



To: NY/NJ HEP Habitat Workgroup
From: Christina Scully, NYC Parks/NRG
Date: March 3, 2003
Subject: January 23, 2003 meeting minutes

Next Meeting: Wednesday, March 12, 2003
10 a.m. - 2 p.m.
Hudson River Foundation, conference room
40 W. 20th Street, 9th Floor
NY, NY

Present at Meeting: *Carl Alderson (NOAA), Robert Alpern (NYCDEP), Mary Arnold (TCC), Alice Belling (NYCDEP), Michelle Bicek (ED), Betsy Blair (NYSDEC), Bernard Blum (FOR), David Burg (WM), Gisele Colbert (EE), Charles DeQuillfeldt (NYSDEC), Eugenia Flatow (HEPCACCB), Margaret Gargiullo (NYC Parks), Cindy Goulder (BL), Nina Haiman (NYCSWCD), Roselle Henn (USACE), Len Houston (USACE), Steve Jandoli (NJDEP/GA), Andrew Kasius (NYNJ), Adam Kelly (ED), John Ladd (NYSDEC), Paul Mankiewicz (NYCSWCD, Gaia, BCEQ), E.J. McAdams (NYCAS), Reyhan Mehran (NOAA/CPRD), Bob Nyman (USEPA, HEP), Manuel Russ (CACNYCDEP), Lindsey Schert (WM), Katie Schmid (NYCCW), Christina Scully (NYCParks), Rosalie Siegel (PANYNJ), Don Smith (HMC), Allison Speiser (EWA), Kyle Spendiff (NJMC), Frank Steimle (NOAA/NMFS), Mike Stringer (Baykeeper), Carolyn Summers (NRDC), Bill Tai (NYC Parks), Nellie Tsipoura (NRDC), Kim Tripp (GNRA), Tali Vardi (NYC Parks), Chris Villari (NYCDEP/BEE), Margaret Waldo (TPL), Clark Wallace (TPL), Nancy Welsh (NYS DOS), Cathy Yugas (NJSG/HEP)*

Minutes:

Bill Tai (NYC Parks) introduced himself as the new director of NYC Parks/Natural Resources Group. Tai explained that because of restructuring within the agency NRG, along with Parks Enforcement Patrol (PEP), and the Park Rangers all belong to the Urban Parks Service branch of the NYC Parks Department. Tai added that the UPS looks forward to contributing to the NY Harbor's environmental initiatives.

□ **Environmental Sensitivity Index Mapping (Ed Levine, NOAA)**

Ed Levine (NOAA) introduced the workgroup to his work developing Environmental Sensitivity Index (ESI) maps. The ESI maps offer guidance to the Coast Guard and clean up efforts in case of chemical and/or oil spills.

The maps have recently been converted to digital format with help from PANYNJ funding. The data is available to the public as downloadable GIS and ARC layers. Thus far, 98% of the US shoreline and some navigable rivers have been mapped. The Hudson River mapping effort currently stops at the George Washington Bridge. Efforts to expand upstream to the navigable reaches are planned. Long Island is also unmapped.

Currently, the ESI maps include three different kinds of information; shoreline rankings, biological resources, and human-use resources. They are delineated by color-

coding, symbols, or other markings. Shoreline rankings are defined by factors influencing sensitivity to oiling. They include grain size, permeability, use, transport, intertidal zone slope, exposure, ease of cleanup, and biological productivity and sensitivity. The biological data includes monthly measurements of species absence/presence and life history info. It was compiled by resource experts and landowners and is both quality controlled and referenced.

Kimberly Tripp (GNRA) questioned if NOAA has quantified armored shoreline. Levine said that there is not a specific category, however one might infer this information from the shoreline descriptions and accompanying data.

Eugene Flatow (HEPCACCB) said it is critical that measurements show how the littoral zone is being impacted. She recommended collaboration with Fran Dunwell, a Hudson River Estuary Coordinator who has collected and compiled sediment data and biological subsurface data over the long term.

Bob Alpern (NYCDEP) questioned what plans exist to update the data. Levine responded that updates are cyclical. Currently, updating all geographic areas to digital format is the first priority for NOAA. He added that increased participation and interest help queue sites. Once sites are digital, it is much easier to update their information.

Information about ESI contacts and obtaining data is available at <http://www.response.restoration.noaa.gov>. Levine can be contacted at (212) 668-6428 or ed.levine@noaa.gov.

□ **Benthic Mapping and Habitat Characterization (Betsy Blair and John Ladd HRNERR)**

Nancy Welsh (NYSDOS) introduced the Benthic and Habitat Characterization presentation and commented that she is pleased with the generous data sharing from the project. Betsy Blair (HRNERR) responded that it is an honor to collect this data and would like suggestions on how to facilitate sharing it.

The benthic mapping and habitat characterization work on the Hudson River has been managed by staff of the Hudson River National Estuarine Research Reserve (HRNERR). HRNERR is one of 25 sites in the National Estuarine Research Reserve System that promotes better estuarine management through site stewardship research, monitoring, education, and outreach. Most of the benthic mapping and habitat characterization work is funded under the New York State Hudson River Estuary Action Plan, as part of the objective “to conserve, protect, enhance and where possible increase river habitats so that species are supported at all life stages by 2009.”

DEC’s general approach to managing aquatic habitats in the Hudson River Estuary is to: map and inventory habitats, assess and monitor change, understand habitat functions, develop restoration science, restore or enhance habitat, and promote conservation via policy change, education and outreach.

Blair began the slideshow presentation on the benthic and habitat characterization. The Hudson Estuary contains a 152-mile tidal river within a 14,000 square mile watershed, which is characterized by high biodiversity. Recent habitat inventories have shown the estuary’s surface area from the Troy dam to the Battery is 9% tidal wetlands, 6% submerged aquatic vegetation (SAV), 2% invasive water chestnut, 17% nonvegetated shallows, and 66% deep waters (greater than 3 meters).

DEC, under the direction of Fred Mushacke, is currently re-mapping Hudson River tidal wetlands from the Tappan Zee bridge south to New York City and mapping all Hudson River tidal wetlands greater than ½ acre north of the Tappan Zee Bridge. These updated tidal wetland inventories will be compared to historic photos and maps to analyze wetland trends. Other studies are determining trends in Phragmites expansion.

DEC, under the direction of Chuck Nieder (HRNERR), is mapping Hudson River SAV for the first time using 1995 and 1997 air photos. SAV is rooted, underwater vegetation that typically grows to depths of 3 meters in the Hudson River Estuary. A dozen SAV species have been found, with water celery the most common. This year the project will re-map the SAV using 2002 air photos and field verification to analyze change in SAV from 1997-2002.

Blair reminded the group of the benefits of SAV, which increases river oxygen levels and is associated with higher fish and invertebrate abundances and diversity. She added that SAV almost offsets the oxygen depletion caused by invasive zebra mussels. Future research needs include examining human impacts, including boat propeller scarring on SAV, as well as an evaluation of the potential to restore SAV.

In 1998 NYS DEC began the benthic mapping project with a goal of mapping benthic habitats throughout the estuary. The benthic mapping data products can yield details about fish, shellfish, and invertebrate habitat, navigational channel changes, sediment transport and contaminant distribution patterns, geologic history of the river and surrounding watershed, location of shipwrecks and historical artifacts, and source areas of soil erosion.

John Ladd (HRNERR) manages this benthic mapping/bottom characterization effort for DEC. The project employs several different study technologies including side scan sonar, multi-beam sonar, sediment profiling sonar, ground penetrating radar, sediment profiling photography, sediment cores and grabs. The resulting data products are acoustic images, digital elevation models of the estuary floor, sub-bottom profiles, photographic images of sediment profiles, cores and grabs, and interpretive maps, that are being integrated into a geographical information system and an internet map server (in development). Maps of sediment distribution and areas of erosion will contribute to our understanding of contaminant concentration and distribution because contaminants electrostatically attach to smaller sediment grains.

Current partners in this venture include NYSDEC, OPRHP, Lamont-Doherty Earth Observatory of Columbia University, SUNY Stony Brook, Queens College, NOAA Coastal Services Center, US Dept of Agriculture, USGS, and the Virginia Institute of Marine Sciences.

Next steps include completing the baseline mapping of the estuary including shallow areas, looking into subaqueous soil mapping, evaluating temporal changes, understanding habitat functions and sediment transport, assessing historic resources, making information accessible, continuing education and outreach, and restoring habitat.

Before the data is digitally available online, it is being released on an individual basis through John Ladd. He can be reached at (914) 944-4373 or Ladd@bestweb.net. Sonar and coring data collected in 2003 will be incorporated into the final product expected in 2004.

Welsh questioned what type of costs would be incurred to expand their mapping efforts to the HEP region. Ladd said that a rough estimate of current expenditures is \$2 million per 200 square kilometers. At the conclusion of the current contract the shallowest third of the estuary (about 100 square kilometers) will be under-sampled. He noted that the shallow water mapping is difficult because multibeam sonars cannot survey efficiently in shallow water and the vessels used so far cannot be operated in water depths less than about three meters. Currently, collaborative partnerships are well established for the project, it only lacks funding. Several HEP HWG members expressed support for continuing the mapping efforts to completion, with inclusion of the HEP area.

Flatow said it would be useful to have an idea on the money amounts to seek funding. Blair would like to see more development of a plan for using and storing the data to insure good returns on the investment. Welsh questioned who we should begin talking to. Blair sees the HEP HWG as instrumental in both disseminating this work and exploring applications of these data and products in the New York Harbor.

Paul Mankiewicz (NYCSWCD, Gaia, BCEQ) recommended that the HRNERR get the results of this work published, highlighting what it implies for sediment transport and contaminant movement around the harbor. This will increase the partnerships and improve the chances of receiving funding. Flatow agreed that the work should be shared immediately to reach funding sources and more clearly related to the HRE report.

Ladd responded that the HRNERR is planning one or more workshops to pull together scientists and resource managers interested in mapping subaqueous soils, determining habitat for species of interest from acoustic remote sensing, and database development for archiving and dissemination of data products. Sediment transport studies are underway with coring and associated radioisotope measurements planned for the spring of 2003. This is currently funded by Lucent Technologies and NYS DEC Region 2. The HRF has funded Rocky Geyer, an Ocean Physicist at the Woods Hole Oceanographic Institute, to look at sediment transport in detail with the hopes modeling sediment transport for the whole Harbor.

□ **Draft Definitions for Priority/High Priority Sites (Carl Alderson, NOAA Restoration Center)**

Carl Alderson (NOAA) presented a new system for determining priority and high priority status for acquisition and restoration sites and projects. According to it, different site characteristics will be assigned numerical values and totaled for an overall site value. Despite numerical totals, the system will not rank sites. Alderson said it is a way to compare pre- and post- restoration activities and to indicate whether certain functions exist or not.

With this system, a site will have 5 major functions; ecological, social/cultural, land use, economic, and threats. These functions will be further broken down into additional categories to a preferred level of specificity.

Members saw the mathematical system as confusing and daunting for potential applicants; many of whom would not have all the required information required for calculating a site value. Cindy Goulder (BL) stated that a nomination system should not intimidate potential nominators with complex statistics or overwhelming requests for site information.

Welsh said that the NYSDOS has a similar system, which is controversial. Assigning numerical totals to sites does not necessarily help to elevate them in the eyes of outside government officials better than a simple high priority status would. With the need to highlight sites in imminent danger of development, or those of exceptional ecological quality, the simple high priority tag may be more useful.

Allison Speiser (EWA) supported the notion of this statistical system over the current system arguing that it makes site prioritization less ambiguous. She would like to see this system elaborated upon, moving away from undefined categories of 'priority' and 'high priority'. Other members said the statistical expertise for such a system is lacking. Charles DeQuillfeldt (NYSDEC) argued that not only is the process inaccessible for community groups, it also makes sites with less collected data appear less valuable. He added that the current lack of site data makes the system impossible. Nellie Tsipoura (NRDC) did not see value in a number that neither ranks nor prioritizes. Proposed component functions are often too subjective and complex for the equation. Alderson responded that you should have elements broad enough to exist at every site.

Gisele Colbert (EE) said that she worked with similar functionality equations in the Florida Everglades. Her experience found them useful in persuading politics and prioritizing work. Kyle Spendiff (HMC) said that he is currently working on prioritizing sites for acquisition and restoration in the Meadowlands for the USACE. He recommended keeping the ranking system slightly vague with tier 1, 2, 3, priority, high priority, etc. categories rather than statistical values per site. In his experience, property ownership, willing sellers, and other broad topics are often the most important pieces of information. As a project progresses, more specific site information can be collected.

Flatow said the main issue is that there needs to be criteria for getting on the HEP HWG list. This becomes especially critical with threatened sites. In her opinion, a numerical system will not fight politics. She noted that in the past, HEP HWG priority categories did not completely influence PANYNJ money. Despite the fact that politics will prevail in some cases, criteria are necessary to support HEP HWG's case for elevating and accepting sites. Welsh agreed that the pertinent issue had been lost. Definitions of 'priority' and 'high priority' are needed. Then, what determines acceptance to 'priority' and elevation to 'high priority' needs to be clarified.

Welsh volunteered to draft 'priority' and 'high priority' definitions for the HEP HWG to review and discuss at the next meeting.

□ **Habitat Conference Planning (Nancy Welsh, NYSDOS)**

Welsh announced that the Spring 2003 conference is going to be postponed indefinitely. She said that the conference was not coming together to be a worthwhile event. It will take more organized and serious thinking, which will require HEP HWG members to step up and plan various aspects of it. It will not be worthwhile unless the HEP can be advertised in the best possible light.

Flatow urged that the postponement be as short as possible. Communities involved with HEP are confused by its relation to the HRE, and LIS. She said that HEP owes it to the constituents to clarify this, along with HEP's goals and means of achieving them at a public conference. She added that this would be a good opportunity to reach potential funders. Bob Nyman (USEPA, HEP) said that the conference was first suggested to highlight HEP's successes and he would like to remain with that overall

theme. Welsh agreed with Flatow's sentiments, however she stressed once again, that there needs to be an overall commitment from HEP HWG members, CAC members, etc.

Welsh said that she does not want the conference to reflect her personal needs, but those of all the HEP HWG participants. As a group, it needs to be decided what is needed and how to achieve that. There needs to be more interest and help in setting up a targeted forum.

Flatow said that she would also like to know what the HEP's conference needs are because the NYCSWCD is planning on holding a biodiversity conference, which could possibly overlap with and address HEP issues. David Burg (WM) said that there are a few other conferences being planned in the area. He suggested collaborating with them, rather than having separate conferences for similar themes.

□ **Update on the Compensatory Mitigation Workshop (Carolyn Summers, NRDC)**

On Jan 6, 2003, a regulatory workshop addressing the White Paper Mitigation document was held in Lincoln Park, NJ. There, participants discussed a number of items for short and long term improvements in the HEP region, including creating legislation to increase habitat protection with improved permit application processes and making lists of appropriate and inappropriate mitigation sites.

The next workshop will target a structured agenda for short term needs. This will include putting out a preliminary set of performance standards to immediately improve the likelihood of getting better mitigation. These actions will get both sides comfortable working together with smaller issues, inspiring a joint vision to look at larger policy issues such as increased mitigation ratios and new legislation. Carolyn Summers (NRDC) remarked that the meeting was very valuable, impressing upon her the openness of the agencies and the sharing of information amongst participants.

Summers handed out an NRDC evaluation of the effectiveness of current wetland protection measures, focusing upon permitting. Summers said that few permits were denied and suspected that agencies permit wetland destruction with the notion that damage can be easily mitigated. She added that agencies dispute that permits are issued with mitigation in mind and instead claim that mitigation is only considered post approval.

Currently, NRDC is working on legally interpreting these processes. Future plans include seeking mitigation for projects that will definitely be approved and examining why so many permits are granted. Summers said this can be pursued separately or in conjunction with the HEP HWG. From her experience, it appears that the law states agencies cannot deny permits. This needs to be addressed at the state regulatory level. Flatow added that mitigation for deepening in the littoral zone and landfill closings must be examined closely.

Welsh suggested Summers articulate the constraints affecting permitting agencies. They are legally bound to grant permits if certain conditions are present. It is not always the case that they are looking at mitigation as a component of the permitting process. Summers said that there are additional factors to consider, such as political pressure and the threat of lawsuits that encourage permits to be granted. To counter this, the NRDC wants to offer legal assistance and insure agencies have the ability to deny permits when it is necessary.

Mankiewicz said there is a need to outline the cost benefit characteristics of a good mitigation project and incorporate performance quality clauses into mitigation projects. Summers agreed and added that it would be helpful to have more than one good example of an ideal mitigation project.

Welsh does not want it to be a forum for environmentalists attacking the regulatory agencies. In her mind, the important thing to do is foster the conversation between the two sides. Summers said that NRDC is pursuing several tracks on this issue. They feel it was important to also take the issue directly to NYSDEC's commissioner Erin Crotty. Summers noted that Crotty has been receptive to policy improvement.

□ **2003 Funding for HEP Projects (Tali Vardi, NYC Parks)**

Tali Vardi (NYC Parks) made a few announcements regarding upcoming Natural Resources Group grant applications. NRG is working to submit a \$1 million grant for North American Wetlands Conservation Act (NAWCA) in northwest Staten Island emphasizing interagency cooperation. This large grant is tied to a small grant application pending for the same area. NYSDOS, NYSDEC, NYC Parks, TPL and NYCAS are all supporting the effort in various ways. Vardi asked the group to think about other possible matches from ongoing or upcoming work in NW Staten Island that can be coordinated in this effort. Vardi can be contacted at (212) 360-1467 or tali.vardi@parks.nyc.gov.