

**Conservation Action Plan
for the
Edith Read Wildlife Sanctuary and Marshlands Conservancy
Important Bird Areas and
Long Island Sound Stewardship Area**

February 2008

The Edith Read-Marshlands Stewardship Committee

Background

In the fall of 2005, Audubon New York convened a group of natural resource professionals and stakeholders (see Appendix B) to identify strategies to help protect the Edith Read Wildlife Sanctuary and Marshlands Conservancy Important Bird Areas (IBAs). Audubon's IBA program is part of a global effort to identify sites that are critical for maintaining bird populations and to work towards their conservation. In addition to this area's significance to birds, the growing momentum behind the Long Island Sound Stewardship Act (see Appendix A) made this site prime for a conservation planning effort.

The purpose of the project was to facilitate conservation of the area by involving different interest groups in the protection of the site, increasing public awareness of the site's importance, and engaging more people in conservation. This project also served as a model for educating and engaging the public in the Long Island Sound Stewardship Initiative, as well as for implementing stewardship actions at specific sites. This report summarizes the work carried out over the past year and is intended to help guide future efforts to protect this incredible natural resource. The first iteration of this document was created in December 2006 and it was updated in February 2008.

“The mission of the Edith Read to Marshlands Stewardship Committee is to facilitate conservation of this area of Long Island Sound by increasing public awareness of its importance, implementing actions to help protect the unique natural resources, in particular the birds found here, and engaging more residents in conservation action.”

Audubon New York received a grant from the National Fish and Wildlife Foundation to facilitate this work.

Introduction

Important Bird Area Program

In the mid-1990s, Audubon New York's Important Bird Area (IBA) Program was initiated with the goal of identifying sites within the state that are most important to birds and to protect and promote proper management of those sites for the long-term conservation of birds, other wildlife, and their habitats. The New York IBA program was patterned after the efforts of BirdLife International that began in Europe and have since spread to many parts of the globe. As such, IBAs in New York are identified on the basis of criteria similar to those used throughout the world, which focus on threatened species, biome-restricted assemblages, and congregations of birds. With the oversight of a committee of ornithological experts from around the state and site nominations provided by individuals, Audubon chapters, bird clubs, and natural resource professionals, 136 IBAs have been identified in New York. This network of IBAs has provided a solid foundation to build conservation efforts aimed at protecting the full diversity of avian species in the state.

Site Description and Significance to Birds

This project focused on the shoreline stretching just north of the Edith Read Wildlife Sanctuary to just south of the Marshlands Conservancy in the City of Rye along the north shore of Long Island Sound in Westchester County (see Figure 1). There was discussion on expanding the area to include Port Chester and Mamaroneck because those areas contribute to the health of this focus site. However, the committee decided that this project should start with a smaller stretch of the Sound to increase chances for success, and to set the stage for further involvement and participation from a larger area in the future. The area was referred to as the Edith Read to Marshlands Stewardship Area (SA).

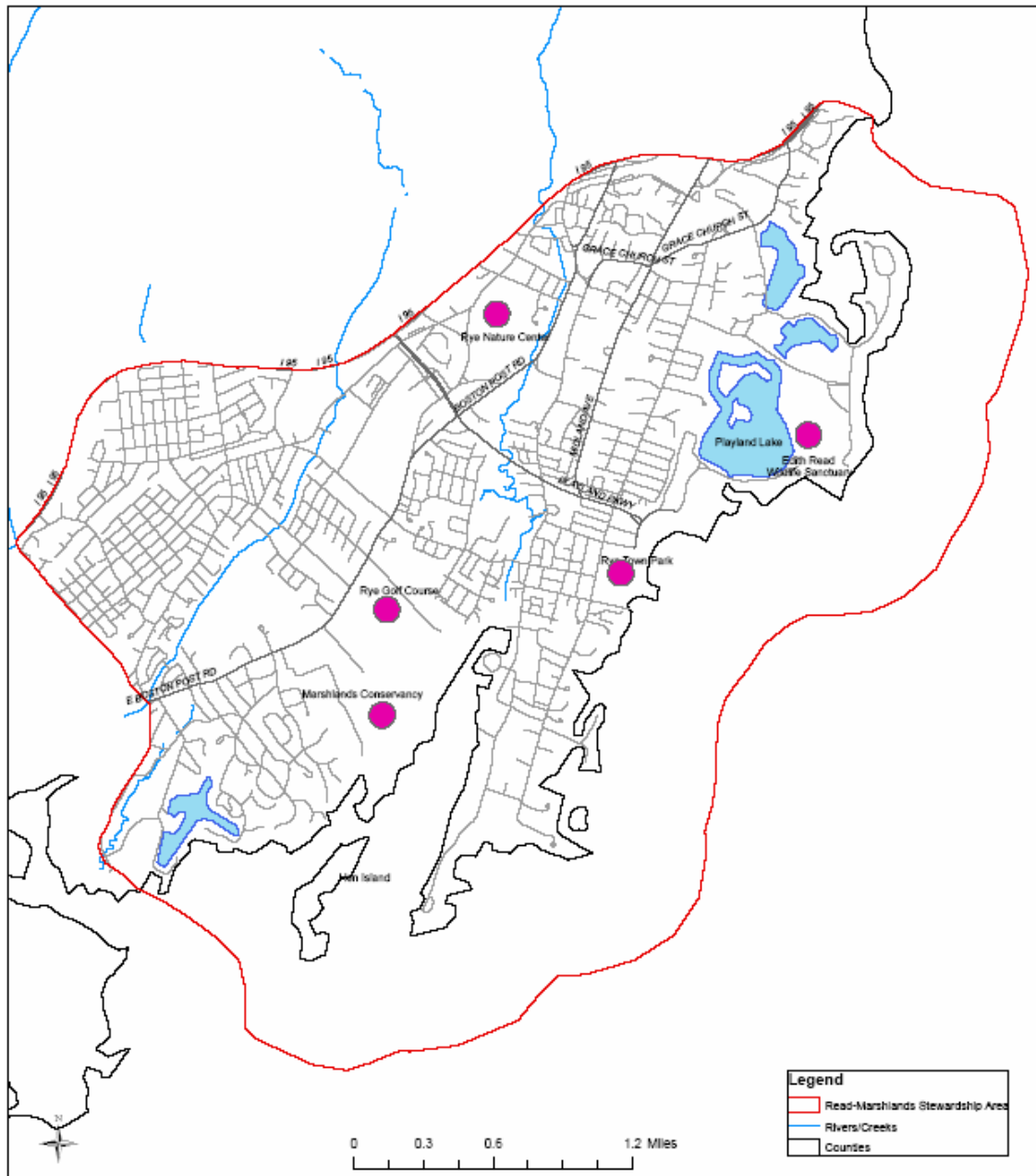
The Edith Read to Marshlands SA provides incredible wildlife habitat in a heavily suburbanized area. Central habitat features include the 80-acre brackish Playland Lake (aka Manursing Lake), miles of shore with rocky intertidal communities, extensive salt marshes, various successional states of maritime forest woodlands, wetland, and open field habitats. One of the needs identified by the Stewardship Committee was the creation of a habitat map. This committee completed that in 2008 and the map and habitat categories are found on pages 15 and 16. Further work was done in 2008 and 2009 to refine the habitat maps classification of hardened shoreline. A significant portion of this area is owned by the Westchester County Department of Parks, Recreation, and Conservation. This area serves as an oasis for wildlife on Long Island Sound.

Table 1. IBA Criteria met at Edith Read Wildlife Sanctuary and Marshlands Conservancy IBAs

IBA Criteria Met

| <i>Criterion</i> | <i>Species</i> | <i>Data</i> | <i>Season</i> | <i>Source</i> |
|-------------------------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------|
| Species at Risk | American Black Duck | 30-40 pairs nesting | Breeding | Jason Klein pers. comm. 2004 |
| Congregations-Waterfowl | Mixed species | Site regularly supports 3,500-4,500 waterfowl during winter, including as many as 3,000 Greater Scaup [1]; supports large numbers of scaup, 5,500 ind. at one time in 2004, max. of 12,000 seen in early 1990s [2] | Winter | 1. Usai, M.L 1996; 2. Jason Klein pers. comm. 2004 |
| Species at Risk | Seaside Sparrow | 1 ind. in 1999, 1 in 1997, 1 in 1995 | Breeding | NY Natural Heritage Biodiversity Databases |

Edith Read-Marshlands Stewardship Area



Map developed by the Edith Read-Marshlands Stewardship Group
Finalized in 2008
Digitized by Audubon NY, Ithaca, NY

Figure 1. Edith Read to Marshlands Conservation Stewardship Area outlined in red, City of Rye, Westchester County, NY. Conservation Stewardship Committee Members agreed on this boundary, but noted that areas outside of this boundary should be considered in future conservation efforts.

Historical and Cultural Background

The land making up the 170-acre Marshlands Conservancy was part of two estates that were added to the Westchester County Dept of Parks starting with a gift of 120 acres in 1967 and an additional gift in 1979 and a purchase in 1992. The entire property is within a National Historic Landmark, the Boston Post Road Historic District, which includes 3 architecturally significant buildings and contains the burial site of John Jay who grew up on the property. The Jay Heritage Center, a non-profit organization, owns and is renovating 2 historic buildings within Marshlands Conservancy.

Other Noteworthy Ecological features

This site is listed in the 2002 Open Space Conservation Plan as a priority site under the project name Westchester Marine Corridor and both Edith Read Wildlife Sanctuary and Marshlands Conservancy are considered significant ecological sites by New York State. A project led by the Army Corps of Engineers to reintroduce tidal flow to the lake is being considered, and would be supported by this conservation plan. Recent habitat enhancements include dune restoration, spartina re-introduction, invasive species management, and meadow restoration. In addition, waterfowl and at-risk species are monitored at the two Westchester County Parks.

Conservation Stewardship Committee Members

Participants in this process represented Central Westchester Audubon, Westchester County Parks, Audubon NY, Friends of Edith Read Sanctuary, Purchase College, Federated Conservationists of Westchester County, City of Rye, Westchester Land Trust, Bronx River Sound Shore Audubon, and the American Yacht Club. See Appendix A for a list of participants.

Identification of Conservation Strategies

This process used a modified version of The Nature Conservancy's Conservation by Design (see <http://www.nature.org/aboutus/howwework/cbd/>) to develop conservation strategies. A series of meetings were held with the conservation committee to identify and prioritize conservation targets, threats to those targets, and strategies to help address the threats. The committee defined the conservation targets to identify the aspects of each target that, if missing or altered, would lead to the substantial loss of that target over time and its ability to persist in the long-term. This helped determine what was needed to measure and assess the status of each target.

Conservation Targets

The Committee initially identified the following potential targets: saltmarsh habitat (focus on species such as *Spartina* and Seaside and Saltmarsh Sharp-tailed Sparrows) and a buffer for immediate surrounding habitat; freshwater wetlands and watercourses; brackish wetland and watercourses; wintering and breeding waterfowl; diamondback terrapin; Eastern box turtle (upland species, but need freshwater wetlands); Osprey; American chestnut; American holly; wild pink (state-listed); island deciduous forest; beach habitat, including sandy beaches, cliffs, rocky, mudflats; and early successional habitat (e.g., meadow at Marshlands). The Committee then prioritized the targets.

Edith Read to Marshlands SA Conservation Targets

1. *Saltmarsh habitat and adjacent natural habitat buffer*

(focal species include *Spartina* and Seaside and Saltmarsh Sharp-tailed Sparrow, diamondback terrapin, and Common and Least Tern)

2. *Freshwater and brackish wetlands and water courses*

(focus species include Osprey and Eastern box turtle)

3. *Wintering and breeding waterfowl*

4. *Island complex (island in Playland Lake)*

(unique deciduous forest with American chestnut, Wild Pink, American Holly, and Common Tern)

5. *Shoreline habitat*

(includes sandy beaches, cliffs, rocky, mudflats)

6. *Early successional/shrub habitat*

The Committee felt that areas within the Marshlands Conservancy have the opportunity to provide a considerable amount of early successional habitat, and there were additional opportunities to create this habitat (since it is not size dependent) throughout the focus area, and therefore, it should be included. Others felt that the importance of the focus area was for coastal

habitats, and adding early successional/shrub habitat only diluted the focus. In the end, the decision was made to target early successional habitat in appropriate areas.

Table 1. Conservation Targets, Definitions and Measurements, Edith Read to Marshlands Conservation Effort

| Conservation Target | Definition | Measure | Knowledge Need |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Saltmarsh habitat and adjacent natural habitat buffer</i> | <ul style="list-style-type: none"> • Nutrient level • Salinity • Ability to migrate (what is beyond and surrounding marsh? Could it move and adapt if needed?) • Size (bigger the better) • Buffer • Tidal flow | <ul style="list-style-type: none"> • Plant indicators • Bird indicators • Shellfish species • Amount of shoreline that would not allow for migration (e.g. roads, hardened, etc.) • Sediment structure • Water quality (O₂, nutrient levels) • Size of habitat • Size of upland areas/natural buffers to allow movement | <ul style="list-style-type: none"> • Sediment movement (what is coming in and where is it coming from) • Natural community/habitat map |
| <i>Freshwater and brackish wetlands and water courses</i> | <ul style="list-style-type: none"> • Clean, freshwater source • Flow variance • Obligate species (amphibians—frogs, salamanders; mammals) • Nutrient level • Salinity • Soils • Functioning system | <ul style="list-style-type: none"> • Nutrient level and salinity • Plants | <ul style="list-style-type: none"> • What and where are freshwater wetlands, vernal pools • Map of storm drain runoff areas • What pre-existing management is there |
| <i>Wintering and breeding waterfowl</i> | <ul style="list-style-type: none"> • Suitable and essential habitat (food and rest/shelter, open areas) • Lack of disturbance | <ul style="list-style-type: none"> • Species and numbers of individuals • Length of stay • Frequency • Availability of open water • Food source (invertebrates) • Number of nests | <ul style="list-style-type: none"> • Survey and map nesting locations |
| <i>Island complex (island in Playland Lake)</i> | <ul style="list-style-type: none"> • Soil composition (lack of worms, presence of duff) • Partial geographic isolation | <ul style="list-style-type: none"> • Soil profile • Species list and some measure of abundance | <ul style="list-style-type: none"> • Complete species census (species and numbers) • Natural community/habitat map of island |

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|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Shoreline habitat</i> | <ul style="list-style-type: none"> • Intertidal zones • Presence of indicator species (shellfish, invertebrates, shorebirds, mammals) • Substrate composition • Associated with water (tidal flow) • Slope | <ul style="list-style-type: none"> • Percentage of natural shoreline verses hardened • Presence of indicator species (shellfish, invertebrates, shorebirds, mammals) | <ul style="list-style-type: none"> • Where are natural and human made shoreline |
| <i>Early successional/shrub habitat</i> | <ul style="list-style-type: none"> • Size • Plant species and composition • Plant structure • Habitat distribution • Landscape context | <ul style="list-style-type: none"> • Acreage of habitat • Inventory of plant community • Number and richness of target bird species in winter and breeding season | <ul style="list-style-type: none"> • What exists, are areas supporting breeding species • Requirements of priority species and size and distribution of habitat • List of priority species |

Threats

The Committee identified and ranked threats to each target. Threats were ranked high, medium, or low (noted by “H,” “M,” or “L” in table) in terms of the degree to which it impacts the target, its immediacy (i.e., something that is currently happening versus might happen), and its irreversibility (i.e., how easily can the threat be eliminated and the target recover).

Table 2. Threats to the Conservation Targets, Edith Read to Marshlands Conservation Effort

| Conservation Target | Threats |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Saltmarsh habitat and adjacent natural habitat buffer</i> | <ul style="list-style-type: none"> • Rise of sea level—climate change H • Pollution (storm drain, floatables, road runoff, residential) H • Natural succession on shoreline H • Navigational dredging (causes marsh to slump) H • Shoreline hardening (e.g., bulkheads, concrete sea walls, rip-rap, jetties) H • Future development (destruction of habitat, septic systems, pesticides, lawn fertilizers, filling, lack of buffers) H • Existing development (septic systems, pesticides, lawn fertilizers, filling, lack of buffers) H-M • Predators (release of domestic cats, turtles, dogs, raccoons) M • Incompatible recreation (walking through habitat, dog walking, wakes, jet skis, kayakers, motor boaters, fishing, floating docks are center points for recreation that can disturb wildlife and break away and damage marshes) M • Invasive species (plants and invertebrates, in buffer zone) M • Illegal harvesting of shellfish L |

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| <i>Freshwater and brackish wetlands and water courses</i> | <ul style="list-style-type: none"> • Water pollution (storm runoff, erosion during storm events caused by quick rise of water that brings pollution from surrounding areas, eutrophication, illegal sewage) H • Current development (dumping in wetlands, lack of buffers, leaking sewage lines) H • Future development (filling in wetlands, channelization) H • Invasive species (bullfrogs, ampelopsis, purple loosestrife) H |
| <i>Wintering and breeding waterfowl</i> | <ul style="list-style-type: none"> • Pollution (contamination of food sources) M-L • Incompatible recreation (e.g. boat disturbance) L • Noise pollution (firearms) L |
| <i>Island complex (island in Playland Lake)</i> | <ul style="list-style-type: none"> • Invasive (porcelain berry, earth worms, decomposers, poison ivy), source: stump and other vegetation dumping VH • Human access (potential threat, but serious if did happen) H • Domestic predators (potential) M • Erosion from boat wake (fills in channel and if allowed, could cause an access point to the islands) M • Floatable garbage L |
| <i>Shoreline habitat</i> | <ul style="list-style-type: none"> • Current development (hardening of shoreline) H • Future development (hardening of shoreline, jetties, piers) H • Invasives (invertebrates, Asian shore crab) H • Incompatible recreation (landing boats, fishing { fishing line and other trash, walking through key habitat of species such as diamondback turtle, disturbing species, release of bait into wild }, unleashed dogs, wake boats, and floating docks) H • Water pollution (inland runoff, storm runoff, motor boat fuel and oil contribution) M • Illegal harvesting of shellfish L |
| <i>Early successional/shrub habitat</i> | <ul style="list-style-type: none"> • Succession H • Invasive species H • Existing development L • Aesthetic preference for mowed areas that reduce areas that could be shrub habitat M |

The highest ranking threats to the Edith Read to Marshlands Area

- **Invasive species**

(Asian shore crab, invertebrates, bullfrogs, ampelopsis, purple loosestrife, phragmites, porcelain berry, earth worms, decomposers, poison ivy)

- **Incompatible recreation**

(recreating in areas that are sensitive, unleashed dogs, boat wakes, jet skis, kayakers, fishing, floating docks are center points for recreation that can disturb wildlife, human access on islands, and fishing (fishing line, release of bait into wild, other trash)

- **Future development**

(filling in wetlands, channelization, hardening of shoreline, jetties, piers, destruction of habitat, septic systems, pesticides, lawn fertilizers, and lack of buffers)

- **Existing development**

(dumping in wetlands, lack of buffers, leaking sewage lines, septic systems, pesticides, lawn fertilizers, and hardened shoreline)

- **Water pollution**

(storm runoff, erosion during storm events caused by quick rise of water and also brings in pollution from surrounding areas, eutrophication, illegal sewage connections, and motor boat fuel and oil)

- **Rise of sea level** (loss of habitat and lack of places for marshes and shoreline habitat to migrate as sea level rises)

- **Navigational dredging**

(Milton Harbor)

An initial set of strategies were identified that address the highest ranking threats and threats that impact multiple conservation targets. Information on whether the strategy is currently being implemented was also gathered.

Table 3. Conservation Strategies, Edith Read to Marshlands Conservation Effort

| Threats | Strategies | Existing Efforts | Knowledge Need |
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| Invasive species | <ul style="list-style-type: none"> • Survey Asian shore crab • Public awareness and education: festival at Playland; hold Long Island Sound Summit at the same time; newsletters from partners (e.g., Audubon, FCWC), local public television or national station announcements; updates to websites • Stop sale of invasives at nurseries • Inventory invasive locations • Physically manage most threatened areas • Develop state and local policies to address invasives • Continue mgmt at Edith Read and Marshlands • Create outreach materials with messages targeting land owners: use the right plants, don't use pesticides, create the demand to change what nurseries sell • Create demonstration sites to do restoration or show wildlife friendly plantings; could do this at sanctuaries for public to come to see | <ul style="list-style-type: none"> • Monitoring of shore crabs at Edith Read by Purchase College • Hudsonia work • Walks/removal at Marshlands • Invasive mgmt at Edith Read and Marshlands • TNC conference on invasives • Rye Nature Center plans to do restoration plot where invasives are removed, native plantings with deer enclosure | |
| Incompatible Recreation | <ul style="list-style-type: none"> • Policy that addresses placement of floating docks in Milton Harbor. They are becoming the focal point for active recreation which is at times in conflict with the nature of the bird sanctuary. Also can cause damage to marsh grass when they break away and drift into marshes. • Uniform signage that identifies the stewardship and IBA sites and shares information that helps protect the sites. • Self-guided tour of the harbor that could be handed out at the Marina to kayakers that interprets the history and natural history of the harbor • Identify areas that are suitable for recreation and other areas that should be restricted; include open water areas as well, this may guide placement of docks • Kayak/canoe launch in Playland, right before you enter Edith Read; may need to look into liability • Create a map that shows points of interest and access, as well as points to avoid b/c they are sensitive (history and | | <ul style="list-style-type: none"> • Any existing policies that address this? |

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| | ecology) brochure that is big and can open (distribute widely in city hall, sanctuary, anywhere in county and city) | | |
| Future development | <ul style="list-style-type: none"> • Map existing natural habitat areas and targets for acquisition or easements • Discussion of Hen Island—many owners, many don't want anything to change, unlikely that things will change, but should be monitored • Consider new zoning to protect areas or limit future development; overlay zoning is easier than re-zoning • Require specific building foot prints to guide future development • Explore shoreline overlay to restrict development in those areas or increase buffer size | | <ul style="list-style-type: none"> • What is the zoning for the clubs, most club zoning, but some may be residential |
| Existing development | <ul style="list-style-type: none"> • Conservation or wetland certification program: property owners get their land certified by the City as an environmentally sensitive piece of property and property owners get some sort of benefit to that (e.g., tax break, good publicity, or certificate) • Award program to property owners that enhance the habitats on their property • Outreach to target land owners who are in priority areas or adjacent to tell them what to do and what not to do; invite the landowners to an event, get them to chat and share stories to educate other landowners. Target Golf Courses. • Create demonstration sites to do restoration or show wildlife friendly plantings; could do this at sanctuaries for public to come to see • Softening of coast—remove hardening to help maintain marshes | <ul style="list-style-type: none"> • Talk to Native Plant Center at Westchester Community College—they have a demonstration gardens | <ul style="list-style-type: none"> • Research models or examples of incentives for land owners that are “green” • How many landowners are within our site |

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| Water pollution | <ul style="list-style-type: none"> • Public awareness and education (dumping in storm drains, pesticides and lawn care) • Residential septic systems: require when property transferred that it is up to a certain code or when it fails deny permit until it is upgraded—city level • Require buffer when new subdivision is created, make sure it is enforced • Creation of more formal beach cleanup days • Work with City and County to address storm water runoff mitigation • Work with land owners and/or create incentives to reduce fertilizer and pesticide use; land owners implement IPM practices. Target Golf Courses. • State and local policy on fertilizer/pesticide use • Habitat restoration of Blind Brook and possibly intermunicipal regulations to building and use along the brook to prevent further pollution and runoff • A catch net at the outflow pipes at Blind Brook to intercept floatables before they enter Milton Harbor • Enforcement of the coastal zone plan and its strategies | <ul style="list-style-type: none"> • The city would like to start an aquaculture project to improve water quality (e.g., Milford, CT) | <ul style="list-style-type: none"> • Contact city planner to get required regulations on buffers • Review coastal zone management plan • Contact County and Riverkeeper for further information on sewage treatment plant |
| Rise of sea level | <ul style="list-style-type: none"> • Policy at county, state, and federal level tax incentives for solar panels and hybrids • Public awareness and education (e.g. brochure on 10 things that every household can do) • Organizations commitment to reduce fossil fuel use | | |
| Navigational dredging | <ul style="list-style-type: none"> • Consider adjusting the channel width in Milton Harbor to a size that is require for recreational boats • Put an interpreter on the boat ride on Playland Lake | | |

The Committee was asked to rank strategies by selecting the top five priorities for implementation not considering feasibility or opportunity. See Appendix B for the complete list

of strategies and ranking.

Highest Ranking Conservation Strategies Edith Read for the Marshlands Area

1. Map existing natural habitat areas and identify areas for acquisition or easements (two phases of this strategy: 1) create map and 2) identify opportunities for acquisition)
2. Present to the City Council on our efforts
3. Outreach to target land owners who are adjacent to or in priority areas and create incentives for property owners to enhance habitats on their property (e.g., tax incentives, award program, learn by example and have demonstration sites).
4. Create uniform signage that identifies the stewardship and IBA sites and shares information to help protect them.
5. Shoreline overlay to restrict development in shoreline areas or increase buffer size

Strategy Assessment

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| Strategy | <i>1. Map existing natural habitat areas and identify areas for acquisition or easements (e.g. land near gut, owned by private investment group; lands adjacent to marshlands)</i> |
| Targets ultimately impacted by the strategy | Saltmarsh habitat, freshwater wetlands and water courses, shoreline habitats |
| Threats the strategy will likely address | Future development |
| Objective of the strategy | To prevent the future development of critical habitats within stewardship area |
| Assumptions or rationale behind strategy | Mapping and identifying the areas critical to habitat will help land protection groups target them for acquisition or easements |
| Geographic location of the activities related to the strategy | Across focus area |
| Partners involved | City of Rye, Westchester County Parks, Westchester County Land Trust |
| Necessary Steps (includes knowledge needs) | Download orthophotos of area, create habitat categories, interpret orthophotos to create habitat map, digitize habitat map, overlay tax parcels, identify parcels with natural habitat, create map and other outreach products |
| Timeframe to achieve strategy | 2 years |
| Estimated cost of implementing strategy | \$5,000-15,000 |

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| Strategy | <i>2. Outreach to City of Rye</i> |
| Targets ultimately impacted by the strategy | All |
| Threats the strategy will likely address | Future development, incompatible recreation, invasive species, existing development, water |

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| | pollution, navigational dredging |
| Objective of the strategy | Increase awareness of the City of Rye decision makers and residents about the importance of the critical natural areas and the ways they can help protect them. |
| Assumptions or rationale behind strategy | People will protect things they know are important |
| Geographic location of the activities related to the strategy | Across stewardship area |
| Partners involved | Committee |
| Necessary Steps (includes knowledge needs) | Create presentation, get on agenda, present |
| Timeframe to achieve strategy | 3-6 months, ongoing |
| Estimated cost of implementing strategy | \$500 for travel and materials for presentation, donation of time |

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| Strategy | <i>3. Outreach to target land owners who are adjacent to or in priority areas and create incentives for property owners to enhance habitats on their property (e.g., tax incentives, award program, learn by example and have demonstration sites).</i> |
| Targets ultimately impacted by the strategy | Saltmarsh habitat, wintering waterfowl, freshwater wetlands and water courses, shoreline habitats |
| Threats the strategy will likely address | Invasive species, incompatible recreation, existing development, water pollution |
| Objective of the strategy | Establish an awards program for property owners to enhance habitat on their property |
| Assumptions or rationale behind strategy | Local residents can assist enhance wildlife habitat and improve the water quality of the Sound by the choices and actions they take in their own backyards. Incentives or a community approach can engage more people. |
| Geographic location of the activities related to the strategy | Across focus area |
| Partners involved | City of Rye, Rye Nature Center, Westchester County Parks, private land owners |
| Necessary Steps (includes knowledge needs) | Research actions we want landowners to take, identify resources, create outreach materials, distribute, identify landowners who can serve as demonstration sites, work with landowner to create demonstration sites, publicize sites, create mechanism to award landowners |
| Timeframe to achieve strategy | 2 years to get up and going, ongoing |
| Estimated cost of implementing strategy | \$20,000+ Depends on whether there is a grant program or benefit is acknowledgment only; may be able to have partners bring funds to do actual habitat enhancement |

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| Strategy | <i>4. Create uniform signage that identifies the stewardship and IBA sites and shares information to help protect them</i> |
| Targets ultimately impacted by the strategy | Saltmarsh habitat, wintering waterfowl, freshwater wetlands and water courses, island complex, shoreline habitats |
| Threats the strategy will likely address | Incompatible recreation, water pollution, invasive species, existing development |
| Objective of the strategy | Increase acreage of habitat maintained and managed for wildlife and water quality |
| Assumptions or rationale behind strategy | People will protect things they know are important |
| Geographic location of the activities related to the strategy | Public access points |
| Partners involved | Westchester County Parks, Audubon |
| Necessary Steps (includes knowledge needs) | Create and distribute signs |
| Timeframe to achieve strategy | 1 year |
| Estimated cost of implementing strategy | \$15,000 |

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| Strategy | <i>5. Shoreline overlay to restrict development in shoreline areas or increase buffer size</i> |
| Targets ultimately impacted by the strategy | Saltmarsh habitat, wintering waterfowl, and shoreline habitats |
| Threats the strategy will likely address | Future development |
| Objective of the strategy | To prevent development from taking place in shoreline areas |
| Assumptions or rationale behind strategy | An overlay district is possible to achieve and will protect critical shoreline areas from development |
| Geographic location of the activities related to the strategy | Shorelines |
| Necessary Steps (includes knowledge needs) | Compile case stories of other cities and areas that have created shoreline overlay districts, show how they protect quality of life and critical habitats, meet with decision makers, gain public support |
| Partners involved | City of Rye and residents |
| Timeframe to achieve strategy | Many years, very ambitious and would be challenging |
| Estimated cost of implementing strategy | ??? |

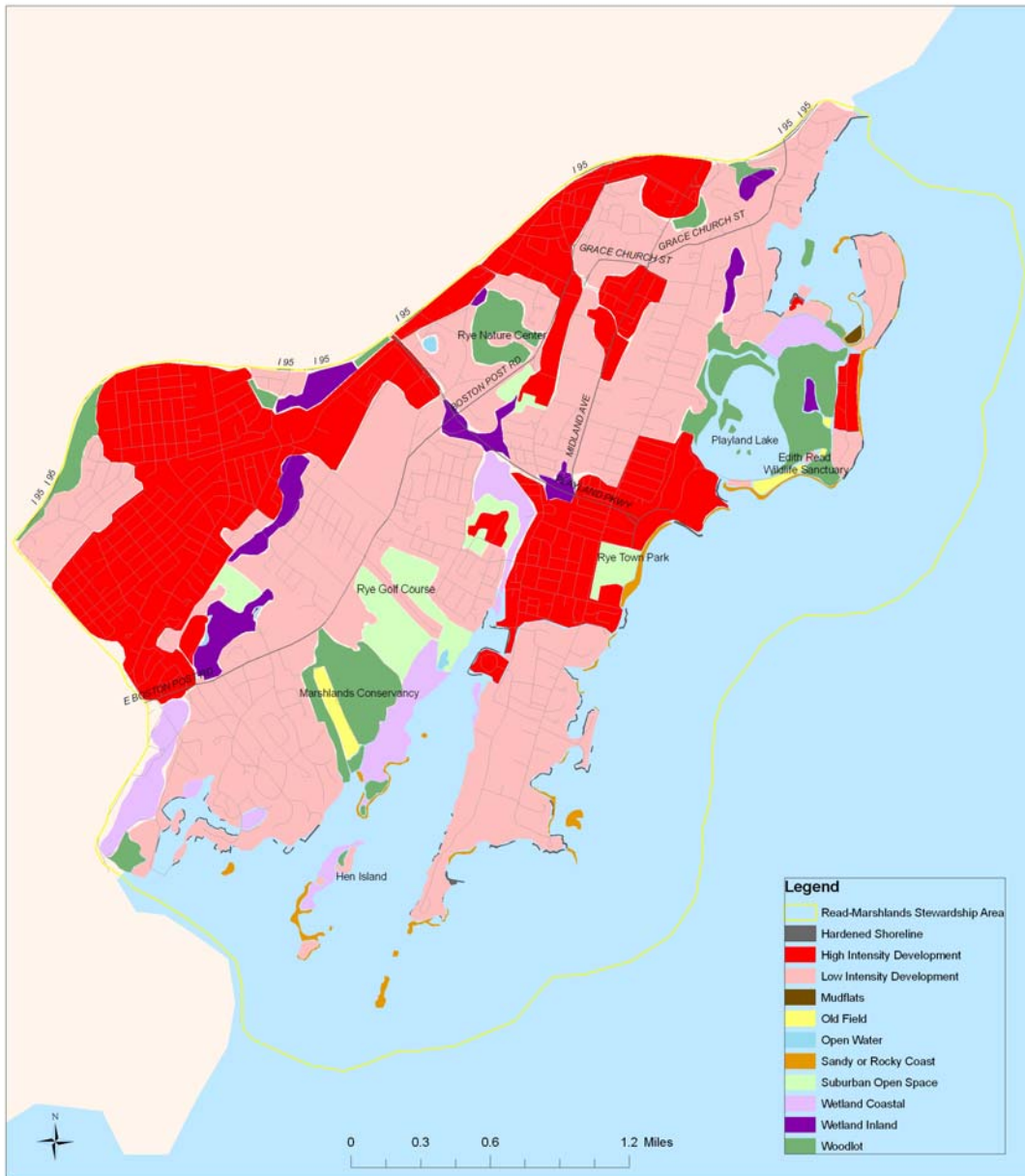
Progress on Implementing Priority Strategies (Updated February 2008)

Following the first iteration of this document in 2006, the committee identified two immediate actions that need to be completed. These included the creation of a habitat coverage map for the site and presenting the results of this process to the City of Rye. The habitat map was completed

in February 2008 following a process of defining habitats on large printed maps of orthophotographs and other relevant overlay data, digitization of those maps, and then a series of reviews. The habitat map and categories are on pages 15 and 16. The committee plans to present their work to date to the City of Rye in March 2008. Tide gate installation to reintroduce tidal flow to Playland Lake will be conducted by Woodard and Curran and commencing in the fall 2009. It is being done through County and grant moneys.

Habitat Classifications for Edith Read-Marshlands Stewardship Area

Edith Read-Marshlands Stewardship Area
Habitat Map



Map developed by the Edith Read-Marshlands Stewardship Group
Finalized in 2008
Primary base maps were orthophotos
Digitized by Audubon NY, Ithaca, NY

Habitat Classifications Definitions

- **Hardened shoreline:** Shoreline that has been hardened with structures that armor and stabilize the shoreline landward of the structure; usually used in erosion control. Examples include bulkheads, concrete sea walls, rip-rap, jetties, groins, breakwaters, stone reinforcement.
- **High intensity development:** Relatively high density residential development, urban areas, and industry
- **Low intensity development:** Lower intensity residential development, suburban, large lawns with shrubs, park with non-natural habitat and manicured lawns (e.g., vest pocket parks), and golf courses
- **Mudflats:** Exposed soil and muddy areas in between high and low tide
- **Old field:** An old agriculture field that has been left to succeed, maintained infrequently to keep as field and may have shrubs dispersed throughout.
- **Open Water**
- **Sandy or Rocky Coast:** Natural coastline, not hardened (see definition above)
- **Wetland coastal:** A coastal area that is inundated or saturated by saltwater with associated vegetation
- **Wetland inland:** An inland area that is inundated or saturated by fresh surface water or groundwater with associated vegetation
- **Woodlot:** A notable stand of trees or wooded area

Conclusions

The Edith Read to Marshlands Conservation Focus Area is a site of state-wide significance because of the habitat it provides to birds, specifically at-risk breeding birds and congregations of waterfowl, and the other unique natural resources. To facilitate conservation and increase awareness of the site's significance, a group of interested individuals participated in a series of meetings to develop a conservation action plan and begin implementing priority needs. Although this report summarizes the work carried out over the past few years, the strategies and actions outlined in this report will require long-term commitment on behalf of those who have been involved in this effort and other conservation partners.

Appendix A

Long Island Sound Stewardship Act

The Long Island Stewardship Act was passed by the House on Sept. 18, 2006 and the Senate on Sept. 20, 2006 and the president signed the bill on October 16, 2006. The measure would authorize up to \$25 million annually through 2011 to preserve and improve open spaces and important ecological sites around the Sound, as well as to provide additional access to this nationally significant estuary. Thirty-three initial priority sites have been identified by the LIS Study Policy Committee, including the Edith Read to Marshlands area.

The bill was amended several times since its introduction to both houses in June 2004. One of the amendments in 2005 added the Peconic Estuary as part of the larger Long Island Sound region. This would allow for grants from this bill to be used in furtherance of the Peconic CCMP which was issued in 2001. Other changes reduced the authorized funding level from \$40 million annually to \$25 million, and the federal to local match from 75%-25% to 60%-40%. The sunset term was reduced from Dec. 31, 2013 to Dec. 31, 2011. There were many other small changes and some more troubling amendments, including the definition of a qualified applicant. Hopefully, many of the concerns will be resolved when the guidelines and criteria are established pursuant to the terms of the bill.

Appendix B
Participants on the Edith Read to Marshlands Stewardship Committee

| Participants | Affiliation |
|---------------------|-----------------------------------------------------------------------------|
| Alison Beall | Westchester County Parks |
| Beth Herr | Westchester County Parks |
| Carolyn Cunningham | Federated Conservationists of Westchester County (FCWC) |
| Chantal Detlefs | Rye City naturalist |
| Damon Oscarson | Westchester Land Trust |
| David Johnson | retired teacher |
| Doug Bloom | Bronx River Sound Shore Audubon |
| Frank J. Alpert | Central Westchester Audubon |
| Garry Corwin | Board of the Friends of Read sanctuary, American Yacht Club |
| George Kraemer | Purchase College |
| Gladys Goldmann | Audubon Council and Audubon New York Board |
| Irene Saltzburg | Friends of Marshlands |
| Jason Klein | Westchester County Parks |
| Jeanne Alpert | Central Westchester Audubon |
| Jeff Main | Westchester County Parks |
| Jillian Liner | Audubon NY |
| Joy Reidenberg | Vice President of the board of the Friends of Edith Read Wildlife Sanctuary |