



GOAL 7

Improve governmental regulation, coordination, and oversight of the waterfront and waterways.

IMPROVE GOVERNMENT OVERSIGHT

Realizing all the ambitious plans New York City has for the waterfront and waterways—expanding public access, using the Blue Network to transport people and goods, redeveloping neglected waterfront sites, restoring ecosystems, and increasing the city’s resilience to climate change—will require action. And improving the efficiency with which New York can take action will be critical to achieving shared goals. The City must maximize what can be accomplished with every dollar, public or private, and with every hour spent by business owners, government agencies, and citizen volunteers.

There are three general ways the city can enhance its ability to take effective action on the waterfront and in the waterways. It can improve the environmental regulatory process to ensure that projects move forward in a timely manner while promoting the health of the city’s ecosystems. It can also improve management of public waterfront infrastructure. And it can achieve better coordination among stakeholders throughout the region to pursue funding and implementation of projects. Progress on these three fronts will help New York City make the most of the waterfront and waterways.

ENVIRONMENTAL REGULATORY PROCESS

Environmental regulations and the permitting process are essential to protect the environment. It is through the permitting process that projects are assessed to ensure that they avoid, minimize, and mitigate environmental impacts. Environmental permits are needed for a wide assortment of projects that involve building in or on the water, and it is important that these projects obtain permits in a timely, transparent manner.

The City of New York generally has regulatory jurisdiction over land use within its boundaries, but authority over the waterfront and the waterways is quite complex. Currently 14 municipal, state, and federal agencies play a regulatory role in protecting the New York Harbor Estuary. Of those 14, three key agencies—the U.S. Army Corps of Engineers, the New York

State Department of State, and the New York State Department of Environmental Conservation—regulate and issue permits for construction and maintenance of in-water structures.

Permit applicants for in-water construction can be private or public owners of waterfront land. They range from an individual homeowner who must repair the seawall on his property to a marine services company that seeks to construct a pier to a City agency that must address erosion in a public park.

All these applicants may face challenges navigating the permitting process for in-water construction. Permit applicants encounter regulatory hurdles, time delays, and uncertain outcomes that can hinder their ability to maintain their properties or create new housing, businesses, or open space. The maritime industry, which relies on the waterfront and waterways and routinely needs to build and maintain structures in and at the edge of waterbodies, is particularly affected by challenges in the permitting process.

Improvements to the existing administrative process could address the following questions:

- What are simple, practical measures that can be undertaken to improve the permitting process to make it more transparent and predictable for all involved?
- Does New York City’s urban context call for an approach to environmental protection that is responsive to its density and unique land-use patterns?
- Should wetland mitigation practices now used by other states and regions—such as mitigation banking and in-lieu fee payments—be employed within New York City?

Improving the Permit Administration Process

Reform of the permitting process for in-water construction is critical to ensure that the many projects described in *Vision 2020* can move forward. Reform does not mean lowering environmental standards or short-cutting public review. Rather, it entails improving the process to make it more transparent and efficient for both permit applicants and regulators. Ultimately, the permitting process should foster outcomes that protect and enhance the environment as well as promote cultural and economic development within New York City.

Several approaches could be pursued to help applicants who seek permits for in-water construction. A one-stop shop for permit applications could be established to provide applicants with a central information repository. Having a single place for application materials, regulations, and guidance for all relevant regulatory agencies would help applicants understand the permitting process and get the information they need. Washington, Massachusetts, and Connecticut all have repositories for federal and state permitting information that New York State could use as models. Another way to improve permitting administration would be to offer training for the engineers and environmental experts often hired to prepare permit applications. The training would better inform such consultants about requirements and standards. Pre-application meetings with standardized protocols and checklists could be offered as well. These meetings could be used to review which permits are applicable and to discuss initial environmental concerns and design considerations—important for complex projects that have potentially significant adverse environmental impacts.

Finally, design guidelines for waterfront in-

“It took years to get the floating swimming pool approved, and there were stumbling blocks at every step. There were times I was almost ready to throw out the baby with the bathwater.”

—Ann Bittenwieser, Founder, Neptune Foundation

infrastructure would help make the permitting process more transparent and predictable. Currently applicants can have difficulty understanding which environmental and design factors regulators will focus on when reviewing applications, as well as how and when different regulators interact during the review phase. Design guidelines for in-water infrastructure, such as piers, docks, and bulkheads, could be put forth in partnership with the regulatory agencies and based on preferred design standards.

Applying Regulations in an Urban Context

Just as permitting administration could be improved, the regulatory review of permit applications from New York City could be revised to reflect the unique conditions here. Regulatory reviews of projects from New York City should recognize that the city's dense urban setting might call for a different approach to the protection and enhancement of natural resources than is used in less-developed areas.

In other parts of the state, the waterfront is generally characterized by a range of low-density uses and parks on large tracts of land. But New York City is highly urban, with land intensively used and divided into small parcels controlled by many owners. Furthermore, past industrial uses have contaminated many sites along the waterfront, and most wetlands have been lost. In this urban setting, it can be difficult to achieve the goals of development and environmental restoration on a single parcel. Rather, there is a need to look for multiple sites where these goals can be realized. Recent history has demonstrated that substantial improvements to water quality and habitat are possible within New York City, and realistic ecological goals can be achieved.

An appropriate approach for New York City is to recognize the ecological opportunities that do exist and to use the development process to improve environmental conditions. For example, portions of the Kill Van Kull waterfront on Staten Island are actively used by critical maritime activities, whereas other portions are significantly degraded and contaminated by past industrial uses. Arlington Marsh, a contaminated wetland area on the Kill Van Kull waterfront, could be restored to greater habitat value. Advancing projects of regional significance, such as the expansion of the New York Container Terminal, could provide the resources to restore Arlington Marsh or similar sites.



Building a public park on the shoreline, such as Hudson River Park (above), requires permits from city, state, and federal agencies.

Mitigation

Federal, state, and local environmental policy seeks first to avoid impacts, then minimize impacts, and, where impacts are unavoidable, mitigate them. Compensatory mitigation is the practice of restoring, enhancing, or protecting wetland, stream, or other aquatic resource functions to offset their loss elsewhere as a result of construction projects. In 2008 the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency issued the Compensatory Mitigation for Losses of Aquatic Resources Final Rule, which establishes performance standards and criteria for mitigation for activities that require Army Corps permits. There are three primary classes of compensatory mitigation recognized in the Final Rule guidelines: permittee-responsible mitigation, in-lieu fee mitigation, and mitigation banking.

Permittee-responsible mitigation is habitat restoration and enhancement undertaken by the permittee either at the site of the disturbance (“on-site mitigation”) or at another location, typically within the same watershed (“off-site mitigation”). Because most permittees lack wetland experience, and because of the inherent difficulty of wetland restoration, creation, and enhancement, permittee-responsible programs are at the bottom of the preference hierarchy of the Army Corps mitigation guidelines. However, permittee-responsible mitigation is

the accepted practice in New York City, where the New York State Department of Environmental Conservation has not recognized in-lieu fee mitigation and mitigation banking.

In-lieu fee mitigation involves permit applicants designating an approved third-party organization to undertake wetland creation, restoration, and/or enhancement. The third-party organization—typically a governmental agency or non-profit—has an agreement with appropriate regulatory agencies to use fee payments from permit applicants to engage in compensatory mitigation. In-lieu fees have proven beneficial because they allow organizations with technical expertise to tackle complex wetland projects. In the past, federal regulators have favored in-lieu fee arrangements, but the Army Corps now lists them second in its preference hierarchy.

Mitigation banking, the Army Corps's preferred mitigation strategy, allows permit applicants for projects of all sizes to purchase “credits” from a restored, established, enhanced, or preserved wetland, stream, or other aquatic resource. Based on a wetland assessment, a mitigation bank assigns habitat/ecological value to those resources in the form of credits that can be sold by the bank to permit applicants to offset losses of natural resources due to dredge and fill activities. Bank credits can be disseminated for projects within a delineated geographic

region, or service area. Assigning credits and standardizing mitigation ratios (for example, one acre of wetland impact could require three acres of restoration) make the process more predictable.

The mitigation bank organization, which can either be a private or public entity, is responsible for restoring, enhancing, or preserving natural resources. A bank's mitigation requires a detailed plan prior to approval. The bank owners and regulators have a formal agreement, or bank instrument, to establish liability, performance standards, management/monitoring requirements, and terms of credit approval. An interagency review team, usually chaired by an Army Corps representative, provides regulatory review, approval, and oversight of the bank and its mitigation efforts. This built-in enforcement ensures that a project meets its restoration goals.

Mitigation banks are often more successful than individual attempts. This is in part because many projects have modest wetland impacts. Mitigating individually for such impacts often results in a mitigation project that provides little, if any, environmental benefit. In contrast, a mitigation banking plan can be implemented on behalf of multiple projects. By assembling and applying extensive financial resources, planning, and scientific expertise not always available to permittee-responsible mitigation projects, mitigation banks reduce uncertainty over whether the compensatory mitigation will be successful. Mitigation banks also reduce permit processing times, and thereby improve the cost-effectiveness of compensatory mitigation.

Mitigation banking can provide economies and ecologies of scale for wetland restoration. The consolidation of scientific expertise, financial resources, and regulatory oversight into large-scale mitigation activities can streamline the permitting process and ensure that mitigation is both professional and ecologically significant.

Mitigation banking or in-lieu fee mitigation, if established in New York City, could channel resources to larger ecological restoration projects. Instituting a policy on these methods of mitigation could provide important new tools to improve the permitting process—and improve the environment.



Repairing fendering and piles at Pier 9A North at the Red Hook Container Terminal.

MANAGEMENT OF PUBLIC INFRASTRUCTURE

The bulkheads, piers, platforms, and other structures that make up the City's public infrastructure are essential to economic development and quality of life. Public and private infrastructure on the shoreline represents assets that today would have a replacement value in the billions of dollars.

Waterfront structures require routine maintenance and repairs. Exposure to the harsh marine environment causes deterioration of these assets, jeopardizing New York City's capacity to continue to grow and diversify its economy. To ensure a prosperous future, investment in and maintenance and management of this infrastructure are critical. Maintenance of these structures can prevent the need for substantial capital demands for major repair and reconstruction. Replacement of deteriorated structures often results in more extensive costs as well as delays due to regulatory obstacles.

Historically, the City's public waterfront infrastructure was under the stewardship of the Department of Ports and Terminals, which later became the Department of Ports, International Trade and Commerce. This agency was dissolved in 1991, and its responsibilities and infrastructure assets were divided among other City agencies, with the majority of the properties go-

ing to the New York City Department of Small Business Services (SBS) under the management of the New York City Economic Development Corporation (EDC). These two agencies maintain approximately 22 miles of waterfront infrastructure. Their program for managing waterfront maintenance could serve as a model for the rest of the more than 100 miles of publicly owned waterfront.

The division of responsibility for inspection and maintenance of waterfront infrastructure among dozens of agencies can create confusion about which agency has jurisdiction over particular waterfront assets. This is especially true when structures abut multiple uses such as parks and roadways. In addition, the inspections and maintenance necessary to preserve waterfront assets can be costly in the short term, and difficult to prioritize. Damage to substructures is often not readily apparent and may require verification by underwater inspections.

Effective maintenance of the City's piers, platforms, and bulkheads first requires current information about their condition, which is subject to change and affected by severe storms and other weather events. Much of this infrastructure has not been systematically catalogued and assessed.

EDC and SBS undertake routine inspection and maintenance of the waterfront infrastructure they are responsible for and have estab-



Without regular maintenance, piers will deteriorate until they collapse, as seen with this pier in Greenpoint, Brooklyn. It is difficult to obtain a permit to rebuild.

lished protocols to forecast future infrastructure repairs. The Waterfront Maintenance Management System (WFMMS) is a new comprehensive GIS-based database—commissioned by EDC and put into effect in 2010—that is designed to serve as a repository for all information pertinent to the maintenance of the City’s waterfront infrastructure. WFMMS has current mapping with geodetic information and maintains past inspection reports, past construction and repair information, past permits, and a variety of other data directly related to the maintenance of EDC’s and SBS’s waterfront infrastructure. Each catalogued site is broken down by sub-facilities and individual structures within those facilities—all the way down to individual structural elements. Using the inspection reports contained in WFMMS, users are able to catalog individual structural component assessments and ratings, along with recommendations for future inspection timing, repairs, and long-term capital rehabilitation projects.

WFMMS is also a planning tool to establish baselines from past projects, identify and manage inspection protocols in the present, and forecast future project needs and budgets. It is scalable so that in the future it can be expanded to provide the same capabilities to all City agencies. WFMMS has the capacity to centralize all property information, facility maintenance and capital project information, and detailed site histories for City-owned waterfront land. By expanding this program or similar programs to all City-owned waterfront facilities, current conditions could be better understood and future needs better anticipated.

REGIONAL COORDINATION

Issues of regional significance—such as dredging, improvements to water quality, ecological restoration, and bridge replacement—require regional coordination. Several initiatives discussed in *Vision 2020* will necessitate coordination among numerous governments within the region. These initiatives include the implementation of the *Hudson-Raritan Estuary Comprehensive Restoration Plan* and the *Dredged Material Management Plan*, coordination of Harbor operations through the Harbor Safety, Navigations, and Operations Committee of the U.S. Coast Guard, planning for the future of the marine cargo terminals, and planning for climate resilience. Regional coordination will be required to seek federal funding for all these projects.

Many of the recommendations in *Vision 2020* have funding needs, large and small. The continued vitality of our waterfront depends on the availability of resources and revenues to support a wide range of public and private activities. Compared to other harbors and estuaries around the nation, New York Harbor is underfunded for environmental restoration and port activities and operations. New York City can seek to partner with New York State and New Jersey and other municipalities and institutions in the region (such as metropolitan planning organizations and the Port Authority of New York & New Jersey) to advocate for federal funds.

Improve Government Oversight: Strategies and Projects

This plan envisions a waterfront in 2020 that is more productive, more active, and more accessible. But permitting difficulties, unclear oversight, and a lack of funding are all challenges to making progress on the waterfront.

To address these challenges, the City will pursue the following set of strategies over the next 10 years. The City will improve permitting predictability and efficiency by providing training and guidance to permit applicants, while

working with regulators to better synchronize permit decisions. The City will also improve maintenance and monitoring of City-owned infrastructure. And to address the need for funding for waterfront projects, the City will partner with stakeholders in the region to advocate for greater funding for the Harbor.

Vision 2020's 10-year strategies are complemented by the *New York City Waterfront Action Agenda*, a set of projects chosen for their ability

to catalyze investment in waterfront enhancement. The City commits to initiating these projects over the next three years and will be tracking progress on an ongoing basis. For each project, the lead agency and implementation year are noted.

Together, these strategies and projects lay out a comprehensive vision for the waterfront and waterways and a plan of action to achieve that vision.

I. Improve predictability and efficiency of the permitting process for in-water construction.

VISION 2020 STRATEGIES

- Establish a permitting liaison to assist applicants in filing applications.
- Create a coordinated process, or one-stop shop, for waterfront environmental permits.
- Support integration of coastal zone policies with Clean Water Act regulatory permit actions and clarify Waterfront Revitalization Program policies encouraging “water-enhanced” uses.
- Work with city and state agencies to expedite the review process and to give priority to bulkhead repair and replacement projects in Significant Maritime and Industrial Areas, while continuing to ensure that environmental concerns are addressed.
- Assist maritime businesses in navigating the environmental permitting process to reduce uncertainty.

ACTION AGENDA PROJECTS

- Establish an in-water permitting task force to focus on developing permitting guidance documents, written mitigation policies and standards, a one-stop shop for in-water permitting, and a training program for applicants. (EDC, 2011)
- Develop a wetlands mitigation bank and/or in-lieu fee program to promote more effective mitigation projects. (Mayor’s Office, 2012)

2. With input from stakeholders, establish design guidelines for in-water infrastructure, such as piers, docks, and bulkheads.

VISION 2020 STRATEGIES

- Establish design guidelines and location criteria for “soft” waterfront edges that create habitat for marine life, enhance ecological productivity, facilitate water access, manage stormwater, mitigate flooding, and control wakes.
- Develop new pier and bulkhead design guidelines that integrate ecosystem-enhancing features, such as oyster baskets.
- Design bulkheads and piers with accommodations for getting in and out of the water where appropriate.
- Create design guidelines for piers, docks, and bulkheads with hardware and structural standards that are functional for multiple types of vessels, including recreational boats and historic vessels. Guidelines should cover pier shape, strength, fendering, bollards, water depth, wake protection, railings and rail openings, floats, upland vehicle access, and water, electric, and sewer infrastructure needs. Incorporate the design standards into the Waterfront Revitalization Program and state coastal permitting, where appropriate.
- Support the creation of training, workshops, and courses on high-quality design of waterfront public space for designers, architects, landscape architects, engineers, and planners.

ACTION AGENDA PROJECTS

- Establish a task force to develop design and construction guidelines for in-water structures that minimize negative environmental impacts, ensure structural resiliency, and accommodate vessel tie-up. (EDC, 2011)

3. Ensure that the City adequately maintains City-owned waterfront infrastructure.

VISION 2020 STRATEGIES

- Create a detailed assessment of the condition of all City-owned in-water infrastructure, subject to funding availability.
- Expand on the model of WFMMS to improve the inspection and maintenance of City-owned in-water infrastructure, subject to funding availability.

4. Pursue regional coordination and partnerships on issues of regional significance.

VISION 2020 STRATEGIES

- Cooperate with regional stakeholders where opportunities exist to share information, pursue projects, or jointly seek federal funding for a range of purposes, including transportation, climate resilience, dredging, and ecological restoration.
 - Cooperate with regional partners to utilize the framework of the draft *Hudson-Raritan Estuary Comprehensive Restoration Plan* to guide restoration projects within the region.
 - Collaborate with partners in the NJ-NY-CT region to enhance the use of the waterways for freight movement, passenger transportation, and emergency evacuation.
 - Collaborate with relevant state and local governments and the Coast Guard on managing boat traffic and other means to improve the safety of water recreation and navigation.

ACTION AGENDA PROJECTS

- Seek to identify and secure funding for the Hudson-Raritan Estuary by coordinating with federal and state partners. (Mayor's Office, 2013)