Bronx River Interagency Land Coordination**

**2.**a

- Address issues of water quality, particularly CSO's
- Provide access points and connections for Bronx River Greenway (examples include Westchester Ave. and Bruckner Blvd.)

#### Waterfalls in Bronx River

**(2.**b

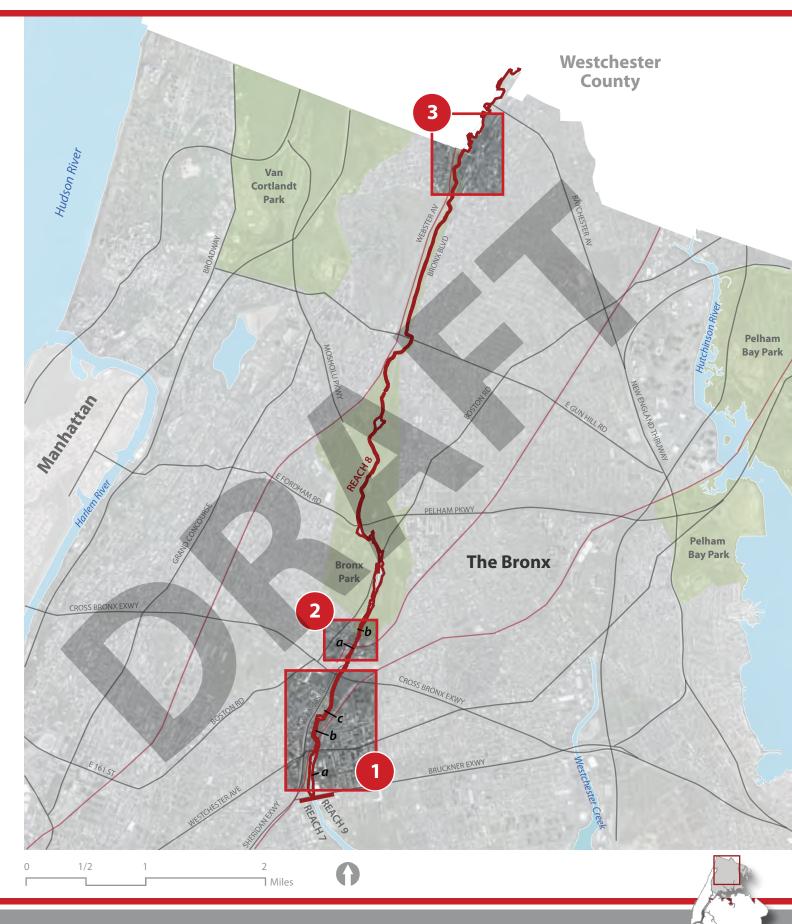
· Improve canoe passage around waterfalls

#### Westchester County Greenway

3

 Provide pedestrian connection to greenway, coordinate connection between greenway in Westchester and the Bronx







### **REACH 9-EAST BRONX**

**Location:** From the east side of the Bruckner Expressway Bridge on the Bronx River to the Westchester County line at Pelham Manor

**Upland Neighborhoods:** Soundview, Harding Park, Clason Point, Castle Point, Throgs Nexk, Silver Beach, Locust point, Edgewater Park, Eastchester Bay, Country Club, Spencer Estates, Co-op City and City Island

### **Summary of Preliminary Recommendations**

### Reachwide

 Explore opportunities for new capacity for dry bulk/ liquid operations (may require dredging). Possible locations include Westchester Creek, Eastchester Bay, or Hutchinson River

### Loral site

- Support brownfield clean-up and redevelopment of privately owned site
- Seek to provide public waterfront access

### Clason Point

• Provide boat launch and fishing facilities

### Zerega Industrial Area

 Study development of two-acre City-owned site north of Watson Ave. with water-dependent industrial uses and create street-end access at Watson Ave.

### Ferry Point Park

Protect the shore of the park from erosion

### SUNY Maritime College

 Pursue development as a "hub" for maritime support services in conjunction with educational and workforce development opportunities for citywide residents

### Pelham Bay Park

Support citizen clean-up of the Hutchinson River from dumping and debris

### Eastchester Brownfield Opportunity Area

**(6.***a* 

- Explore strategies for revitalizing shipping and barging industry
- Work with BOA to improve water quality of Hutchinson River and Eastchester Bay

### Eastchester

(6.1)

· Explore access to waterfront at MTA bus yard

### Co-op City

**6.**c

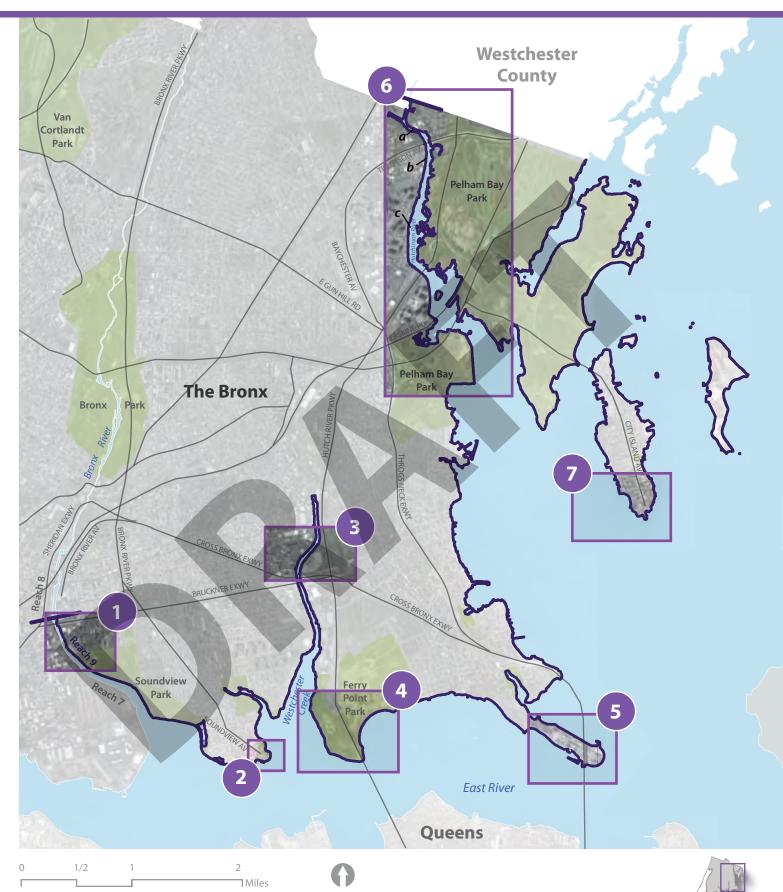
 Provide public waterfront access and connection from Pelham Bay Park to Co-Op City, possibly including a bike path

### Belden Point, City Island

7

Pursue funding to restore the shoreline and establish waterfront access







# **REACH 10**-QUEENS NORTH SHORE

Location: Flushing Bay to Nassau County

Upland Neighborhoods: College Point, Malba, Whitestone, Beechhurst, Bay Terrace, Bayside, Douglas Manor, Douglaston

### **Summary of Preliminary Recommendations**

### MacNeil Park

1

Explore possible locations for a human-powered boat launch

### Whitestone Pier

2.a

 Support leasing and operation of pier to provide onwater recreation

### **Rock Crushing Site**

**2.**b

Support rezoning and residential redevelopment that incorporates public waterfront access





# **REACH 11**-QUEENS UPPER EAST RIVER

Location: North Shore of Queens from 20th Ave. in Astoria to the Flushing River, inlcuding Riker's Island

Upland Neighborhoods: Astoria, East Elmhurst, Corona, Flushing

### **Summary of Preliminary Recommendations**

### Flushing Bay

Study hydrology and means of improving water circulation and siltation

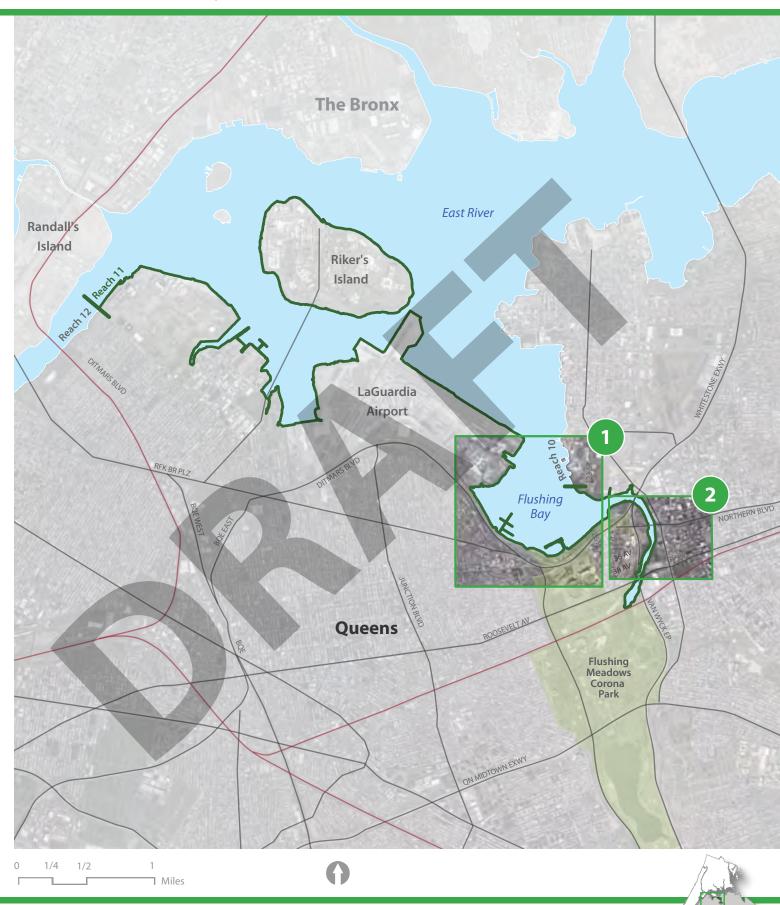
- Explore options for expanding tie-up capacity for recreational boats
- Improve maintenance of Flushing Bay Esplanade
- Improve pedestrian connections between Flushing Bay Esplanade and upland sites including Flushing Meadows-Corona Park

### Flushing River

- Support redevelopment and creation of public space as envisioned in preliminary Brownfield Opportunity Area master plan
- Study options to improve pedestrian connections from Flushing Bay to and across Flushing River
- Improve pedestrian/bike connections between Flushing and Willets Point on Northern Blvd. and Roosevelt Avenue Bridges
- Support and maintain active industrial use of Flushing River north of Northern Blvd.









# **REACH12**-WEST QUEENS

Location: East River, from Newtown Creek to 20th Ave. in Astoria

Upland Neighborhoods: Hunters Point, Long Island City, Ravenswood, Astoria

### **Summary of Preliminary Recommendations**

### Reachwide

- Continue to implement Queens East River and North Shore Greenway
- Enhance wetlands habitat at Pot Cove, Hallets Cove, Broadway Street Extension, under the Queensboro Bridge, 44th Drive, and Hunter's Point South

### Hallets Point / Pot Cove

 Support appropriate medium-density redevelopment with continuous waterfront access around peninsula

- Upgrade transportation infrastructure by opening up Astoria Blvd.
- Enhance wetlands habitat at Pot Cove and Hallets Cove
- Support repair of Hallets Cove Esplanade

### **Broadway Waterfront Access**

 Improve connection between Costco site and Socrates Sculpture Park as part of Queens East River and North Shore Greenway

### Queens Plaza South Improvement Project

- Advance planned public waterfront access at DOTowned parcel under Queensboro Bridge as part of Queens East River and North Shore Greenway
- Enhance wetlands habitat

### **Anable Basin**

4

 Explore options for redevelopment consistent with surrounding context of upland community and look for opportunities to incorporate recreational access to the water

### 44th Dr. Parking Lot

**4**.a

 Explore options for public access as part of Queens East River and North Shore Greenway with a natural edge and habitat area

### **Hunter's Point South**

5

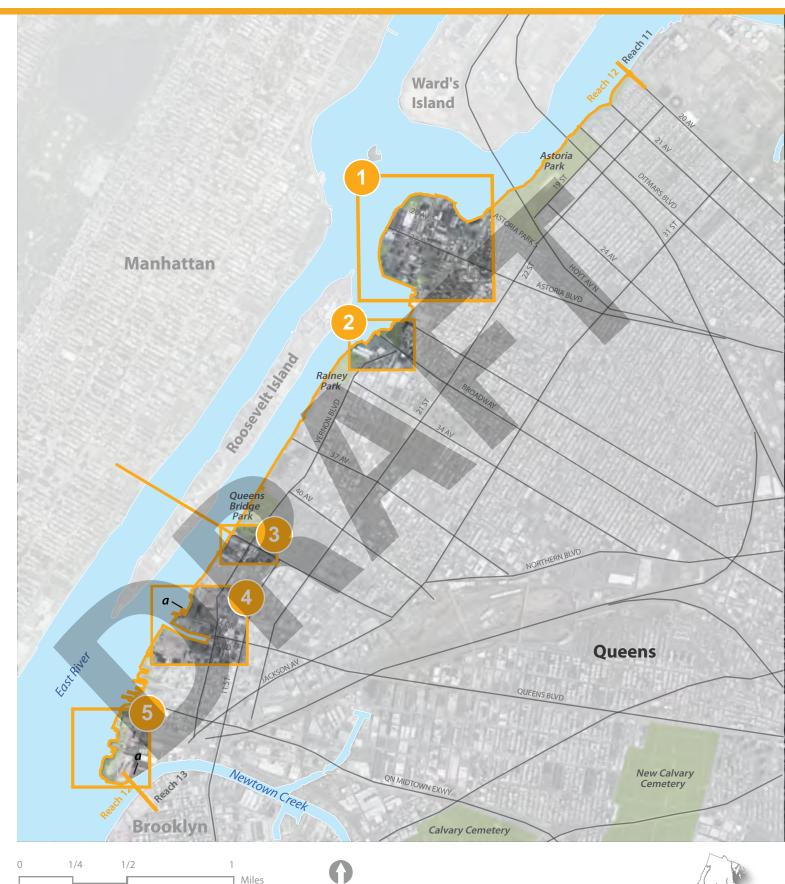
 Continue to support redevelopment and enhance shoreline wetlands habitat as part of plans for public access

### 2nd St. Boat Launch

5 0

 Support planned hand-powered boat launch and explore opportunities for including a boathouse







# **REACH 13**-NEWTOWN CREEK

Location: Newtown Creek, between Brooklyn and Queens

Upland Neighborhoods: Greenpoint and East Williamsburg in Brooklyn, Hunters Point, Dutch Kills, and Maspeth in Queens

1

### **Summary of Preliminary Recommendations**

### Reachwide

- Support the remediation and habitat enhancement of the creek
- Support Brownfield Opportunity Area study to identify businesses and their economic impact as part of an initiative to encourage industrial growth and development
- Promote waterway for goods transport with a focus on dry bulk and liquids through dredging and bulkhead repair
- Manage potential conflicts between recreational boaters and industrial use of the waterway
- Encourage marine waste transportation to replace truck traffic
- Overcome regulatory difficulties to future redevelopment due to possible Superfund designation

### 54th Avenue Site

Reevaluate for residential/commercial development and public access

### Manhattan Avenue

• Improve public waterfront access area and boat launch

### **Greenpoint Avenue**

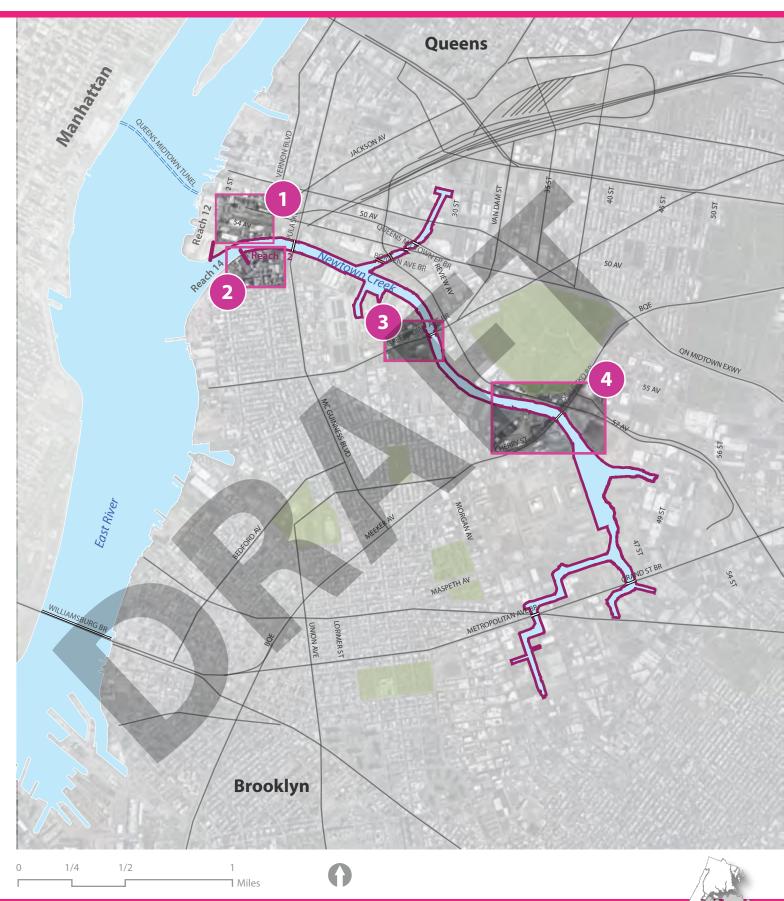
3

 Provide public waterfront access in a configuration compatible with adjacent industrial uses and Greenpoint Avenue bridge

### Kosciusko Bridge

- Support repair/replacement of bridge infrastructure
- Explore opportunities for safe indirect-contact in-water recreation, in consultation with State and Federal regulators







# **REACH 14 N.-BROOKLYN UPPER BAY NORTH**

Location: East River and Upper Bay from Newtown Creek to Atlantic Ave.

Upland Neighborhoods: Greenpoint, Williamsburg, Navy Yard, Vinegar Hill, DUMBO, Fulton Ferry, Brooklyn Heights

### **Summary of Preliminary Recommendations**

### 65 Commercial St.

1

 Explore options for funding and relocation of MTA facility and construction of a public park

### Dupont St. Site (Greenpoint Lumber)

2

 Support mixed use redevelopment of site to facilitate housing, expansion of Newtown Barge Park, and provision of public access

### India St. Pier

**3.**a

- Support appropriate mixed use development of upland site and integration of pier into waterfront public access, consistent with the Greenpoint Williamsburg Master Plan
- Support design of pier for water taxi service and onwater recreation

### Java St. Pier

**3.**l

Explore opportunities for in-water recreation and water-related educational programming

### **Bushwick Inlet Park**

4

- Support protection of habitat and wetland restoration
- Remediate National Grid site land and water contamination
- Continue efforts to secure funding for acquisition and park development
- Provide in-water recreation (get downs, boat launch)

### Williamsburg Bridge

5

 Explore potential for open space under bridge dependent on finding relocation sites for current DOT and DCAS facilities

### Brooklyn Navy Yard

6

- Support continued economic development through industrial uses
- Explore opportunities for public access (including views of docks, point access, and paths) around and within Brooklyn Navy Yard where appropriate.
- Support preservation of historic structures
- Support creation of new graving dock capacity and associated dredging

### ConEdison site at Division Ave.

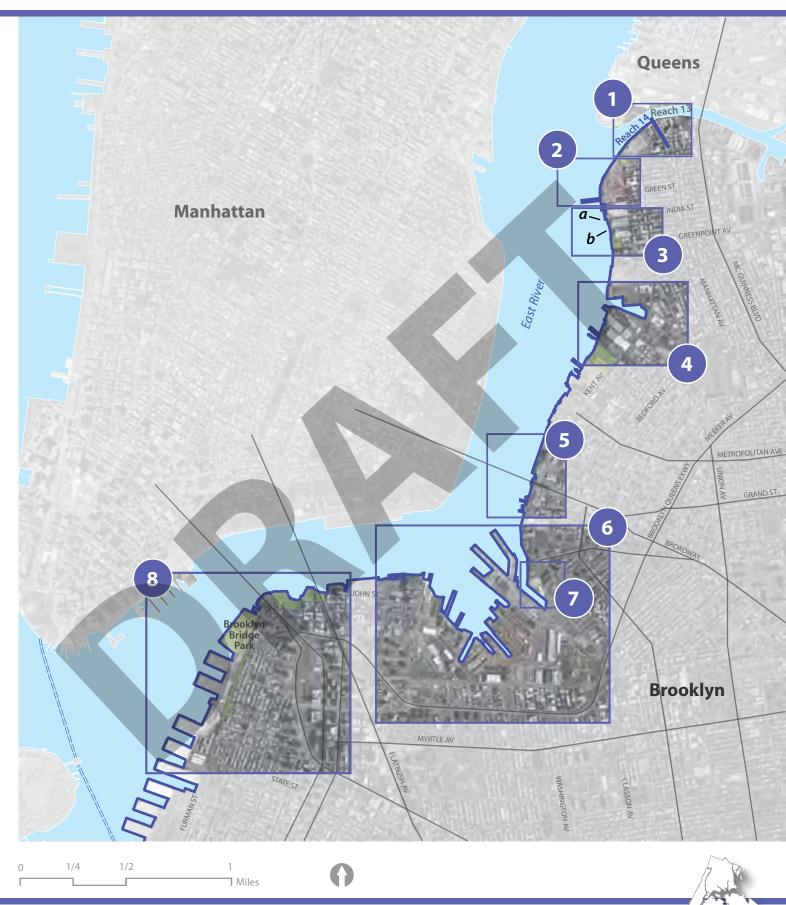
7

 Explore options for redevelopment for industrial and/ or commercial uses with opportunities for public access if appropriate

### Brooklyn Bridge Park

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- Support continued development as envisioned including habitat enhancement, residential and hotel uses, and in-water recreation
- Explore permanent funding options
- Support development of water-related educational programming
- Explore improvements to mass transit options to park





### **REACH 14 S.-BROOKLYN UPPER BAY SOUTH**

Location: Buttermilk Channel and New York Upper Bay from Atlantic Avenue to Owls Head

Upland Neighborhoods: Cobble Hill, Red Hook, Gowanus, Sunset Park

### **Summary of Preliminary Recommendations**

### **Piers 7-12**

1

- · Support continuation of industrial uses
- Support appropriate alignment of Brooklyn Greenway plan through this area
- Explore preservation of historic properties and creation of waterfront interpretive center focused on history of working waterfront
- Support use of green port technology, such as cold ironing
- Minimize traffic conflicts between trucks and pedestrians/bicyclists
- Pursue development as a "hub" for maritime support services in Atlantic Basin
- Support opportunities for active public use of cruise terminal on days when ship is not in port
- Study opportunities for active water-related public uses, such as recreation and educational programming

### 280 Richards St.

2

 Support appropriate development with uses compatible with adjacent water-dependent industry and explore opportunities for incorporating public access

### Gowanus Canal

- Support infrastructure improvements to improve water quality and remediation of contaminated soil and sediments through such initiatives as planned upgrade of the pumping station and flushing tunnel, Superfund cleanup program, and other efforts
- Support rezoning for a mix of uses where appropriate in underutilized areas with provisions for continuous waterfront public access, and with cleanup of contaminated sites consistent with applicable City, State, and Federal standards
- Explore opportunities for safe indirect-contact in-water recreation, in consultation with State and Federal regulators
- Support preservation of historic properties
- Support continued industrial activities
- Support plans to use street end parks and pervious surfaces to capture stormwater and provide education to public about stormwater management

### 3rd Ave./3rd St. Site

4

- · Continue ongoing remediation efforts
- Explore options for reuse along with providing public and visual access to waterfront

### Public Place Site

5

 Support site remediation in cooperation with responsible parties and State and Federal regulators, and pursue planned housing development with public waterfront open space

### Sunset Park

6

- Support recommendations of EDC's Sunset Park Vision Plan for future infrastructure improvements to maximize efficient movement of goods
- Support appropriate alignment of Brooklyn Greenway plan through this area
- Expand berthing areas with restoration of 39th St. pier and 35th St. pier
- Actively market marine transport to local businesses
- Explore rehabilitation of Pier 6 for possible dry bulk/ liquid operations
- Pursue maritime industrial development, possibly as a "hub" for maritime support services at BAT Pier 4, 23rd St. pier or 39th St.

### **Bush Terminal Piers Park**

- Advance plans for park including remediation and explore opportunities for enhanced upland connections
- Explore opportunities for in-water recreation where appropriate
- Explore funding sources for planned environmental education center
- Design park access to minimize pedestrian and industrial business conflicts
- Explore options for preservation of deteriorating piers





# **REACH 15-SOUTHWEST BROOKLYN**

Location: Owls Head to Sea Gate

Upland Neighborhoods: Bay Ridge, Bensonhurst, Bath Beach, Gravesend, Coney Island

### **Summary of Preliminary Recommendations**

### 69th Street Ferry

Denyse Wharf

1

· Support planned eco-dock for kayakers and boaters

### Verrazano Bridge to Bay Parkway

2

**2**.a

 Support extension of bike path and repairs/ reconstruction of exising path and sea wall

• Explore opportunities for activation of site for public

### **Gravesend Bay**

3

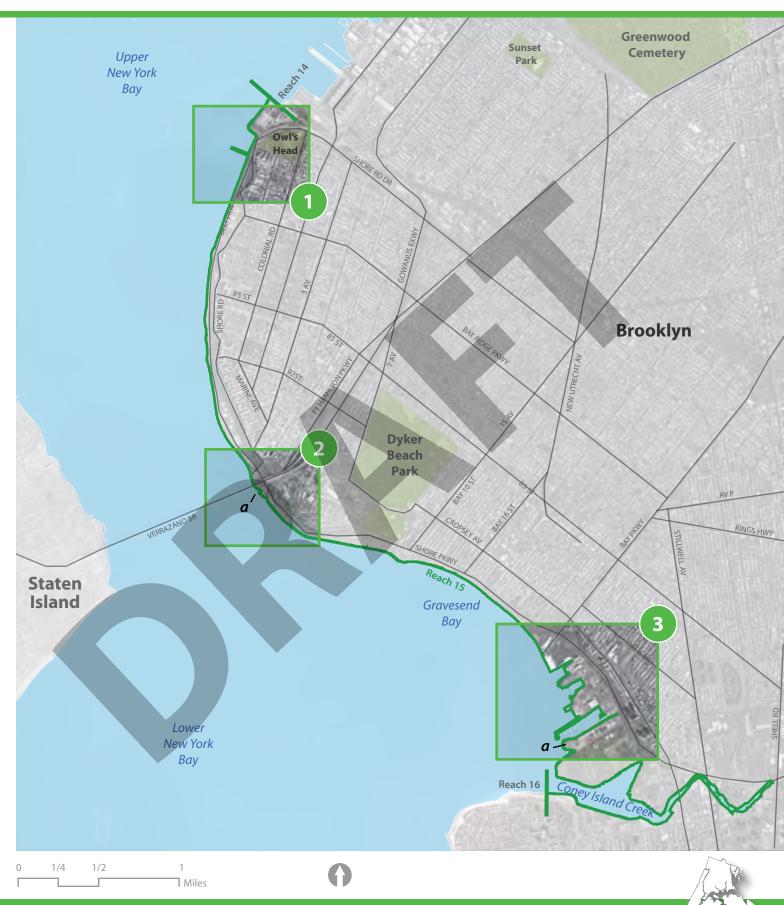
- Support Southwest Brooklyn Marine Transfer Station
- Explore provision of public waterfront access at redevelopment sites

### Westshore Ave. Site

(**3.**a

Support remediation as condition of possible development







## **REACH 16** - CONEY ISLAND & SHEEPSHEAD BAY

Location: Sea Gate to Plumb Beach

Upland Neighborhoods: Sea Gate, Coney Island, Brighton Beach, Manhattan Beach, Sheepshead Bay

### **Summary of Preliminary Recommendations**

### Coney Island Creek

1

- · Preserve salt marshes and ecologically sensitive areas
- Explore opportunities to improve public waterfront areas, including access for boating and fishing

### Special Coney Island Mixed Use District

2

Study land use and regulation to facilitate appropriate development

### Coney Island

3

- · Support ongoing preservation of historic properties
- Explore opportunities for enhanced in-water recreation including training for water sports and lifeguards
- Promote Coney Island Aquarium and other programs to educate the public about existing waterfront activities and resources

### Brighton Beach Muni Lot

4

Support appropriate redevelopment that enhances public waterfront access

### Brigham Street Park

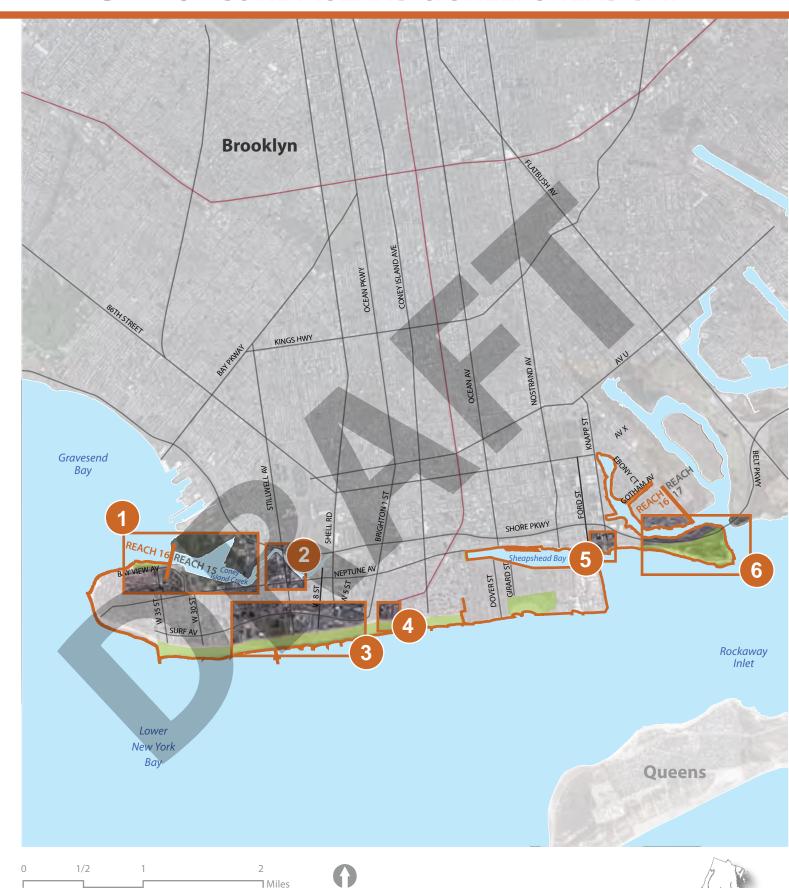
5

Explore opportunities for enhanced public access by integrating into adjacent Plumb Beach

### Plumb Beach

- Mitigate against continuing erosion through sand replenishment to enhance natural habitat
- Re-build bike paths







### **REACH 17**-JAMAICA BAY / ROCKAWAY

**Location:** Southern shore of Brooklyn from Marine Park to Spring Creek, Queens from Spring Creek to the Nassau County Border, the Rockaway Peninsula, and the islands and waters of the bay.

**Upland Neighborhoods:** Flatlands, Mill Basin, Bergen Beach, Canarsie, Ozone Park, Howard Beach, Broad Channel, Far Rockaway, Edgemere, Arverne, Rockaway Beach, Rockaway Park, Belle Harbor, Neponsit, Roxbury, Breezy Point

### **Summary of Preliminary Recommendations**

### **Brooklyn Community District 5**

1

- Preserve and promote public awareness of salt marshes and ecologically sensitive areas
- Support rebuilding bridges on Belt Parkway with improved pedestrian connectivity between the waterfront and greenway
- Explore opportunities for water recreation such as boating and fishing
- Improve pedestrian access to existing waterfront parks

### Pennsylvania and Fountain Avenue Landfills

1.0

 Continue monitoring of capped landfills and explore future opportunities for public access

### Fresh Creek & Spring Creek Forever Wild Sites

1.*t* 

Improve maintenance and explore options for public access

### Canarsie Pier

Explore options for rehabilitation and active, cultural use of historic pier

#### Mill Basin

3

Explore public access to waterfront within ecologically sensitive area

### Floyd Bennett Field

4

 Support National Parks Service master plan process for Gateway National Recreation Area to maximize public use and activation of this site

### Former Schmitt's Marina Site

5

Explore options for creating nature preserve and passive recreation

#### Beach Channel West/Beach Channel Park

**(6.**a

- Secure funding for seawall repair from Beach 116th to Beach 156th St.
- Improve public access on city-owned waterfront sites from Beach 125th to Beach 130th St

#### Beach 108th St.

**6.**b

 Examine options for redeveloping the site once remediation is complete to be compatible with enhancing the vacant city-owned lots to the north of the site as a waterfront recreation area

### Beach 88th St. DPR Site

**7.**a

Improve site for waterfront public access and passive recreation

### Beach 80th St. Marina Site

7.b

 Support proposed commercial development which will provide a publicly accessible human-powered boat launch and an 18-slip marina on currently vacant land

### Arverne Urban Renewal Area

8

- Support planned educational center and nature preserve and maintain protected habitat
- Ensure planned public access to boardwalk at Arverne by the Sea
- Improve signage and wayfinding Beach 59th St. to create better connection to waterfront resources along the bay

### Edgemere Landfill / Rockaway Community Park

9

 Study possible future uses for remediated landfill in conjunction with a master plan for Rockaway Community Park that improves pedestrian access, includes provisions for in-water recreation, addresses mosquito issues, and restores shoreline and habitat

### **Idlewild Park**

10

- Protect "Forever Wild" area from illegal dumping and stormwater runoff from industrial sites
- Advance park master plan to enhance public access including human-power boat launch and environmental education center
- · De-map unbuilt Nassau Expressway through the park

### Rockaway Peninsula

 Explore providing human-powered boat access from the beach on the Atlantic Ocean





## **REACH 18** - STATEN ISLAND NORTH SHORE

Location: North Shore of Staten Island from Bard Avenue to Fort Wadsowrth along the Kill Van Kull and Upper New York Bay

Upland Neighborhoods: New Brighton, St. George, Tompkinsville, Stapleton, Clifton, Rosebank, Fort Wadsworth, Shore Acres

### **Summary of Preliminary Recommendations**

### Reachwide

- · Explore means to open public views of waterfront activity
- Determine necessary bulkhead repair and expansion in support of maritime businesses
- Provide easy and inviting connections between Staten Island Ferry and North Shore destinations

### **Snug Harbor**

 Improve public access from the Staten Island Ferry Terminal along the waterfront and Richmond Terrace

- Evaluate reconstruction of dock for potential future use as a ferry landing
- Resolve conflicts between rail right-of-way and public waterfront access
- · Improve pedestrian crossing to waterfront
- Support designation of Snug Harbor wetlands in the Bluebelt program
- Investigate efforts to protect shoreline from erosion

### New Brighton Waterfront

- Investigate relocating rail right-of-way to facilitate maritime expansion
- Consider as location for maritime support services "hub"
- Consider expanded commercial, maritime, and cultural uses along waterfront
- Explore extending and improving North Shore Esplanade to Jersey St.
- Provide wider sidewalks, bike lanes, and turn lanes on Richmond Terrace
- Reduce truck queuing on Richmond Terrace

#### St. George

 Build on DOT study to improve pedestrian access between Ferry Terminal, waterfront, and St. George Civic Center

Activate waterfront public spaces with cultural uses

### St. George - Ferry Terminal Parking Lots

- Study feasibility and necessary infrastructure investments for development
- Provide guidelines for public access for any future development

### St. George - Ferry Terminal

**3.***b* 

 Provide better outreach and information to tourists to promote St. George as tourist destination

### North Shore Esplanade

4

 Support improvement of connections along waterfront from St. George to Stapleton, including such areas as Bay Street Landing Promenade

### Former Coast Guard Site

**4.**a

 Reutilize/activate historic Coast Guard site with residential, retail, open space and cultural components

### **Merchant Marine Memorial Plaza**

l.b

· Repair and maintain public waterfront plaza and piers

### Victory Blvd.

**4**.c

- Extend North Shore Promenade
- · Provide kayak launch

#### Cromwell Center

4.0

· Evaluate Cromwell facility

### New Stapleton Waterfront

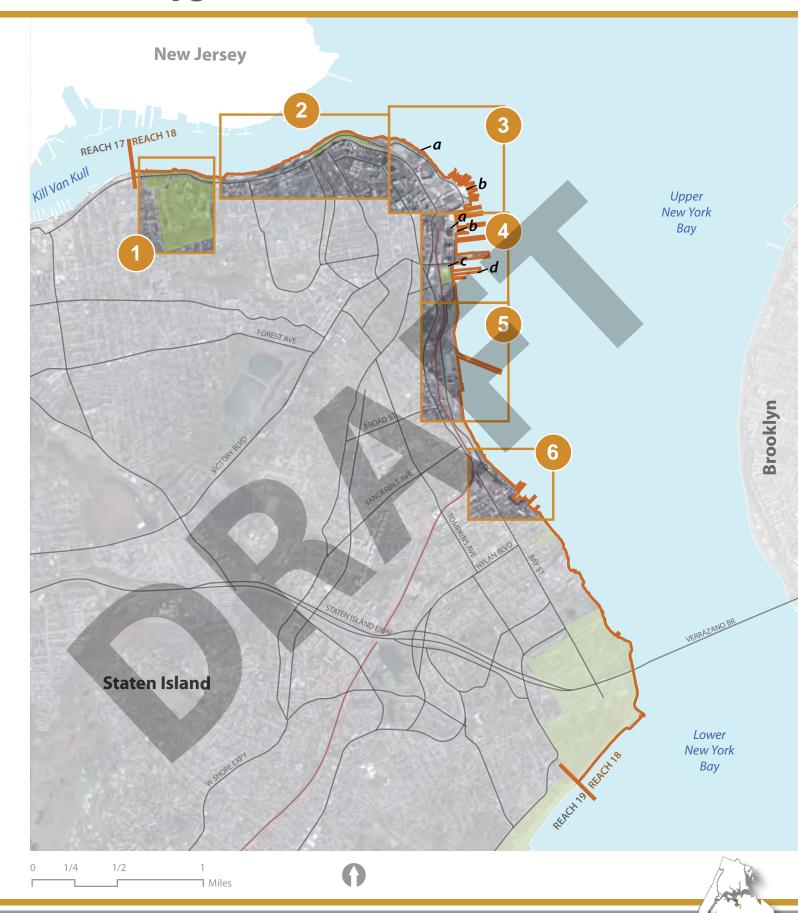
5

- Restore natural waterfront with limited on-water recreation in the Cove
- Support extension of the North Shore Promenade
- Support master-planned development on the waterfront, along with necessary infrastructure improvements

### Edgewater/Rosebank

- Support continued water-dependent maritime uses
- Support creation of public access to extend the North Shore Promenade as redevelopment occurs
- Consider rezoning for residential development incorporated with public access







# **REACH 19** - STATEN ISLAND SOUTH SHORE

Location: Lower New York Bay and Raritan Bay from Verrazano Bridge to Conference House Park

**Upland Neighborhoods:** Midland Beach, South Beach, New Dorp Beach, Oakwood Beach, Great Kills Harbor, Eltingville Beach, Southeast Annadale, Prince's Bay, Tottenville

### **Summary of Preliminary Recommendations**

### Reachwide

 Study methods to limit coastal erosion on public and private land, including consideration of using suitable dredge material to replenish beaches

### Midland to Great Kills

(1

- Support National Park Service master plan for increased waterfront access in Gateway National Recreation Area
- Provide continuous bike and pedestrian access along waterfront
- Complete Midland Beach Children's Park and public amenities on the boardwalk

### Great Kills to Tottenville

E

- Work with DOT and DPR on evaluating the feasibility of widening street ends and posting signage to provide public waterfront viewing and seating areas
- Identify and remove private obstructions and barriers placed on required public waterfront access sites
- Consider providing public access along the mapped but unimproved section of Johnston Terrace to Sharrots Rd.

### Oakwood Beach/Cedar Grove Ave-



 Restore and improve public access to the public park and beach







# **REACH 20** - ARTHUR KILL SOUTH

Location: Arthur Kill from southern end of FreshKills Park to northern boundary of Conference House Park

**Upland Neighborhoods:** Rossville, Charleston, Kreischerville, Tottenville

### **Summary of Preliminary Recommendations**

### Rossville Waterfront

1

- Explore feasibility of improving municipal pier and recruiting maritime user
- Support redevelopment with mix of maritime, retail and commercial uses
- · Support the widening of Arthur Kill Road
- Improve public waterfront access, incorporating Blazing Star Cemetery with an eventual link to FreshKills Park

### **Richmond Valley**

3

Support incorporating Mill Creek in the Bluebelt program and providing complementary public access

### Ellis St Waterfront

4

 Support continued operation of existing marinas and explore mixed-use development that complements marinas

### Charleston/Kreischerville

- Provide continuous esplanade along waterfront from Clay Pit Ponds Park to Tottenville
- Explore rezoning in Special Area M district to minimize land use conflicts







# **REACH 21**- ARTHUR KILL NORTH

Location: Lower New York Bay and Raritan Bay from Verrazano Bridge to Conference House Park

**Upland Neighborhoods:** Midland Beach, South Beach, New Dorp Beach, Oakwood Beach, Great Kills Harbor, Eltingville Beach, Southeast Annadale, Prince's Bay, and Tottenville

### **Summary of Preliminary Recommendations**

### Reachwide

- Explore possible extension or creation of Significant Maritime Industrial Area (SMIA)
- Explore possible West Shore Bluebelt for stormwater management

### **Bloomfield Waterfront**

- Reutilize industrial sites with modern distribution, maritime and commercial facilities with sensitivity to existing wetlands
- Explore financing mechanisms for essential infrastructure.
- Explore opportunities for point access to waterfront

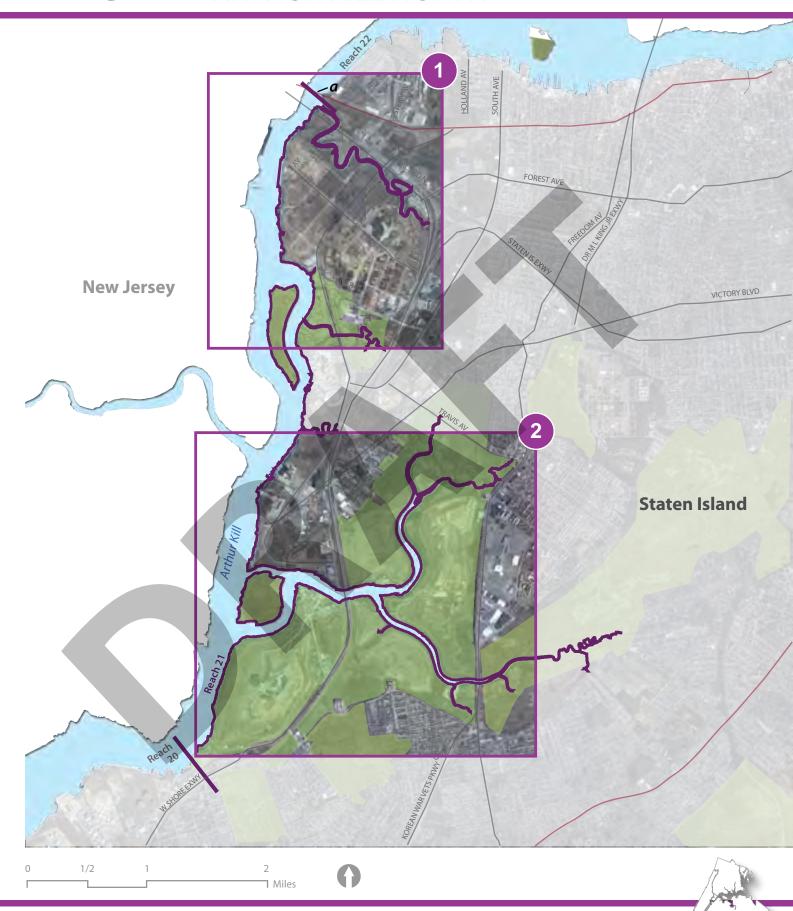
### **Goethals Bridge**

- Support designated site of new bridge and advocate for construction
- Support expansion of maritime industry around new Goethals Bridge

### FreshKills Park

- Provide on-water recreation (boat ramps, landings) in appropriate areas
- Protect and enhance natural habitats in appropriate areas within park
- Support implementation of the master plan
- Map officially as parkland
- Increase transportation to the park, with consideration for ferry, light rail and bus rapid transit
- Explore potential sources of revenue such as park concessions
- · Promote as eco-tourism destination
- Retain barge tie-up fender systems and DSNY barge fleet in short term







### **REACH 22-KILL VAN KULL**

Location: Kill Van Kull, from Old Place Creek to Bard Avenue, including Shooter's Island

**Upland Neighborhoods:** Arlington, Old Place, Graniteville, Mariners' Harbor, Port Richmond, Livingston Manor, West New Brighton

### **Summary of Preliminary Recommendations**

### Reachwide - Richmond Terrace

- Improve roadway conditions to facilitate safe access to the waterfront for pedestrians and bicyles
- Target roadway improvements at key pedestrian crossings, dangerous intersections, and major curves
- Improve roadway conditions where mapped street is wider than built street and where there is minimal building encroachment
- Improve roadway in coordination with planned and proposed development projects and capital improvements

### Reachwide

- Explore possible changes to existing Significant Maritime and Industrial Area (SMIA) to better reflect existing uses and development opportunities
- Incorporate educational opportunities on the history of the North Shore in coordination with new public waterfront access
- Explore means to open public views of waterfront activity
- Work with maritime industry and regulatory agencies to determine top locations for shoreline improvements and erosion prevention measures (bulkheads, rip-rap)
- Explore opportunities for additional mooring locations for tugs and barges to support maritime support services and provide possible revenue sources for public access
- Work with DPR and regulatory agencies to identify means to prevent shoreline erosion on publicly owned properties
- Relocate at-grade portions of rail right-of-way where feasible in coordination with MTA to support waterfront businesses, improve pedestrian / bicycle corridor, improve transit options and traffic conditions
- Identify tools and explore new uses and opportunities to facilitate the remediation of public and private waterfront sites

### Howland Hook/Arlington Marsh

 Support expansion of New York Container Terminal along with remediation of Arlington Marsh for eventual use as public waterfront

### **Mariners Harbor Waterfront**

2

- Remediate publicly owned Van Pelt/Van Name Ave. waterfront to provide open space with views of Shooters Island
- Identify new uses in order to adaptively reuse existing industrial buildings
- Consider expanded commercial uses and community amenities along Richmond Terrace
- Investigate using street ends as maritime overlooks
- Provide safe pedestrian crossings at future parks

### Bayonne Bridge

3

 Support reconstruction of bridge to raise its clearance to accommodate larger ships (with consideration of sea level rise), and incorporate a transitway, bikeway and walkway into new bridge design

### **Port Richmond**

4

- Consider expanded uses along the waterfront compatible with active maritime support services
- Explore expanded waterfront access

### West Brighton Waterfront

5

- Investigate relocating rail right-of-way to facilitate maritime expansion
- · Investigate using street ends as maritime overlooks
- Consider expanded commercial uses which support proposed park

### **West Brighton Waterfront**

5.0

 Secure funding for remediation, design, development and maintenance of new North Shore Waterfront Park

### **West Brighton Waterfront**

(**5.**b

Facilitate maritime industry expansion between Davis and Bard Avenues

