



## **Green Harbor Task Force Meeting Minutes**

**May 12, 2010**

**10:30-12:30**

**MWA Offices  
Seaman Church Institute  
241 Water Street  
New York, NY 10038**

The Green Harbor Task Force Meeting worked to develop recommendations for the Comprehensive Waterfront Plan (CWP) on changes needed to improve the ecological and environmental health of the waterfront by addressing three primary questions:

1. What is needed in the Comprehensive Waterfront Plan to improve the ecological and environmental health of the waterfront?
2. What metrics and indicators are needed for the ecology of the harbor and its successful restoration?
3. How can we secure local, state and federal funding to finance everything in the CWP?

A summary of the discussion and what we accomplished at the meeting follows.

### **1. What is needed in the Comprehensive Waterfront Plan to improve the ecological and environmental health of the waterfront?**

#### ***Comprehensive Restoration Plan for the Hudson Raritan Estuary (CRP)***

The Army Corp of Engineers, the Port Authority, Hudson River Foundation and New York New Jersey Harbor Estuary Program recently released the Comprehensive Restoration Plan for the Hudson-Raritan Estuary (CRP). The CRP can be found [here](#).

There was discussion about the CRP and that it should be an important component of the Comprehensive Waterfront Plan. The City made it clear it is looking for comments on the elements of the CRP that should be included in the Comprehensive Waterfront Plan. It was suggested the Corp of Engineers and others must determine what elements of the CRP should be included in the Comprehensive Waterfront Plan.

Participants explained that the CRP is the first comprehensive blue print for wide ranging restoration of the New York – New Jersey Harbor. Through Target Ecosystem Characteristics (TECs) (see Appendix A) the plan defines the ecological objectives of a healthy harbor ecosystem and possible restoration locations around the harbor.

One important part of the CRP is the need in the harbor for more shallow water. We have a deep and constricted harbor that lacks shallow areas for juvenile fish and other animals. If we could do one thing to improve the harbor it would be to promote fish

populations by providing more shallow areas. In addition to shallow areas, the CRP focuses on providing a mosaic of habitats. A mosaic of habitats is what is critical for the health and restoration of the harbor. From the CRP, page 6, Volume 1:

*The scientists agreed that the restoration program should be focused on creating and restoring a variety of habitats with high ecological value and function interspersed within the human-dominated landscape, and to allow public access to the waterfront to appreciate the estuary. The CRP Program Goal is to develop a mosaic of habitats that provides society with renewed and increased benefits from the estuary environment.*

It was noted that the CRP also includes the need to reduce pollution to improve and sustain the health of the harbor and to improve water quality especially for shellfish. Pathogens from Combined Sewer Overflows (CSOs) are inhibiting access and the growth of aquatic organisms such as shellfish. This has to be a central focus of the City's work because pathogens from CSO events are one of the limiting factors and can determine the success of the CRP.

The CRP is a comprehensive, ecological restoration plan for the harbor that encourages broad planning instead of drawing battle lines over small areas of the harbor.

### ***Design Guidelines***

The need for Design Guidelines was emphasized at the meeting. Design guidelines could be a way to encourage ecological design which could benefit the New York State Department of Environmental Conservation (NYSDEC) by improving the permitting processes. NYSDEC expressed concerns that guidelines may create a market for certain types of techniques or products which would be problematic. Some participants thought creating a market in some cases would not be a bad idea.

At the meeting it was specifically requested that NYSDEC provide design guidelines to enhance habitat and to help project developers better understand the parameters through which they should design their projects. It was suggested that the Green Harbor Task Force take up the task of developing design guidelines. The point was made that NYSDEC would have to be part of the development to make sure the guidelines conformed with state regulations.

It was explained that there are NYSDEC guidance documents for wetlands and protection of waters, however NYSDEC would have to modify that guidance to provide more direction for projects along the waterfront and in the New York-New Jersey Harbor.

It was mentioned that there could be performance standards which would be a part of an effort to develop design guidelines.

It was mentioned that the American Society of Landscape Architects in conjunction with others has developed a landscape rating system, the [Sustainable Sites Initiative](#), which is similar to energy efficiency ratings for buildings. This landscape rating program rates the

environmental quality and sustainability of landscapes. The format and the grassroots appeal of the Sustainable Sites Initiative is a model for the waterfront development guidelines that NYSDEC and others can work together to produce.

<http://www.nyasla.org/content/view/127/71/>

### ***Significant Natural Waterfront Areas (SNWAs)***

There were discussions about SNWAs and the need to have a broader list of SNWAs that need to be protected in the harbor. It was stated that the Comprehensive Waterfront Plan must expand on the original 1992 SNWA list. There is a lot of new data available about both old and possible new SNWAs.

The city doesn't have guidance on underwater land. Even if the Department of City Planning doesn't control underwater land, this needs to be in the Comprehensive Waterfront Plan. Underwater land should be included as a Blue Network section in the Comprehensive Waterfront Plan.

### ***Incentives***

Participants often mentioned the need for incentives to promote ecological and progressive waterfront design. Currently there are large city developments with no interactions, ecological or recreational, with the water. Unless there are real incentives and mandates there will be no new public access or ecological designs on the water.

The City should have mandates and incentives for waterfront development such as those in Toronto. We can look to the land incentives the City offers for affordable housing and public spaces to develop similar waterfront zoning incentives to promote ecological design and design that accommodates recreational access to the water.

It was suggested the City should institute progressive incentive programs to promote the incorporation of the CRP's Target Ecosystem Characteristics (TECs) into large waterfront development projects as well as medium to small waterfront developments. Identified below are the eleven TECs which establish the ecological objectives of the CRP:

- Coastal Wetlands
- Habitats for Waterbirds
- Coastal and Maritime Communities
- Oyster Reefs
- Eelgrass Beds
- Shorelines and Shallows
- Fish, Crab and Lobster Habitat
- Tributary Connections
- Enclosed and Confined Waters
- Sediment Quality
- Public Access

### ***Maritime Industrial Areas***

There was discussion that a balance between industrial uses and natural resources in our harbor and on the waterfront is critical. Guidelines for ecological development are very important and the guidelines should show how industrial uses can be innovative and be ecologically sustainable. There can be both industrial uses and public access in one place.

It was suggested that the City have an office that would advise companies on sustainability practices and pollution prevention. Companies need to be able to seek out this advice without the threat of prosecution for environmental noncompliance.

### ***Ecological Waterfront Design***

It was hoped that future planning will allow developers to incorporate habitat into their plans for infrastructure so habitat can be built into the project and possibly facilitate the permitting process.

The City and developers should closely consider the materials that current docks and piers are built with. For example, the most commonly used materials for pilings have a polymer resin coating to prevent lower life forms from degrading the piling. This resin material can be toxic to aquatic life forms. Pilings should be built with/covered in sustainable materials that have a high surface to volume ratio that will attract organisms (like oysters, mussels, etc.) to live on the pilings without degrading them. There could be hundreds of acres of vertical aquatic habitat if the region is able to build habitat enhancing features on pilings. The city could provide incentives for ecological design enhancements on pier pilings.

It was noted that planning for improving habitat can correspond to the replacement of bulkhead. It was suggested that the City look at the miles of shoreline that have bulkheads and comprehensively determine how long the bulkheads will last to gauge the replacement timing. EDC had done a survey of its capital needs and capital costs for infrastructure. Participants explained this should be basis for strategy on ecological design.

The City should appropriate underused waterfront, areas that were previously industrial or city-owned, to the NYC Department of Parks and Recreation for use as waterfront park land.

National Ocean Policy is now developed at the federal level, New York City can plug into it as part of the comprehensive list of planning documents. The interagency task force has called for protecting, maintaining, restoring coastal marine health. These aren't trade offs, it's more about incorporating multiple goals.

<http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans>

<http://www.whitehouse.gov/administration/eop/ceq/initiatives/oceans/interim-framework>

### *Shellfish and Oyster Enhancement*

Oyster habitats should be incorporated and built into waterfront projects. This could facilitate the permitting process of projects. The city could create incentives for building oyster habitats.

The City should create incentives for NYC Department of Education to create oyster farming programs for public schools to create school sponsored/maintained oyster reefs. This will increase harbor literacy and discourage vandalism of reefs.

### *Mapping*

One participant commented that the City needs an updated wetlands map. Maps should survey wetland location, health, elevation, etc. to improve development/restoration orientation.

It was explained that the LIDAR and aerial wetland mapping is being conducted by Columbia University on behalf of the City. The finished map will show where the wetlands are located, their size, and the possible wetland loss. Quantifying wetland loss is important for planning restoration efforts like the CWP. Once the mapping is completed the City will write a Comprehensive Wetland Policy that can be incorporated in the CWP, there was a preliminary report released earlier. The CWP should be written in anticipation of this document and should accommodate the wetland policy which it will include.

The wetlands mapping effort is also significant for the transfer of wetland management from the City to NYC Department of Parks and Recreation (DPR). Before this management change can occur, the wetlands need to be comprehensively surveyed.

The City explained that the LIDAR mapping project is not public yet. LIDAR mapping is part of PlaNYC's effort which will be used to improve zoning and building codes, to assess the potential for flooding, and to evaluate rooftops for solar power installations. The mapping project's goals were to determine if any wetlands still exist in the city that could play a role in flooding issues. New York's current flood plan maps date to the 1980s when they were formulated from aerial photographs and ground-based surveys. The new information will not only enable the City to take preventive measures, but also to enhance its emergency response systems.

It was mentioned that the reach maps used by the City for the update of the Comprehensive Waterfront Plan are important but LIDAR, bathymetry, current, future wetlands, water quality data, CSO and access data needs to be incorporated into the public discussions.

### *Wetlands Banking*

There was a discussion that wetlands banking is not a clear cut solution to waterfront development issues. The statement was made that you cannot throw your marbles into one jar by putting all the wetlands into one wetlands banking location. It is more ecologically sound to have multiple wetland banks.

A problem with wetlands banking is that private sector partners become involved in wetlands mitigation without a stake in the outcome of the success of the wetlands. Mitigation projects in a wetlands banking program should instead funnel responsibility and money to the natural resources groups as opposed to a third party who has no stake in the outcome. It is sometimes decades before the biodiversity in wetlands banks reaches the level of biodiversity of the original wetlands.

#### *Climate Change/Sea Level Rise Adaptation and Mitigation*

The Comprehensive Waterfront Plan should call for a certain amount of bio-retentive soil and swales per square foot/mile. The new Healthy Harbor Strategy for 2010 in Baltimore is an important model to consider for the Comprehensive Waterfront Plan. The Waterfront Partnership in Baltimore developed a guidelines document called the Healthy Harbor Strategy for 2010. This document is a collection of innovative methods for adaptation and mitigation. One specific requirement was to mandate 1500 cubic feet of bioretentive soil per every street tree. Other methods include manufactured floating islands and manufactured riparian buffers, among many others. The document was primarily created and edited by Mahan Rykiel Associates, a landscape architecture firm, and Biohabitats Inc., an environmental consulting company.

Toronto has an even more robust code, the Toronto Green Development code, which it has been working on and implementing for the past 10 years. It is now simply known as the Toronto Development Code. This code has even more ambitious requirements than Baltimore, requiring 30 cubic meters of bioretentive soil for each street tree, as well as the individual responsibility of on-site water quality management. Swaths of the city have been built under these development guidelines, implementing rain gardens and other green infrastructure methods on every street. By mandating the quantity of loam per unit of street, Toronto promotes the implementation of a growing variety of methods including green roofs, green walls, swales, bioretentive soils, and many others.

#### *Stormwater and CSO Abatement*

Pathogens from CSOs are inhibiting access and growth of aquatic organisms such as shellfish. Pathogen/CSO cleanup needs to be a priority of the City's work because pathogens are one of the limiting factors that can determine the success of the CRP.

There are unrecognized impacts from plastics on the City's waterfront and in CSO discharges. Participants expressed the need to find structural and nonstructural ways of controlling plastics discharges and plastic trash on the waterfront. The sentiment was our shorelines are covered in plastic. After the meeting, a participant submitted this photo of plastics covering a shoreline on



Staten Island.

## **2. What metrics and indicators are needed for the ecology of the harbor and make this happen?**

At this point in the Task Force meeting we discussed and developed metrics for the City's Action Agenda for the waterfront and for the Waterfront Score Card MWA is developing. Participants were asked which metrics are needed to measure environmental and ecological progress on the waterfront.

### *CSOs*

# of bio-retention/stormwater BMP pilot projects in NYC?

# of tons of plastic in the Harbor?

### *Mapping*

# of separate NYC Harbor mapping initiatives?

### *Development*

# of development incentives for waterfront?

# of miles of connected waterfront?

2015 goal for linear miles of connected waterfront?

### *Restoration*

# of acres of shallow water in harbor?

## **3. How can we secure local, state and federal funding to finance everything in the CWP?**

The discussion continued to address the question of financing the Comprehensive Waterfront Plan.

### *Funding Opportunities*

The City should start a storm water utility. A storm water utility will set up a mechanism for charging people for stormwater outflow from their property. It could be like a CSO utility charge.

Federal funding through the Clean Water State Revolving fund is a way to fund wastewater and sewer infrastructure. We need to reinvest and reauthorize at the Federal level and direct money to green infrastructure. This is a big ticket item and it can be a way to fund the Comprehensive Waterfront Plan.

Connection with climate change is important. There may be Federal funding for adaptation and mitigation and hopefully through the cap and trade program.

## **Appendix A: Comprehensive Restoration Plan Target Ecosystem Characteristics**

Identified below are the eleven TECs which establish the ecological objectives of the CRP:

- Coastal Wetlands
- Habitats for Waterbirds
- Coastal and Maritime Communities
- Oyster Reefs
- Eelgrass Beds
- Shorelines and Shallows
- Fish, Crab and Lobster Habitat
- Tributary Connections
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- Sediment Quality
- Public Access