



**City of New York
Parks & Recreation**

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To: NY/NJ HEP Habitat Workgroup
From: Marc A. Matsil, Chair, HEP Habitat Workgroup
Date: December 18, 2000
Subject: Minutes from October 19, 2000 HEP Habitat Workgroup Meeting, Hudson River Foundation

Next meeting: Wednesday, January 24, 2000
10.00 am – 2.00 pm
Hudson River Foundation Conference Room
40 West 20th Street, 9th Floor

Present at last meeting:

Bob Alpern (NYC DEP), Melissa Alvarez (NYS DEC), Steve Barnes (Baykeeper), Alice Belling (NYC DEP), Peter Blanchard (TPL), Michelle Broege (WPC), Paul Brunn (NYC DCP), Andy Darrell (WPC), Len Houston (US ACOE), Zoe Kelman (US EPA), Marc Matsil (NYC Parks), Paul Mankiewicz (Gaia Institute, NYCSWCD), John McLaughlin (NYC DEP), Joyce Novak (NYC DEP), Bob Nyman (US EPA), Mario Paula (US EPA), Surangi Punyasena (NYC Parks), Greg Remaud (NY/NJ Baykeeper), Lisa Rosman (NOAA), Don Smith (HMDC), Jim Tripp (ED), Inga Van Eysden (NYC Law), Christopher Zeppie (PA NY&NJ).

Items requiring further action:

- Jim Tripp (ED) will draft a letter to the US ACOE outlining the criminal violations committed by Kaplan Associates at Cheesequake Marsh.
- Marc Matsil (NYC Parks) will distribute copies of the paper published by NYC Parks & Recreation in *Wetlands Ecology and Management* and the monitoring reports completed by the Port Authority at Alley Creek.
- Steve Barnes (Baykeeper) will put together an issues map and a synopsis of the significance of the Raritan River Watershed.

Minutes:

❑ **THREATENED ACQUISITION PRIORITIES & FUNDING BRAINSTORM**

CCMP Action H-4.4: Ensure that actions impacting habitat in the Harbor core area, in the aggregate, result in a net increase in the acreage and quality of aquatic habitat, where feasible and appropriate. Emphasize key habitat types such as submerged aquatic vegetation.

CCMP Objective H-11: Identify significant coastal habitats warranting enhanced protection and restoration.

CCMP Action H-11.4: Identify and protect locally significant habitats in the Harbor core area.

CCMP Objective H-12: Develop and implement plans to protect and restore significant coastal habitats and impacted resources.

CCMP Action H-12.8: Seek opportunities for upland habitat acquisition.

Greg Remaud (Baykeeper) presented six New Jersey HEP High Priority Acquisition sites that are currently threatened by development.

CONASKONK POINT. NJ DEP has received a US FWS coastal management grant to pay for acquisition of the 200-acre Monmouth County wetland. The future of Conaskonk Point is not yet secure – there are proposals by the Monmouth Planning Board, local officials, and local realtors to develop the site. The property owner, GPU Energy, has yet to decide if it is willing to sell the property or maintain it as a mitigation bank for future projects.

MARQUIS CREEK. A hundred acres of wetlands and ponds and a small creek mouth are owned by the township of Old Bridge. Audubon has described it as one of the most important natural sites along the Raritan Bayshore. The town is willing to work with HEP to preserve the site, but there are competing plans for a marina and developments on the upland/filled portions of the property. Funding is needed for restoration. Marquis Creek was nominated by HEP for the ACOE Hudson-Raritan Estuary Study.

CHEESEQUAKE MARSH. This is the most graphic example of the development threats faced by HEP sites. Development on all sides of the salt marsh and maritime forest fringe has altered the hydrology of the area and directly harmed even the protected portions of Cheesecake State Park.

At the La Mer development, a residential complex adjacent to the state park, the steep forested bluffs on the property were clear-cut and completely denuded in August by Michael Kaplan Associates for a road and sewer line [*see the August 16th HEP Habitat Workgroup meeting minutes*]. Remaud noted that the ACOE was very responsive, and has issued a stop-work order. NJ DEP/Regulatory Branch did not visit the site until after the bluffs had been bulldozed. DEP had issued a permit for a 0.3-acre detention basin and a technicality in state regulations allows linear development (sewer lines and roadways) on coastal bluffs. However, Remaud noted that the sewer line could have been placed away from the bluff edge in the developed portions of the property. Baykeeper suspects that the forest was cut down to provide the La Mer properties a more expensive waterfront view.

The clear-cutting and manipulation of the bluff has left the downhill marsh vulnerable to runoff and sedimentation – “mechanically induced erosion” – that has filled about 8 acres of tidal and salt marsh.

Baykeeper has photos and videotapes of the expansive manipulation of the bluff by bulldozers and backhoes. There are several clear wetland violations, including the lack of proper erosion control measures and the presence of heavy machinery tracks through the marsh. Baykeeper also notified the local press to publicize the violations.

Twelve days elapsed before a violation was issued by NJ DEP. The municipality of Sayerville was responsible for enforcing soil erosion control measures (normally state jurisdiction).

The developer is now terracing the bluffs and there are plans to lightly revegetate the hillside. The restoration mitigation plan that was developed did not require Kaplan Associates to restore a mature tree line. Only the impacted tidal and freshwater wetlands will be restored (4.5 acres of salt marsh and 2.5 acres of freshwater wetland) and there may be only \$11,000 in fines. Some of the wetland damages were not included because sections of the marsh were not classified as regulated wetland. Baykeeper has not fully reviewed the report, and is considering legal action. Kaplan Associates has had a history of environmental violations.

Don Smith (HMDC) suggested the restoration plan require that all the fill be removed from the marsh and the freshwater ponds and that a sizeable performance bond be issued. He added that sizeable trees be replanted on the bluffs. He believed that Kaplan Associates should be required to restore a functioning slope (extensive species lists for the area, including amphibians, may be available). Natural resource damages should be included.

Paul Mankiewicz (NYCSWCD) suggested that the understory be re-established to prevent erosion and continued runoff of sediment into the bluff. This would be a difficult restoration.

Lisa Rosman (NOAA) volunteered photos of the area from two years before. Smith volunteered topographic maps. Marc Matsil (NYC Parks) volunteered the services of Parks geomorphologists.

Steve Barnes (Baykeeper) added that the soil districts are the biggest contributors to nonpoint source pollution in New Jersey. Permit applications are rubberstamped and sediment runoff problems are investigated during dry weather. The districts need to be held more accountable.

Christopher Zeppie (PA NY&NJ) noted that the requirements for a NJDPES permit mandate that any physically altered site over five acres have a stormwater permit that includes a soil erosion/sediment control plan. The fines for not having this permit are \$25,000/day for each day of the violation.

Jim Tripp (ED) noted that this was a clear violation of the Clean Water Act and Section 13 of the 1899 Rivers and Harbors Act. Section 13 gives the ACOE jurisdiction to regulate any precipitation into wetlands from adjacent uplands. Section 13 also includes criminal sanctions. He suggested that a subpoena from the US Attorney might deter future violations. He requested that the Workgroup adopt a resolution to request that the EPA and ACOE require a full restoration of the marsh effected by sedimentation and the denuded bluffs to prevent future sedimentation.

- *Tripp was nominated to draft a letter to the ACOE outlining the criminal violations committed by Kaplan Associates at Cheesequake Marsh.*

At the eastern border of the park, there is a second development, Metro Park South. Although there are no outright violations, development of the site will adversely affect the adjacent marsh.

SOUTH AMBOY/SAYERVILLE. These wetlands are in the middle of an industrial area, behind a new waterfront park and a NJ Transit rail line. The area requires management, but the towns are willing to work with HEP.

LIBERTY STATE PARK. Two hundred-forty acres of the interior of the park and a couple of hundred acres outside the interior could potentially be restored. There are moss-mat communities and open fields used by migratory songbirds and raptors, where habitat has re-established itself. There is some contamination from historic fill and two hotspots that require remediation. Two hundred twenty-five acres are closed to public.

Liberty State Park Conservancy has worked to keep development out of this site. Necessary work includes remediation of the hotspots, restoration of functional habitat, and permanently protecting the site from recreational development. The recommendation is that the contaminated fill soils be

removed and that a 1½-foot cap added. Remaud and Smith, however, were afraid of the potential damage to the existing plant communities. The site was nominated by NJ DEP and HEP for the ACOE Hudson-Raritan Estuary Study. The ACOE will not be responsible for the remediation, but may help with other aspects of the restoration.

MEADOWLANDS/FD&P. This is the contentious site of the proposed Meadowlands Mills Mall. The ACOE is considering a permit application for the site. EPA has recommended that the permit be denied, but would be reluctant to veto an ACOE permit.

STATEN ISLAND. Matsil presented slides of some of the destruction that has occurred in New York City wetlands. All the Staten Island HEP Acquisition High Priority Sites are threatened. At *Pawpaw Hybrid Oak Woods* there were several wetland violations last year. Bulldozers are poised to develop the site. Developments around *Graniteville Swamp Woods* are contributing to runoff into the swamp forest and wetlands. At *Outerbridge Pond Woods*, a privately owned site, heavy machinery bulldozed its way through state-regulated wetland AR-14. The patchwork of hybrid oaks that was destroyed will be difficult to restore. There was no clear motivation for the bulldozing.

Matsil added that one of the earliest priorities of the Habitat Workgroup was the NYS Agreement of Coordination on Wetlands Permitting. But he continued that without agreement on what defines a wetland, there is little hope of regulating development. US EPA and FWS, through the National Wetlands Inventory, have documented a number of wetlands that are not protected under current regulations.

Zoe Kelman (US EPA) suggested that this should be a priority for the Policy Committee. She would like to see an audit of the permitting programs in both states.

FUNDING. The Workgroup discussed creative funding mechanisms for habitat acquisition. Smith noted that hunters voluntarily pay a tax when buying a license, a gun, or ammunition that contributes millions of dollars to the Robinson-Pittman fund. The fund finances the acquisition of open spaces in the United States. Fishermen should create a parallel fund that could be used toward acquisition of the wetlands necessary to maintain fisheries.

Andy Darrell (WPC) added that Waterfront Parks Coalition is working stateside to find new sources of to replace the NYS Clean Water/Clean Air (CWCA) Bond Act and Environmental Protection Fund. He is writing a statement of need and planned to incorporate these sites and their price tags. (Matsil estimated Graniteville Swamp Woods at \$25 million, Outerbridge Ponds as \$12 million, and Pawpaw Woods at \$10-12 million).

There was discussion on the justification necessary to fill wetlands. Mario Paula (US EPA) noted that developers are allowed to build on regulated wetlands if they are no alternatives available. The unavoidable impacts must first be minimized and then mitigated.

Matsil added that some of the sites have “problem soils” – red parent material – and are not obviously hydric, or may have complex hydrology and geology. Paula responded that federal agencies are required to use the ACOE three-parameter approach to defining wetlands.

New Jersey has several funding programs for habitat acquisition. \$15 million has been dedicated to acquisition and there is a million-acre program, which aims to buy a million acres of open space. Remaud noted, however, that urban properties were not a priority because of high costs. The NYS CWCA Bond Act had set aside \$150 million for acquisition statewide. \$25 million was spent on the acquisition of South Mount Loretto alone.

The Workgroup again discussed setbacks on adjacent areas. In New York City, the development is limited to only 150 feet from a tidal wetland and 100 feet from a freshwater wetland. In New

Jersey the setback is 50 feet for normal wetlands and 150 feet for high quality wetlands. The Workgroup agreed that setbacks should be increased.

❑ **MITIGATION RATIOS: ROUND II**

CCMP Objective H-1: Develop a comprehensive regional strategy to protect the Harbor/Bight watershed and to mitigate continuing adverse human-induced impacts.

CCMP Objective H-3: Manage coastal development.

CCMP Objective H-4: Manage shoreline and aquatic habitat modifications.

CCMP Action H-4.4: Ensure that actions impacting habitat in the Harbor core area, in the aggregate, result in a net increase in the acreage and quality of aquatic habitat, where feasible and appropriate. Emphasize key habitat types such as submerged aquatic vegetation.

CCMP Action H-4.2: Ensure regulation of proposed actions involving less than one acres of fill in freshwater wetlands.

Matsil began the follow-up to August's discussion on mitigation ratios by distributing a discussion draft prepared by Nancy Niedowski (NYS DOS). He discussed NYC Parks/NRG's recent paper "Restoration of a *Spartina alterniflora* salt marsh following a fuel oil spill, New York City, NY" (*Wetland Ecology and Management*, 8: 185-195, 2000) chronicling the results of restoration at Old Place Creek, Gulfport Reach, and Prall's Island, Staten Island. A decade after the massive oil spills, negligible portions of the unrestored impacted sites have returned. Much of the marsh is now being lost to erosion. Cumulative impacts, including PAH saturation, non-point source pollution, and waking generated by tugboats, contribute to marsh degradation.

Because of the limited success of restored wetlands in the short-term, Matsil suggested in-kind and out-of-kind acquisition replacement in lieu of traditional restoration mitigation. Developable unregulated uplands generally cost \$1.5 million an acre. To achieve the no-net-loss standard required by federal statutes, he also suggested an additional 3:1 restoration ratio. For restoration alone, because of the slow rates of functional and structural recovery, he suggested 20:1 mitigation ratios.

He added that the argument for higher ratios must be made in the context of urban restoration and urban development. The reality is that high quality habitat is being lost annually.

Dan Montella (US EPA) in the August 16th Habitat Workgroup meeting, estimated current mitigation banking prices in New Jersey at approximately \$65,000/acre. Matsil noted that NYC Parks/NJ DEP restorations average over \$500,000/acre, because of the amount of fill that needs to be removed. A cubic yard of fill costs \$20-30 to remove if clean and over \$100 to remove if contaminated.

Mankiewicz and Barnes suggested that the value of the habitat loss be compared to the value of the habitat created by using ecological productivity measures. Mankiewicz suggested using leaf area indices and Barnes suggested vegetative biomass. Quantifying the productivity of the restored marsh would help set a fair mitigation ratio that would offset lost ecological use.

Rosman noted that time was a large factor in gauging the success of a restoration. She believed that most scientists would argue that there is neither enough research available nor enough monitoring of restorations. Success criteria have not been properly defined and there is little funding for the necessary long-term research. Many academic and government monitoring of restorations are at most only five years – less than the actual recovery time.

Paula noted that the National Academy of Sciences is completing a study on mitigation. The first draft is due at the end of this year. [*Release of the draft has been postponed to April 2001.*]

Zeppie suggested that the cost of restoration and the quality and functionality of the wetland lost be included in the calculation. Brownfield restorations will never find sponsors if the ratios are too stringent. The overall cost, not just acreage, needs to be considered.

Rosman noted that the Habitat Equivalency Analysis (HEA) looks at ecological injury, the current quality of the habitat, and the time to establishment of a functional marsh. To criticism that HEA was flawed, she replied that she would say that it is the inputs that are flawed.

Mankiewicz also added that there needs to be some flexibility in the definition of success. Sometimes a “failed” restoration is an unintended success of a different habitat. What needs to be measured is the return of biomass over time.

Matsil defended a standard ratio because he was concerned that a subjective determination of the value of a wetland would make it too easy for developers to undervalue an area. He would prefer a simple, but larger, ratio.

Barnes believed that the acquisition ratios should be larger than those proposed. More land that is preserved now means less land that needs to be restored in the future.

Bob Alpern (NYC DEP) suggested that the mitigation protocols be informed by the results from the application of the HEP monitoring protocols.

NYS CLEAN WATER/CLEAN AIR YEAR 2000 BOND ACT SUBMISSIONS

CCMP Action H-3.4: Identify projects and issues requiring regional cooperation; facilitate cooperation.

CCMP Action H-4.4: Ensure that actions impacting habitat in the Harbor core area, in the aggregate, result in a net increase in the acreage and quality of aquatic habitat, where feasible and appropriate. Emphasize key habitat types such as submerged aquatic vegetation.

CCMP Objective H-12: Develop and implement plans to protect and restore significant coastal habitats and impacted resources.

CCMP Action H-12.5: Identify and facilitate implementation of habitat acquisition and restoration projects.

The Workgroup reviewed two NYS Clean Water/Clean Air Bond Act projects that NYC Parks has submitted on behalf of HEP. Melissa Alvarez (NYS DEC) provided comments on improvement of the applications.

SOUNDVIEW PARK. Soundview, at the mouth of the Bronx River, is a HEP and Long Island Sound Study (LISS) high priority restoration. There has been a tremendous amount of momentum generated by the Bronx River Working Group – a coalition of federal, state, local, and non-profit organizations. There is a great deal of community and political support.

The \$4-5 million project cost reflects the reality of restoring this difficult site. Nearly 90,000 cubic yards of fill need to be removed. The northern end of the lagoon will be excavated, increasing the area of low marsh and the degree of tidal flushing. The application requested monies that were earmarked for both LISS and HEP available funds.

MEADOW LAKE II. This eighty-acre lake in the Flushing Creek matrix is the largest in New York. Over 2 million people use it a year, including the City’s largest Caribbean and Asian communities. The lake is hypereutrophic – leading to fish kills every year. This restoration will hopefully increase filtration rates, enhance the freshwater plant communities, and restore 8.6 acres of wetland and 6 nearshore acres by removing fill material that New York City now maintains as a lawn. The total project cost is \$2.7 million (with \$1.3 million matched by New York City).

Phase II is independent of the first phase of the project, but the two components compliment each other. Phase I of Meadow Lake was a proposed \$5 million project which sought to limits the

inputs and sediments running into the lake, including oil products from the nearby highway system. The larger project goal was to create freshwater wetland habitat and the salt marsh at Flushing Bay. Only \$500,000 of the project – the oil and sediment separators and aerators – was funded. The site is also part of the US ACOE and NYC DEP Flushing Creek Study.

Barnes stressed that HEP had a responsibility to ensure that money allocated to HEP priorities is spent on actual restoration and achieving the goals of the Habitat Workgroup.

❑ **RARITAN RIVER WATERSHED MANAGEMENT PROJECT (*not on agenda*)**

Barnes provided an update on the work of the Raritan River Watershed Management Project Committee (Watershed Management Area 7 of the NJ Watershed Management and Planning Map). Wetland areas along the lower portion of the Raritan are the largest outside the Meadowlands. There is a separate planning process for the stretch of the Raritan River from the confluence of the North and the South Branch to Raritan Bay. Middlesex county is the lead.

The lower watershed planning effort does not include the tidal portion of the river, which falls under HEP. The management committee plans to coordinate management strategies with HEP.

The Workgroup discussed TMDL levels for the lower Raritan. Because they are due in 2007, two years after the rest of the river, Kelman and Barnes expressed concern that the levels will be as high as possible to compensate for what is being put in the water upstream, Barnes added that there are additional threats to Raritan habitat. There are plans by Middlesex County and local governments to develop wetlands and brownfield areas that could be restored to buffer.

Barnes volunteered to serve as liaison between the Raritan Committee and the Workgroup. He suggested that the Raritan River be listed as a priority watershed, as is the Arthur Kill, Jamaica Bay, and the Meadowlands. He volunteered to compile an issues map and a synopsis of the importance of the Raritan River to the Harbor watershed.