

Meeting of the Policy Committee of the New York – New Jersey Harbor Estuary Program

December 11, 2008, 10:30 AM – 1:45 PM - Final Minutes

Attendees:

Policy Committee Members or Alternates Present: Tom Creamer, Barbara Finazzo, Jim Tierney (by telephone), Chuck Warren (by telephone), Jay Watson, Chris Zeppie.

Management Committee Members or Alternates Present: Kerry Kirk Pflugh, Dennis Suszkowski, Jeff Myers, Bob Nyman, John Tavolaro, Doug Adamo, Howard Golub.

Observers: Lisa Baron, Bob Connell, Suzanne Dietrick, Fran Dunwell, Charlie deQuillfeldt, Scott Douglas, Charles Dujardin, Olivia Glenn, Jim Joseph, Roland Lewis, Simon Litten, James Lodge, Debbie Mans, Robin Miller, Gabriela Munoz, Boris Rukovets, Joe Seebode, Clay Sherman, Bill Slezak, Eric Stern, Mario Delvicario, Rosalie Siegel,

Facilitator: Bill Logue

Materials handed out: 1) Agenda, 2) Policy Committee April 15, 2008 Meeting Summary; 3) Regional Sediment Management Plan PowerPoint; 4) Hudson Raritan Estuary Comprehensive Restoration Plan PowerPoint and highlights handout; 5) Oyster Restoration PowerPoint and Handout; 6) Status of Modeling Work Supporting Nutrients and Toxics TMDL Evaluations; 7) Status of Pathogens TMDL PowerPoint; 8) The Tidal Exchange HEP Newsletter; and Harbor-Wide Water Quality Monitoring Report for the New York – New Jersey Harbor Estuary.

Meeting Summary

Opening Remarks:

Barbara Finazzo, EPA Region 2 Director of the Division of Environmental Planning and Protection welcomed the Policy Committee members and others present and extended thanks to Jay Watson and the New Jersey Department of Environmental Protection for hosting the meeting. She reviewed the agenda for the meeting. All present in person and by conference call introduced themselves. Bill Logue reviewed expectations and goals for the meeting.

Regional Sediment Management Plan

John Tavolaro of the US Army Corps of Engineers presented the recently released Regional Sediment Management (RSM) Plan. He thanked all the participants who worked diligently on developing the plan and noted that two and one-half years of productive dialogue produces the consensus Plan. This regional approach is desirable because of the multiplicity of jurisdictions and authorities involved (e.g., three New Jersey Agencies, two New York and federal agencies and municipalities).

Mr. Tavolaro noted that the Policy Committee had formed the *ad hoc* work group in 2006 to address sediment issues beyond navigation and dredging such as water quality and economic and environmental

issues. Contaminated sediment adversely affects the ecosystem, public health and economy of the region. He noted that sediment deposition can be both beneficial and detrimental and that dredging and dredge material management requires improvements.

The Work Group of key stakeholders developed a consensus plan around sediment quantity, sediment quality and dredged material management. The RSM Plan recommends a scope and structure for the program, 8 objectives and 44 specific recommendations.

- **Sediment quality objectives** include: ensuring new sediments are clean, ensuring that new sediments remain clean once they enter the ecosystem, reducing toxic exposure and reducing transport of contaminants to other areas.
- **Sediment quantity objectives** include ensuring sufficient sediment to support a healthy ecosystem process and reducing sediment deposition in shipping channels and berths.
- **Dredge material objectives** include improving dredging operations and dredge material management. A goal is to identify high shoaling areas and to develop plans to minimize shoaling. The plan seeks to avoid unintended environmental consequences from dredging and encourages development of best management practices, setting seasonal windows for work and developing better interagency collaboration and coordination, especially for beneficial reuse and disposal.

The key recommendations address both governance and coordination and technical/action oriented items. The RSM Plan recommends that each state create an RSM advocate position. Other governance/coordination recommendations include strengthening regional coordination and consistency and fully engaging the public early in setting priorities and objectives. Technical/action recommendations include developing a sediment quality map to prioritize action areas, accelerating Hudson River and Passaic River cleanup projects, identifying excessive sediment loads and plans for reducing them, and updating technical information through research, monitoring and modeling. Benefits of the RSM include cost savings, improved habitat quality, improved availability of habitat, and shared regional scale data management system, models and tools, improved interagency and public relationships, and improved predictability of the regulatory process.

In discussion, Policy Committee members noted the need for this approach citing recent lack of coordination on dredging projects, the limited amount of dredging equipment in the area given the number of projects being bid, and the need to include Mohawk Valley and other farmers in sediment runoff planning. New York and New Jersey Policy Committee members noted that the Plan integrates well with their efforts concerning land use, flood management, storm water permits and other initiatives. Although the funding environment is difficult, some projects could be included in economic stimulus plans.

Decisions/Actions: The Policy Committee agreed to charge the Management Committee with making recommendation for a RSM Work Group including mission, administrative/funding needs and in-kind support, and initial priorities. A Policy Committee member cautioned parity with other Work Groups be considered if funding is recommended.

Habitat

Lisa Baron of the Army Corps of Engineers presented an overview of the draft Hudson Raritan Estuary (HRE) Comprehensive Restoration Plan (CRP). Participants participating in the consensus process include HEP, the Army Corp, The Port Authority, the Hudson River Foundation and Cornell University more than four federal agencies, eight city and state agencies, 13 research institutions, 28 nonprofits and five consulting firms. The draft will be released electronically in January and in hard copy in February 2009. The CRP Work Group is scheduled to meet in March 2009. There will be outreach on the draft and public input including from watershed communities. The plan will be compared with municipal master plans to assess feasibility. The genesis of the plan is in the 1996 CCMP and a 1999 Congressionally authorized Hudson Raritan Estuary Ecosystem Study. In 2005 the Hudson River Foundation developed the Target Ecosystem Characteristics (TEC) concept for planning which was adopted by the Corps in 2006.

Target Ecosystem Characteristics. The CRP is intended to provide a vision for a restored estuary and a blueprint for future restoration that will coordinate and align regional restoration activities. It will also be used to track progress. The Habitat Work Group encouraged the Policy Committee to use flexibility to overcome policy/regulatory challenges in implementation and to take ownership of the CRP in implementing restoration. The goal is to continue to work by consensus. Ms. Baron noted the HRE study areas, the active restoration areas and nominated sites. Eleven TECs were identified which prescribe what will be restored, where, how much and by when. This helps to identify where to implement with highest chances of success and sustainability. Constraints are being identified as are implementation methods, funding and measurements. The TEC wetlands goals include 1,200 acres restored by 2015 and 32,000 acres by 2050. GIS mapping results indicate that 12,543 are available for wetland restoration and 14,469 acres are available for wetland creation.

Challenges. Policy challenges to TEC implementation include:

- For wetlands existing prohibitions on placement of fill, habitat trade-off/exchange
- For habitat restoration the pervasive contamination in the estuary, determination of the appropriate level of clean, and questions of creation of attractive nuisances through restoration activities. The CARP data includes identification of hot spots of contamination in the top 10 cm of sediment and primary risk data for dioxin. (The hope is that the RSM will look at erosion and deposition zones and contaminants at depth.)

Challenges for the oyster restoration TEC which are addressed below. The TECs, CRP sites have been integrated on GIS maps for the Lower Bay Planning Region and now need to be prioritized.

Costs and Implementation. Potential costs have been estimated at the low, median and high units of costs for coastal wetlands, oyster habitat and eelgrass. For wetlands these are \$218,587, \$277,009 and \$713,569 per acre. For oysters they are \$51,457, 52,478 and \$109,776 per acre. For eelgrass they are \$1,080, \$16,600 and \$170,083 per acre. The cumulative total will be billions of dollars – highlighting the need to work collaboratively with existing funding and programming. Early implementation of restoration is consistent with CRP goals and with existing agency missions, authorities and programs. To fully implement the plan, agencies will need to align policies and programs to encourage and promote

restoration, streamline and make more flexible the permitting process, work to integrate the players and manage progress and success.

The Work Group will ask the Policy Committee to adopt and implement the final CRP at a future meeting. On an ongoing basis restoration opportunities will be evaluated as will strategies for broader public support and outreach.

After brief discussion, Policy Committee members agreed that before additional legislative authority is sought any gaps should be identified to assess if that additional authority is necessary. An observer suggested looking at the Long Island Sound Futures Fund as a model for restoration program funding. A Policy Committee member suggested that other sources of funding also be considered including those from mitigation measures and natural resource damage assessments.

Oyster Restoration TEC. Jim Lodge, of the Hudson River Foundation, presented an overview of oyster planning and restoration for HEP. In developing and finalizing the CRP, and to gain more stakeholder feedback, workshops have and will be conducted with the technical/scientific community, agency staff, restoration practitioners, policy makers and regulators. The initial 2015 TEC for oyster restoration is 500 acres, among 10-20 sites, of self sustained and naturally expanding reefs with a long-term 2050 target of 5,000 acres. The initial target is feasible and work could be initiated prior to finalization of the CRP.

The **benefits** of oyster restoration include enhanced ecological services such as additional unique habitat, intertidal reefs acting as natural breakwaters, and water quality improvements. From a societal perspective oyster reef restoration would be a visible symbol of environmental improvement. Commercial harvest is not a goal. There is strong community interest and support for oyster restoration.

Current and planned **pilot projects** amount to more than \$1.8 million. These include a \$600,000 Jamaica Bay pilot studying water quality benefits, a \$200,000 Soundview Park oyster reef pilot, and a \$1 million Great Beds Oyster Reef Restoration in the Western Raritan. Research initiatives total approximately \$750,000. Including initiatives by HEP, the Hudson River Foundation, the National Fish and Wildlife Foundation, the New Jersey Meadowlands Commission/Hackensack Riverkeeper/NY-NJ Baykeeper/Rutgers University, and another joint project of the NY-NJ Baykeeper and Rutgers. Most of the research programs have received permits.

Regulatory challenges include concerns by NJDEP and NYDEC that oyster restoration in contaminated areas creates an attractive nuisance to the degree where the ecological benefits are not outweighed by the potential health risks from poached oysters. Both states are also concerned that enforcement capabilities are not sufficiently reliable in deterring and detecting poachers. New Jersey is particularly concerned about the impact on its shellfish industry if tainted poached oysters are consumed.

Baykeeper Debbie Mans noted that there was funding for programs but that policy issues need to be resolved by the states in tandem with discussions which integrate science and institutional controls so that pilot projects can move forward. The question was raised as to why the states might be using a higher standard for shellfish than for other species (fish and waterfowl) for whom advisories are established. Jay Watson of New Jersey DEP noted that shellfish are consumed raw resulting in immediate illness and exposure, whereas for fish it tends to be a longer term exposure issue. He also

noted serious poaching problems (power washing of marked shellfish). NJDEP is developing a policy to provide consistency in decision making. He noted that New Jersey does desire to move forward where it is safe, practical and feasible. Jim Tierney of NYSDEC noted that New York had similar goals.

Decision. After further discussion NYDEC, NJDEP will meet at the Hudson River Foundation to discuss circumstances and possible criteria including deterrence measures (e.g., cages), inspections, surveillance, locations and conditions would address the public health concerns.

Water Quality

Robin Miller presented the status of the modeling work for the nutrients and toxics TMDLs and Charlie Dujardin on the pathogens TMDL.

Nutrients. Ms. Miller noted that the negative impacts of nutrients manifest in low dissolved oxygen (DO). A number of tasks have been completed including: development of loading tables, estimates of MS4 loadings if Limit of Technology (LOT) is applied, impact of planned improvements in the System Wide Eutrophication Model simulation, sub-regional SWEM simulations and initiation of the Hackensack River stakeholder workshop process. Key findings include: DO increases with the planned improvements are modest, LOT is not sufficient to attain DO standards in all regions, and that, with a compliant Hackensack River, the Passaic River and Newark Bay almost fully attain current standards. This later point indicates that, if this difficult area can be addressed, it will have wider benefits. Ms. Miller displayed graphics of the baseline non-attainment of standards using 1988 rainfall as the typical year.

The regional SWEM simulation run 1 captures planned improvements including the Long Island Sound Study nitrogen TMDL, the Jamaica Bay Consent Order, the Clean Air Interstate Rule (CAIR), North Bergen sewage treatment plant (STP) outfall relocation, the Passaic River freshwater phosphorous TMDL and revised Owls Head STP load. Although CAIR was recently vacated by court order, the model has not been adjusted to date, in part because it is expected that there will be a program that achieves some level of air reductions and that its impact on the projections is not that significant. A decision will be made as to whether CAIR should be included prior to any final model runs. The Work Group will discuss this at future meetings. A second model run, building on the first, was conducted to identify maximum attainments through treatment. This run also includes LOT for STP and runoff and assumes local municipal separate storm sewers. This run demonstrates significant and marked improvements from the LOT over just the planned improvements.

The draft schedule for the nutrients TMDL will slide by about 6 months; however, a final TMDL is expected by March 2010.

Toxics TMDL. Work completed includes identification of contaminants of concern and development of loading component spreadsheets. Work in progress includes: site specific standards calculations, additional mercury model development, dioxin site identification and ranking in selected sub-watersheds, and identification of MS4 reduction levels for toxics. This work will be completed by year end. Work to be initiated includes CARP model projection simulations and how to address in-place sediment "hot spots." This should be completed by March 2010.

From an initial set of 39 contaminants 11 have been identified as **contaminants of concern**. A model is available for six contaminants exceeding standards, these include: mercury, dioxin/furans, PCBs, DDT and metabolites, chlordane, and individual PAHs. The mercury model needs further refinement because it is currently showing consistent violation of standards. No model has been developed for hexachlorobenzene, dieldrin and heptachlor epoxide.

For the **bioaccumulation**, New York and New Jersey have very different standards which raises the question of how to establish a TMDL. Existing bioaccumulation factors are based on national datasets. With the CARP model it is possible to set site specific numbers with EPA expert guidance. Dioxin contamination exists in numerous areas. Source areas in watersheds and land sites need to be identified. A toxics TMDL will be completed by March 2010 and will complement the RSM work.

Pathogens TMDL. Charlie Dujardin presented the status of the pathogens TMDL modeling and work. Completed tasks include: selection of indicator organisms (total coliform, fecal coliform and enterococci); evaluation of existing databases including NY CSO loadings, NJ CSO loadings and stormwater loadings; calibration of the Harbor Pathogen Model (PATH); and development of the Pathogen Allocation Tool (PAT). Ongoing tasks include evaluation of management scenarios using PAT and development and management of management alternatives. The proposed final TMDL is anticipated by December 2010.

Key issues for resolution include a decision on the averaging period and design conditions. In attempting to address this, 13 years of data were examined and the results extrapolated for key locations for return intervals of 2, 3, 4, 5, and 10 years. The essential question for the averaging period is whether to use a seasonal average or the more stringent 30-day geometric mean. The choice will determine the level of desired protection. Mr. Dujardin displayed graphics showing the results based on the different averaging periods and intervals. He noted that EPA recommends the 30-day averaging period but that there is flexibility to use a different period. In response to questions, he stated that he did not believe that in the near term climate change would impact the return interval calculations.

The PAT divides the landside into 18 management zones by waterbody and jurisdiction. For each zone responses are performed based on a 10 year return frequency for CSO only and stormwater only. The results are stored in a GIS based program. This allows for analysis by users by management zone with key statistics. Results are displayed on color coded maps. The tool indicates that pathogen issues are related to polluted runoff.

The oversight group of New Jersey, New York and EPA is scheduled to meet in January and will set as a priority making the decision on the averaging period.

Other Business. In closing Doug Adamo presented Bob Nyman with an award for his work on the Big Egg Marsh Restoration Project several years ago.

The meeting was adjourned at 1:30.