

PECONIC ESTUARY PROGRAM

FY08 WORKPLAN AND BUDGET



**Submitted by:
PEP Management Conference**

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**Peconic Estuary Program
FY08 Workplan and Budget**

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PECONIC ESTUARY PROGRAM FY 08 WORKPLAN

PART I: GENERAL INFORMATION

1. INTRODUCTION

The Peconic Estuary System consists of over 100 distinct bays, harbors, embayments and tributaries, the surface area of these waters exceed over 158,000 acres. The population of the East End towns surrounding the Peconic Estuary System more than doubles during the summer months. These residents and visitors use the system and its resources extensively for beach-going, swimming, boating, fishing, shellfishing, and other water-dependent activities, contributing significantly to the local economy. However, there are problems in the system ranging from increased nutrient loading to declines in habitat quality and quantity, and reduction in catch of commercially and recreationally important finfish and shellfish. Other issues of concern include closure of shellfish beds due to contamination by coliform bacteria (used as an indicator for pathogens), potential contamination with toxic substances, the relationship of land use to water quality and the health of the living resources, and the occurrence of Brown Tide, a harmful algal bloom. The effects of these problems are a significant threat to the overall health of the Peconic Estuary System and its resources.

2. OVERALL FUNDING SOURCES

The core FY08 budget (see Appendix A) reflects the following sources of funding:

EPA FY08 Base Funding	\$591,750
Non-Federal Match	\$591,750
TOTAL	\$1,183,500

The non-Federal match is provided by the Suffolk County Department of Health Services (SCDHS) (\$470,750) and the New York State Department of Environmental Conservation (\$121,000). Match is itemized in detail in **Section III: Grants/Funding to Local Entities, subsection ii**. The actual match for the FY08 period is expected to exceed the commitment reflected in the budget table.

3. ACCOMPLISHMENTS AND TOP PRIORITIES

The Management Conference believes that the PEP has effectively administered the funding it has received to support appropriate and necessary efforts, which has resulted in a truly comprehensive, meaningful, and site-specific CCMP. Especially significant are the following factors that, individually and collectively, have made the PEP unique:

- the focus on early action, which resulted in a firm "no net increase of point source nitrogen" commitment for the western bays system, as well as a commitment to

establish a progressive water quality preservation policy for the eastern portions of the Peconics

- the level of detail (*e.g.*, parcel-specific land use information for the entire study area)
- the extent of monitoring and data collection (*e.g.*, thousands of groundwater and surface water samples)
- the powerful management tools which are being utilized (*e.g.*, state-of-the-art hydrodynamic and water quality modeling for the entire estuary and the Critical Lands Protection Strategy)
- the goals of site-specificity for management, with focus not only on the main bays system, but also on subwatersheds for creeks and embayments
- state-of-the-art technical characterization techniques essential to PEP management (*e.g.*, sediment flux and accretion measurement; sophisticated groundwater underflow measurement techniques)
- the early focus on finance and implementation, with a state-of-the-art, full valuation of market and non-market resources completed
- emphasis on water quality and habitat preservation, and interaction of living resources with water quality management

4. COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN (CCMP) GOALS

a. Annual Goals and Top Priorities:

CCMP Chapter: Brown Tide

- Maintain HAB and Brown Tide research funding levels
- Continue monitoring and funding research activities to better understand, and if necessary mitigate, blooms in the Peconic Estuary system

CCMP Chapter: Nutrients

- Implement the Agricultural Stewardship/Agricultural Environmental Management (AEM) Program
- Develop and implement a residential fertilizer use reduction program (*e.g.*, comprehensive education/media program, use restrictions, public relation endorsements of “good”/sustainable products, investigate the feasibility of a selective sales fee on fertilizer and pesticide products)
- Develop and adopt an on-site disposal system strategy (*e.g.*, incentive-based programs, upgrade programs, maintenance programs); and ensuring that all STPs discharging to the Peconic Estuary are upgraded and operating properly.

CCMP Chapter: Habitat and Living Resources

- Protect and restore existing eelgrass with aggressive public outreach coupled with a long-term management strategy.
- Develop a strategy to minimize shoreline hardening structures that results in no net increase of such structures and protects natural shorelines.
- Develop a strategy to protect the Critical Natural Resource Areas in each town and institute a pilot program.

- Update and implement the habitat restoration plan; continue shellfish enhancement and other resource restoration programs, particularly fish passage projects along the Peconic River.
- Fund priority ecosystem investigations identified in the Living Resources Research, Monitoring and Assessment Plan through the National Estuarine Research Reserve System (NERRS) or by State legislative equivalent.
- Manage invasive species, especially water primrose in the mainstream Peconic River.

CCMP Chapter: Pathogens

- Implement stormwater mitigation recommendations including those from the four Subwatershed Stormwater Runoff Management Plans, finalized and sent to Towns for implementation.
- Continue to implement the Vessel Waste No Discharge Area in the Peconics.

CCMP Chapter: Toxics

- Reduce loadings of pesticides and herbicides by pursuing implementation of the NYSDEC's Long Island Pesticide Management Plan; planning and carrying out "Clean Sweep" programs; developing and implementing a comprehensive agricultural pesticide management strategy; funding and initiating aggressive public outreach and education.
- Reduce the use of insecticides used for mosquito control to the maximum extent practicable, while adequately protecting human health and without detriment to the environment.
- Continue remedial efforts at sites of concern in Peconic Estuary, including monitoring the effectiveness of implemented remedies under Superfund for Operable Unit V at Brookhaven National Laboratory.

CCMP Chapter: Critical Lands Protection

- Continue to implement the Critical Lands Protection Plan.
- Accelerate land protection in the Peconic Estuary by monitoring success of acquisition programs; securing 0% financing of county and town CPF monies for the Peconics from the State by executive order or legislation; and securing long-term 10 to 15 year land acquisition funds from county, state and federal sources.

CCMP Chapter: Financing

- Ensure that funding reserved for the PEP in the New York State Clean Air/Clean Water Bond Act and the Suffolk County General ¼% Sales Tax Program is used effectively for the highest priority eligible projects.

b. Status of Annual Goals and Top Priorities & Expected Focus in 2008:

CCMP Chapter: Brown Tide

- *Brown Tide and HAB Research Funding Levels* - Since 1991, Suffolk County has appropriated over \$1.69 million dollars for Brown Tide research. Brown Tide efforts are being carried out using \$150,000 of 2007 Suffolk County Capital Funds and an

additional \$275,000 was authorized to replace one of the sampling vessels used to carry out marine monitoring in the Peconic Estuary. Additionally, Harmful Algal Bloom research efforts are continuing, as the County has authorized \$67,719 of Capital Program funds in 2007 and \$182,556 in 2008 in support of HAB related endeavors.

CCMP Chapter: Nutrients

- *Nitrogen Load Allocation Program* -A Nitrogen TMDL has been developed to achieve dissolved oxygen standards in select segments in the western estuary. The document was finalized in September 2007 and implementation has been initiated. Several PEP-related projects are expected to arise in response to the Nitrogen TMDL including enhanced groundwater monitoring efforts to be funded using NEP FY08 funding. Increased groundwater monitoring will provide the necessary data to better understand nitrogen loading into the Peconics via this source.
- *Agricultural Environmental Management (AEM) Program* - Work towards implementation of the Suffolk County Agricultural Stewardship Program continues. The Ag Stewardship Program is envisioned as a comprehensive initiative for maintaining and strengthening farming in Suffolk County while improving groundwater and surface water quality. A Five Year Plan has been developed by the Ag Stewardship Program and initiatives supporting the Plan are expected to begin in 2008.
- *Residential Fertilizer Use Reduction Program* -Specific recommendations have been made to guide homeowners to eliminate or reduce nitrogen losses, and have been included in the program's newsletter and website. Additionally, an RFP for services to implement a homeowner and landscaper outreach program has recently been issued in support of Suffolk County's Nitrogen Reduction Law.

CCMP Chapter: Habitat and Living Resources

- *Eelgrass Management* - The Peconic Estuary Program continues to fund the Submerged Aquatic Vegetation Long Term Monitoring Program; an Eelgrass Management Plan is being drafted; and numerous restoration efforts have taken place and success is being monitored. Additionally, new research initiatives, among other information, were shared at the Seagrass Experts meeting in May 2007 and will provide a direction for future eelgrass management initiatives. The proceedings from this meeting are available at http://www.peconicestuary.org/NY%20Seagrass%20Experts%20Meeting_FinalProceedings.pdf.
- *Shoreline Hardening* - With the use of Base Program funds, the PEP contracted the USFWS to analyze aerials flown in the fall of 2000 for submerged aquatic vegetation and shoreline hardening. New aerials are expected to be flown by the end of 2008 to update the extent of eelgrass beds and hardened shoreline. The maps of the hardened shoreline serve as a basis for developing a strategy to minimize shoreline hardening structures. This information will be showcased in the upcoming 2nd PEP Environmental Indicators report and the GIS layers will be available through the PEP Program Office.

- *Critical Natural Resource Areas* – Critical Natural Resource Areas are areas of particular ecological significance designated by the Peconic Estuary Program. Steps have been made to protect the marine CNRAs by targeting these areas in the first phase of the Benthic Mapping Project. The upland CNRAs are an overlay criterion in the Critical Lands Protection Strategy for identifying land protection priorities.
- *PEP Habitat Restoration Plan* – Select projects identified in the existing Habitat Restoration Plan have been initiated, including diadromous fish passage restoration along the Peconic River, bay scallop restoration in the eastern Peconics, eelgrass bed restoration in the eastern Peconics and wetlands restoration at Cassidy Preserve. The effort to update the plan has begun and the PEP is going through the process of reaching out to the east-end towns to attain updated priority restoration information. The NEP funded Marine Conservation Planner will be designating a significant amount of time to this endeavor.
- *Living Resources Research, Monitoring, and Assessment Plan* – The Benthic Mapping Project is one of the priorities in the PEP Living Resources Research, Monitoring, and Assessment Plan. As mentioned above, this project is ongoing. Nine shellfish spawner sanctuaries, another priority in the Plan, have been established by The Nature Conservancy and other partners in the Peconics and will be investigated as a natural resources management tool as well as a possible control for Brown Tide populations.

CCMP Chapter: Pathogens

- *Vessel Waste No Discharge Zone* – The USEPA Regional Administrator approved New York State's designation of the entire Peconic Estuary as a Vessel Waste No Discharge Zone in June 2002. Efforts to educate the public and provide financial assistance to municipalities for the purchase of pump-out boats continue.
- Implement stormwater mitigation recommendations including those from the four Subwatershed Stormwater Runoff Management Plans, finalized and sent to Towns for implementation.

CCMP Chapter: Toxics

- *Long Island Pesticide Management Plan*- The PEP will pursue implementation of relevant elements of this NYSDEC Plan in the coming year.
- *Clean Sweep Programs*- A Clean Sweep event was held in Suffolk County in March 2008. Unwanted, unused and obsolete pesticides and chemicals were removed from various agricultural and non-agricultural businesses within the Peconic Estuary for proper disposal.
- *SC Vector Control and Wetlands Mgmt Long Term Plan & EIS* - Suffolk County was responsible for overseeing the development and implementation of a Suffolk County-wide vector control and wetlands management plan, which addressed numerous issues of Federal and state jurisdiction, including pesticide

fate and transport and wetland preservation. The County Legislature has adopted the Long Term Plan and Findings and Resolution 285 was signed into law by the County Executive in March 2007. Efforts to implement the Long Term Plan have been initiated.

- *Brookhaven National Laboratory* – The Peconic Estuary Program continues to remain involved through USEPA/NYSDEC/SCDHS oversight of the Superfund clean-up at Brookhaven National Laboratory (BNL). The oversight of environmental restoration is important as BNL is located at the headwaters of the Peconic River. In 2007, the United States Department of Energy acceded to an SCDHS request regarding decommissioning of the High Flux Beam Reactor. The DOE secured additional funding to complete the Control Rod Blade and Beam Plug removal interim actions within the FY 2008/2009 time frame instead of by 2020 as proposed. This action will remove and secure a large portion of the highly radioactive components remaining within the HFBR structure for decay at an appropriate out of state facility.

CCMP Chapter: Critical Lands Protection

- *Critical Lands Protection Plan* – The Peconic Estuary Program Critical Lands Protection Plan (2004) prioritizes land protection (including acquisition) priorities with respect to estuarine management concerns. Efforts continue to protect critical landscapes through methods including full-fee acquisition, purchase of development rights, conservation easements, and native vegetation protection ordinances. Measures to support these methods of land protection are specifically addressed in the 2008 Marine Conservation Planner workplan.

CCMP Chapter: Financing

- Efforts to ensure funding sources such as the Suffolk County ¼% Sales Tax Program are used effectively continue. The PEP has a Priority Funding List which includes the highest priority eligible projects that will support PEP initiatives.

5. PROJECT OBJECTIVES AND STATUTORY AUTHORITY

The objective of this project is to support the Peconic Estuary Program Management Conference in carrying out the EPA Administrator-approved Comprehensive Conservation and Management Plan (CCMP). Specific activities in the workplan address: aquatic vegetation monitoring and management, surface and groundwater quality monitoring, stormwater management, the National Atmospheric Deposition Program, and program coordination at the state and county level. Funding under Section 320 of the Clean Water Act is made available to support activities necessary for the development and implementation of a comprehensive conservation and management plan prepared under Section 320 of the Act. The project therefore carries out Section 320 of the Clean Water Act. Clean Water Act core program implementation is further defined in Appendix B.

6. PROGRAM OBJECTIVES AND EPA'S STRATEGIC PLAN

This National Estuary Program cooperative agreement supports Subobjective 4.3.1 of the 2003-2008 EPA Strategic Plan (see page 94) which is to restore and protect ecosystems and facilitate the ecosystem-scale protection and restoration of natural areas. The Strategic targets under this subobjective specifically cite improving the overall aquatic system health of the 28 estuaries that are part of the National Estuary Program and working with National Estuary Program (NEP) partners to protect and restore habitats. The objective of this project is to support the Peconic Estuary Program Management Conference in carrying out the EPA Administrator approved Comprehensive Conservation and Management Plan (CCMP). Specifically, the SCDHS will support implementation of the CCMP to restore and protect the Peconic ecosystem and facilitate the ecosystem-scale protection and restoration of natural areas.

The workplan for this National Estuary Program Cooperative Agreement contains well-defined outputs, and to the maximum extent practicable, well-defined outcomes, summarized as follows:

Outcomes:

- Improvements in the health and extent of eelgrass beds due to the development and implementation of pollution control programs and an eelgrass management plan, as measured by the eelgrass monitoring program. Maintain existing eelgrass acreage (1,550 acres) in 119 eelgrass beds, per 2000 assessment.
- Enhanced protection of critical lands and better coordination among land acquisition programs, as recorded by critical lands protection reports. Protect 200 or more acres per year through acquisition programs.
- Advancement in knowledge for targeting aquatic habitat restoration projects and the siting of aquaculture projects due to benthic mapping and as described in accompanying reports. Remove 40 cubic yards per year of the invasive ludwigia plant from the Peconic River until removal is no longer necessary.
- Knowledge of water quality conditions for conventional water quality parameters to better manage point and nonpoint source water pollution control programs, as reported in summary reports. Achieve dissolved oxygen standards in 97% or more of the Peconic Estuary.
- Planned and realized reductions in pathogen loadings and improvements in water quality for swimming and shellfishing uses, due to the preparation of a Total Maximum Daily Load and the development and implementation of Stormwater Runoff Management Strategies, as measured by water quality monitoring. Maintain all existing open shellfish growing areas (prevent closed shellfishing growing areas from exceeding 5,172 acres). Prevent any public bathing beach closures.
- Planned and realized reductions in nitrogen loadings and improvements in dissolved oxygen conditions due to the preparation of a Total Maximum Daily Load, as measured by water quality monitoring and estimated by modeling. Summarize atmospheric deposition loadings. Ensure the 4 waste water treatment plants included in the TMDL do not exceed their total nitrogen load targets/limits (156 lbs.

- of nitrogen per day).
- Successful outreach and participation to citizens and elected officials resulting in reduced pollution loads, increased participation in projects, and improved governmental management, as measured by: participation in programs, meetings, and events; increases in subscriptions to newsletters and web page hits; and projects pursued/undertaken. Hold a minimum of six Citizens Advisory Committee meetings per year.

7. OVERALL PROGRAM APPROACH

The Peconic Estuary Program follows the general approach outlined in the Management Conference Agreement. This approach has three key elements: 1) technical, 2) administrative/regulatory, and 3) public involvement. These elements are outlined in general here, and the specific tasks that fall under each element are described below.

The technical element includes research and monitoring activities, designed to synthesize our understanding and further our knowledge of the Peconic Estuary System. It can be further broken down into three categories: 1) systemwide and site-specific investigations and implementation, 2) performing detailed water quality and natural resource investigations, 3) conducting management efforts, additional research and pilot demonstration projects (including Brown Tide research).

The administrative/regulatory element includes, but is not limited to:

- Communicating regularly with all PEP participants about activities and issues to ensure consensus and that all views are fairly represented in work products
- Coordinating activities among Federal, state, county, and local agencies as well as the public sector to obtain program objectives.
- Managing the preparation of annual workplans, the CCMP, and budgets, in cooperation with all PEP participants.
- Managing the preparation of all PEP work products, including data summaries, annual reports, technical reports, CAC products, and modelling activities, for content and accuracy before publication.
- Ensuring the transfer of all PEP materials (e.g., work products, annual reports, meeting minutes, etc.) to the appropriate persons and locations (e.g., Management Conference participants, the public, local libraries, etc.).
- Receiving and responding to requests for technical information and assistance regarding the PEP from the public, elected officials, USEPA Headquarters, and others.

Public involvement is addressed through a Public Participation strategy developed by the Citizens Advisory Committee. The Public Participation and Outreach Program will include disseminating information to educate the public regarding the scope, goals, and progress of the Peconic Estuary Program. This information will be disseminated

through pamphlets, booklets, public service announcements, conferences, workshops, and other methods.

8. PEP ADMINISTRATION: STAFF AND RESPONSIBILITIES

The Peconic Estuary Program is administered by a Management Conference, as outlined in the Management Conference Agreement. However, funding will be provided for support of most Management Conference activities, in the form of NYSDEC and SCDHS staff. State and County staff will provide many functions that are vital to the success of the Peconic Estuary Program. These tasks include planning and coordinating Management Conference activities, developing support documents for the Program, and providing State and County input into all levels of the Program. Staff support of the PEP is more fully discussed below. (It should be noted that in addition to administering and carrying out NEP workplan activities, program staff also dedicates time to PEP endeavors sponsored by various funding sources and partners. Detailed accounts of such Non-NEP support can be seen in Appendix D.)

The SCDHS Office of Ecology has been designated as the PEP Program Office. As such SCDHS, as the working arm of the Management Committee, is responsible for management and coordination of all routine aspects of the PEP.

Vito Minei, P.E., Program Manager (approx. 20% of time)

Walter Dawydiak, P.E., JD, Deputy Program Manager (approx. 20% of time)

Sponsoring Institution: Suffolk County Department of Health Services

Location: Suffolk County Department of Health Services, 360 Yaphank Ave, Suite 2b Yaphank, NY 11980

Responsibilities and Funding Sources:

The SCDHS Division of Environmental Quality, directed by Mr. Vito Minei, stands at the national forefront as a progressive, pro-active County environmental agency. With approximately 170 employees, the division conducts comprehensive environmental programs through its offices of Pollution Control (e.g., commercial and industrial pollution discharge monitoring, assessment, and management), Water Resources (well drilling, groundwater quality monitoring, drinking water supply, etc.), Wastewater Management (including development and discharge permits), and Ecology. The Division also has a state-certified laboratory, which analyzes groundwater, surface water, and sediment samples for a broad array of organic and inorganic conventional parameters (nutrients, salinity, etc.), pesticides, metals, organics (e.g., PAHs), Brown Tide, coliform bacteria, enterococcus, etc.

Mr. Vito Minei serves as Program Manager of the Peconic Estuary Program and oversees the activities of the PEP Program Office, situated within the SCDHS Office of Ecology. Mr. Minei also marshals the multi-disciplinary resources of the Division to

provide technical and administrative support for the PEP. Mr. Minei typically attends national NEP meetings, as well as Association of National Estuary Program functions.

Walter Dawydiak serves as the Chief Engineer for the SCDHS Division of Environmental Quality. With Mr. Minei, he oversees and works with many offices within the Division, including the Office of Ecology. The Office of Ecology oversees water quality-related planning studies for all of Suffolk's waters, including the Peconic Estuary Program, the Long Island Sound Study (LISS) Suffolk County Watershed Management Strategy, the South Shore Estuary Reserve (SSER) Suffolk County Monitoring Program, and the Source Water Assessment Program. The office also conducts an aggressive surface water monitoring program, having collected over 50,000 samples since 1988. Finally, the Office conducts State Environmental Quality Review Act (SEQRA) review for the SCDHS, and conducts and coordinates numerous other environmental review activities and programs.

As PEP Deputy Program Manager, Walter Dawydiak assists in overseeing activities of the Program Office (discussed below), and supervises the PEP County Coordinator, as well as other facets of the environmental management program.

Between them, Vito Minei and Walt Dawydiak bring over 53 years of professional environmental management experience to the PEP, with advanced degrees in engineering and law. They serve the program at no cost to the PEP, and are funded through the operating budget of the SCDHS. As such, their positions are not dependent on grant funds, and provide a great likelihood of continued local commitment and institutional longevity. Unique opportunities for interdisciplinary integration are also offered, by virtue of SCDHS commitment to the program.

Richard Balla, Federal Coordinator

Sponsoring Institution: U.S. Environmental Protection Agency – Region II

Location: U.S. Environmental Protection Agency, 290 Broadway, New York, NY 10007

Responsibilities:

The regional coordinator is responsible for ensuring that the Peconic Estuary Program and the CCMP comply with the requirements of the Clean Water Act, Federal regulations and EPA issued guidance. This includes serving as project officer or work assignment manager for all funds awarded in support of the program, including grants, cooperative agreements, interagency agreements, contracts and procurements. The coordinator participates in and represents EPA at PEP meetings, and meetings with other stakeholders, elected officials and the public. The coordinator serves as the liaison with EPA-HQ on matters related to the National Estuary Program and ensures that all reporting requirements are satisfied and program requirements are met. Within the regional office, the coordinator works to secure funding or services of other programs to complete actions in the CCMP. The coordinator works to ensure PEP goals and actions

are consistent and integrated with other EPA functions and programs, including but not limited to: water quality standards, total maximum daily loads, wetlands protection, vessel waste no discharge areas, Superfund, the national pollutant discharge elimination system, stormwater management, dredged material management, monitoring and assessment, quality assurance/quality control requirements, peer reviews, nonpoint source management, pollution prevention, sustainable development, state revolving loan funds, RCRA programs, Clean Air Act programs, and matters related to Brookhaven National Laboratory. The coordinator is also responsible for working with other Federal Agencies (including FWS, NRCS, NOAA).

Laura Stephenson, State Coordinator

Sponsoring Institution: New York State Department of Environmental Conservation

Location: New York State Department of Environmental Conservation, 205 Belle Meade Road, East Setauket, NY 11733

Responsibilities:

The New York State Coordinator is responsible for assisting the New York State Department of Environmental Conservation in providing support to the Peconic Estuary Program Management Conference and is primarily responsible for ensuring implementation of PEP CCMP Pathogen and Habitat and Living Resources Management Actions. The New York State Coordinator co-chairs the PEP Natural Resources Subcommittee and the PEP Phase II Stormwater Workgroup, spearheads the PEP Impacted Shellfishing Waters Management Initiative, and supports a myriad of stormwater management, regional watershed-based pathogen management, invasive species, habitat restoration, and water quality improvement initiatives. The Coordinator also reviews proposals submitted to New York State for NYS Clean Air/Clean Water Bond Act and Environmental Protection Fund funding.

Kimberly Paulsen, Suffolk County Coordinator

Sponsoring Institution: Suffolk County Department of Health Services

Location: Suffolk County Department of Health Services, Yaphank, NY 11980

Responsibilities:

The County Coordinator works within the Program Office and is responsible for assisting the departments of Suffolk County in providing support to the Peconic Estuary Program Management Conference. Responsibilities include management of all PEP related contracts and oversight of projects to ensure terms of the agreements are adequately fulfilled; ensuring administrative duties are carried out sufficiently within the Program Office; and participating in technical and public outreach activities. Ms. Paulsen serves as the Program Office representative for various workgroups and committees such as the Suffolk County Aquaculture Leasing Program Advisory

Committee. She also provides support for the Management Committee, Technical Advisory Committee, and Citizens Advisory Committee.

Theresa Goergen, Technical Outreach Specialist

Sponsoring Institution: Suffolk County Department of Health Services

Location: Suffolk County Department of Health Services, Yaphank, NY 11980

Responsibilities:

The Technical Outreach Specialist is responsible for producing technical publications for the program, including PEPTalk, the official newsletter of the PEP. Working out of the Program Office, Theresa coordinates and attends outreach events and provides information pertaining to PEP initiatives to the public. She is responsible for updating and maintaining the PEP website (www.peconicestuary.org), overseeing the mini-grant program, and fielding information inquiries in relation to PEP reports and GIS data. In addition to technical outreach tasks, Ms. Goergen provides support to the Program Coordinators and the Citizens Advisory Committee.

Wayne Grothe, Marine Conservation Planner

Sponsoring Institution: The Nature Conservancy

Location: The Nature Conservancy, 250 Lawrence Hill Road, Cold Spring Harbor, NY 11724

Responsibilities:

The Marine Conservation Planner was responsible for developing the living resources characterization report, a living resources threats analysis, and the Living Resources Research and Monitoring Framework. Responsibilities now include providing technical review of project proposals and PEP-funded studies, co-chairing the Natural Resources Subcommittee, implementing the Critical Lands Protection Plan, and overseeing the Benthic Mapping Project.

PART II: PROPOSED AND ONGOING PROJECT REPORTING

1. STATUS OF NEP FY07 PROJECTS

- *Submerged Aquatic Vegetation Management and Long Term Monitoring funds* (FY07; \$30,000 Federal funding) continue to support ongoing Peconic eelgrass monitoring including vegetative sampling at six sites (Gardiners Bay, Orient Harbor, Southold Bay, Northwest Harbor, Three Mile Harbor, and Bullhead Bay) as well as other SAV-related activities including the commencement of work on development of an Eelgrass Management Plan. The most recent monitoring report was submitted to the Program Office on April 8, 2008 and is available for

viewing at www.peconicestuary.org/PEP2006Eelgrass.pdf . Responsible entities are the Suffolk County Department of Health Services (SCDHS) and Cornell Cooperative Extension (CCE). Milestone/Completion Date: Ongoing.

- *Marine Conservation Planner Activity funds* (FY07; \$63,000 Federal funding) The Marine Conservation Planner and team continues to assist in Peconic CCMP implementation, including managing the benthic mapping project, serving as co-chairperson of the Natural Resources Subcommittee, overseeing the implementation of existing and future shellfish spawner sanctuaries, and implementing the findings of the Critical Lands Protection Plan whereby almost 70% of the remaining land available for development were designated as high protection priorities. Maps and related metadata indicating impervious surface and shoreline buffer information for the entire Peconic Estuary has been provided to the Program Office and is available for viewing upon request. Additional outputs from this project include sample Wetlands Code that has been developed by the Nature Conservancy. Efforts are in place to help local municipalities adopt and write these concepts into law. Responsible entities are the Suffolk County Department of Health Services (SCDHS) and The Nature Conservancy. Milestone/Completion Date: Ongoing.
- *Water Quality Monitoring Program/Long Term Monitoring funds* (FY07; \$130,800 Federal funding) were used to support the Suffolk County Department of Health Services' Marine Monitoring Program (monthly monitoring at 32 Peconic surface water quality stations throughout the year for a suite of parameters; periodic monitoring of point source stations; weekly monitoring at the NADP rain gauge; and several YSI continuous monitoring stations). Specifically, the funds were used to support a Boat Operator and purchase sampling and lab equipment, as well as overtime for personnel. The remaining funds set aside for the salary of a Chemist will be utilized when this currently vacant position is filled. The responsible entity is the SCDHS – Office of Ecology. Milestone/Completion Date: Ongoing.
- *Report Preparation/Reproduction* (FY07; \$800 Federal funding) funds are being used to publish the New York Seagrass Experts Meeting Proceedings and Priority Recommendations document.
- *Program Office funds* (FY07; \$61,300 Federal funding) provided support for a PEP Suffolk County Coordinator. Milestone/Completion Date: Ongoing.
- *Technical Outreach Specialist funds* (FY07; \$66,100 Federal funding) are supporting an Environmental Analyst hired as a county employee to fulfill technical outreach requirements of the program in July 2007. Outreach activities have resumed and will continue. Milestone/Completion Date: Ongoing
- *National Atmospheric Deposition Program funds – NTN and Mercury Monitoring Costs* (FY07; \$36,000 Federal funding) are necessary to maintain the respective contracts with Illinois State Water Survey and Frontier Geosciences required for the PEP to be a part of the National Atmospheric Deposition Program. The funds are also being used to carry out the mandatory equipment upgrade to the existing gauge and will also allow for mercury deposition to be monitored at

Cedar Beach County Park in Southold. Milestone/Completion Date: Ongoing

2. NEP FY08 WORKPLAN TASKS

a. Submerged Aquatic Vegetation Management and Long Term Monitoring

Project Purpose and Description:

Eelgrass was at one time abundant throughout the Peconic Estuary. At least 82% of the Peconic's eelgrass meadows have disappeared since the 1930s - only 1,550 acres of eelgrass remain. This submerged, marine plant is inextricably linked to the health of the Estuary, providing an important shellfish and finfish habitat in nearshore waters and a food source for organisms ranging from bacteria to waterfowl. While Brown Tide has not occurred in harmful concentrations in almost a decade, eelgrass beds and scallop populations have not rebounded. Because of the importance of eelgrass habitat to the biodiversity and health of the Peconic Estuary, the Peconic Estuary Program will continue to contract Cornell Cooperative Extension (CCE) to track the health and extent of the eelgrass beds in the estuary and identify management needs. The Submerged Aquatic Vegetation Management and Long Term Monitoring Project includes vegetative sampling at six sites (Gardiners Bay, Orient Harbor, Southold Bay, Northwest Harbor, Three Mile Harbor, and Bullhead Bay) as well as other SAV-related activities.

Milestone/due date: Ongoing activity, annual report

Related CCMP Action: HLR-6.2, CCMP Page 4-39; HLR 16.8, CCMP Page 4-65

Budget: \$30,000 Federal Funding

Responsible Entities: Suffolk County Department of Health Services (SCDHS) and Cornell Cooperative Extension

Roles:

SCDHS acts as the contracting agency for this project and oversees progress of SAV management activity tasks and goals. CCE is subcontracted by SCDHS and provides SAV management services by carrying out monitoring and management activities and produces annual reports

Outcomes:

Short Term:

Assessment of eelgrass health; identification of research needs; greater understanding for restoration site selection; increased understanding of reasons for decline in eelgrass abundance; and a greater awareness among natural resource managers of the need for protective management measures to be taken

Intermediate:

Ongoing research and monitoring will help decision makers identify

appropriate management efforts; established management efforts can be translated in an education and outreach program

Changes in Pressure Targets:

In 2006, the New York State Legislature passed a law creating a New York Seagrass Taskforce. By January 1, 2009 this Task Force is charged with developing research, monitoring and management recommendations. The NEP funded SAV management program work will be coordinated with the Task Force and its recommendations.

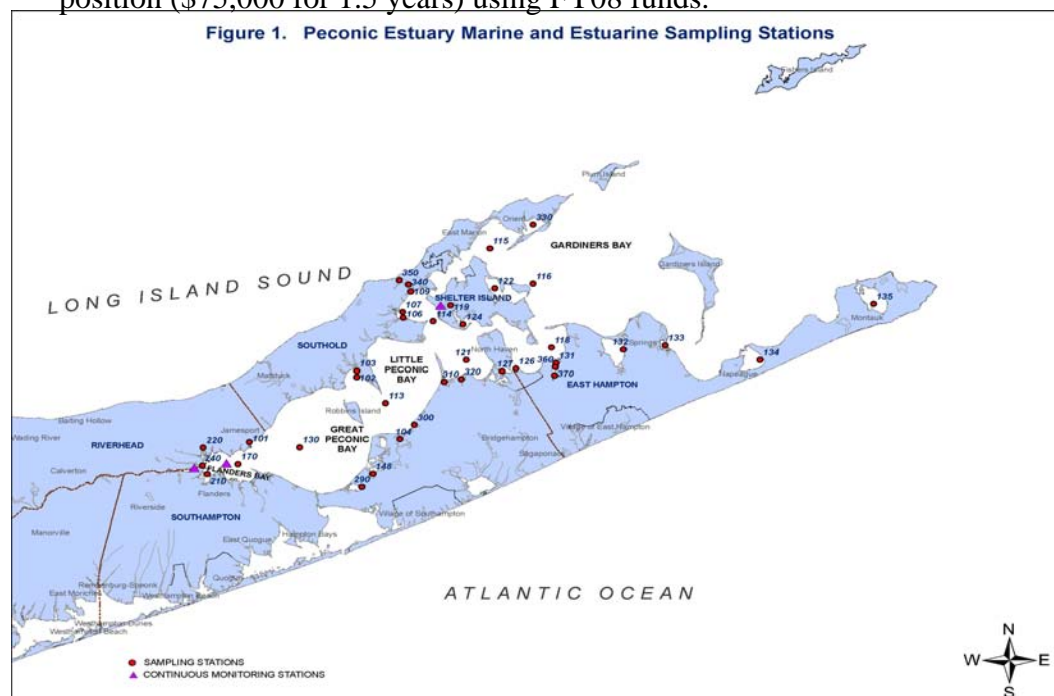
Long Term:

Local management efforts will aid in heightened protection of existing eelgrass beds; increased success in restoration activities; mitigation and elimination of threats to eelgrass; increased research undertaken in the Peconic system

b. Water Quality Monitoring Program/ Long Term Monitoring

Project Purpose and Description:

The water quality monitoring program conducted by the Suffolk County Department of Health Services (SCDHS) Office of Ecology includes monthly monitoring at 38 Peconic surface water quality stations throughout the year (see Figure 1 for map), periodic monitoring of 30 point source and stream stations, and weekly monitoring at the NADP rain gauge. Since 2002, SCDHS has also operated two continuous monitoring stations in the western estuary. An additional continuous monitoring device was deployed in West Neck Bay, Shelter Island in the summer of 2005. Water quality monitoring is essential to assess the ambient environment, to analyze the effectiveness of programs in relation to their intended goals, and to make corrections in the course of the post-CCMP implementation process. The data collected from this monitoring program was critical in listing the water segments in the western estuary on the 303(d) list for dissolved oxygen violations and in developing the nitrogen TMDL for the Estuary. Current needs of the program have made it necessary to fund the salary and fringe benefits for a boat operator (\$78,000 for 1.3 years) and a Chemist I position (\$75,000 for 1.5 years) using FY08 funds.



Milestone/due date: Ongoing

Related CCMP Action: M-2.1, CCMP Page 10-17

Budget: \$153,000 Federal Funding

Responsible Entities: Suffolk County Department of Health Services (SCDHS)

Roles: SCDHS Office of Ecology (with analytical services provided by SCDHS Public & Environmental Health laboratory)

Outcomes:

Short Term:

Routine monitoring in the Peconic Estuary makes it possible for the PEP to have accurate, up to date information regarding water quality conditions throughout the estuary. Data generated from this program can be used towards projects involving the many partners and stakeholders of the PEP

Intermediate:

Based on water quality data, priority projects and research initiatives can be identified and the PEP can continue its success in efforts to protect and restore the estuary

Changes in Pressure Targets:

The development and finalization of Total Maximum Daily Loads for Pathogens and Nitrogen; prevalence of harmful algal blooms; shellfish bed closures; occurrences of bathing beach closures all contribute to water quality goals and what measures are necessary to meet them.

Long Term:

Subwatersheds have been prioritized and partners and funding sources are being investigated to implement stormwater management plans; effectiveness of shellfish restoration efforts over time will be evaluated and any correlation to water quality parameters will be determined; an interpretive analysis of the long term data set of water quality monitoring data (30+ years of information) will soon be carried out.

c. Groundwater Discharge Determination

Project Purpose and Description:

The need for a better understanding of the effects of submarine groundwater discharges into the Peconics has arisen. Several research initiatives have been developed and a need for long term monitoring of groundwater inputs into the Peconic system has become apparent. These funds will be used to support such initiatives. Services will be carried out by an appropriate provider.

Milestone/due date: 2010

Related CCMP Action:

Budget: \$40,000 Federal Funding

Responsible Entities: TBD; Contractor to be selected through sole source agreement consistent with County procurement policy and local

preference law.

Outcomes:

Short Term:

By distinguishing the location and extent of submarine groundwater discharge inputs into the Peconic system, a baseline for further research initiatives can be developed. Partners from several academic and governmental organizations have already come together to discuss this topic and partnerships are expected to continue.

Intermediate:

Research initiatives to further investigate the possible impacts groundwater discharge into the estuary can have on the system will be streamlined to ensure meaningful conclusions are drawn from these projects.

Changes in Pressure Targets:

The lack of presence of submerged aquatic vegetation in the Western parts of the estuary has led to an increased interest in determining what role groundwater inputs may be having on vegetation and occurrence (or lack thereof, of other species as well); determining the fate and transport of pesticides and nitrogen on land and the possible link to the effects of such occurrences in water has become a targeted goal.

Long Term:

The effectiveness of Best Management practices for Nitrogen being carried out on land can be better determined by measuring the amount of nitrogen that makes its way into offshore wells. Links between land applications agricultural chemicals and the occurrence of marine species will be better understood and policy to mitigate such events can be developed.

d. NYSDEC Staff

Project Purpose and Description:

The State Coordinator position is funded under this budget line and was filled by the NYSEC using a subcontract to the New England Interstate Water Pollution Commission. The State Coordinator carries out day-to-day Post-CCMP work required by the Management Conference in addition to spearheading efforts to encourage regional watershed based nutrient and pathogen management, increasing habitat and living resource restoration initiatives and co-chairing the PEP's Natural Resource Subcommittee.

Milestone/due date: Ongoing

Related CCMP Action: M-2.3, CCMP Page 10-17

Budget: \$121,000 Federal Funding

Responsible Entities: New York State Department of Environmental Conservation (NYSDEC)

Roles: NYSDEC houses the State Coordinator

Outcomes:*Short Term:*

Effective communication with East End municipalities of issues pertaining to the CCMP including nutrient and pathogen management is maintained by the State Coordinator. Non-federal funding opportunities are continuously sought after and necessary partnerships are obtained.

Intermediate:

Preservation and maintenance of shellfish beds in the estuary, reduced agrichemical losses, increased interest and collaboration on PEP related projects, and increased understanding of changes in tidal wetland complexes and eelgrass beds will be realized via the State Coordinator through NYSDEC efforts.

Changes in Pressure Targets:

The finalization of TMDLs for Nitrogen and Pathogens and new MS4 permitting requirements has lead to an increased need for collaboration with municipalities to ensure targeted goals and reductions are seen.

Long Term:

Improvements in habitat quality and quantity, improvements of dissolved oxygen concentrations in the Peconic Estuary, heightened understanding of waterfowl, wildlife, livestock, domestic pet and septic system pathogen contributions to select watersheds, and a greater understanding of eelgrass population decline will be attained.

e. Program Office**Project Purpose and Description:**

The SCDHS-Office of Ecology continues to serve as the PEP Program Office. The Program Office conducts program management on behalf of the Management Committee. Responsibilities include administering grants, managing activities of several committees, providing technical support to the PEP (including conducting technical projects and providing data management services), and offering public information and outreach services. The budget for the Program Office includes support for a PEP County Coordinator (\$74,000 for salary and fringe benefits) and office supplies (\$4,750). Specific tasks of the PEP County Coordinator include, but are not limited to, initiating and overseeing PEP subcontracts and serving as a liaison between County Government and the PEP Management Conference.

Milestone/due date: Ongoing

Related CCMP Action: M-2.1, CCMP Page 10-16

Budget: \$78,750 Federal Funding

Responsible Entities: Suffolk County Department of Health Services (SCDHS)

Roles: House the PEP Program Office and provide technical and administrative support to the PEP Management Conference

Outcomes:

Short Term:

Daily operations of the PEP will continue and work towards programmatic goals will be carried out. Overall program perception and stakeholder approval and agreement of elements of the PEP are strived for continuously.

Intermediate:

Cooperative partnerships with various agencies will be maintained and communication within these groups will be fostered as a result of Program Office efforts.

Changes in Pressure Targets:

Staff turnover and vacancies have proven to be problematic in recent years, but the Program has since filled the vacancies of the County Coordinator and Technical Outreach Specialist and the Program is now functioning at an effective level.

Long Term:

The projects and research initiatives in which the Program Office assists in carrying out, both technically and administratively, ultimately help the PEP to carry out the restoration and protection activities that are the core of the program.

f. **National Atmospheric Deposition Program – NTN and Mercury Monitoring Costs**

Project Purpose and Description:

On behalf of the Peconic Estuary Program, the Suffolk County Department of Health Services – Office of Ecology has participated in the National Atmospheric Deposition Program (NADP) since Winter 2004 by constructing and operating a rain collection site at Cedar Beach County Park in Southold. Every Tuesday according to established protocols, the site is maintained and a water sample collected from the rain gauge is sent to the Illinois State Water Survey for testing (pH, SO₄, Cl, NO₃, NH₄, and base cations). With funding from the USEPA, the Cedar Beach County Park site will also monitor mercury deposition this year. Funding in the amount of approximately \$6,000/year is needed in order to continue the National Trends Network contract with the Illinois State Water Survey. Funding in the amount of approximately \$9,000/year is needed to contract Frontier Geosciences for one year of analyzing rain samples for total mercury. Both of these contracts are a requirement of the NADP.

Milestone/due date: Ongoing

Related CCMP Action: N-9.4, CCMP Page 3-36

Budget: \$15,000 Federal funding

Responsible Entities: Suffolk County Department of Health Services (SCDHS)

Roles: SCDHS Office of Ecology is responsible for ensuring the site is maintained and sampled on a weekly basis (with analytical services provided by Frontier Geosciences and Illinois State Water Survey)

Outcomes:

Short Term:

The national collaboration of all of the partners, including the PEP, who participate in weekly wet deposition sampling for the National Trends Network, is contributing to increased knowledge and awareness of atmospheric deposition.

Intermediate:

Quality control is a key element in sample collection. Practices to ensure samples are not contaminated in any way are taught to sample collectors via workshops and informational updates. In addition, the NADP Management Committee makes recommendations and mandates changes in procedure and equipment as appropriate to improve the accuracy and efficiency of the sampling process.

Changes in Pressure Targets:

Site specific requirements and recent equipment update mandates have slowed the process of integrating the site to perform Mercury sampling in addition to wet deposition sampling.

Long Term:

A long term, national data set is being contributed to with every sample analyzed. This data set will help to determine long term trends and can serve as baseline information as to the elements that make up our atmosphere and how they are circulated across the country.

g. Public Health/Stormwater Management

Project Purpose and Description:

This money has been set aside for Stormwater Management purposes. The funds will either assist in implementation of stormwater remediation recommendations (such as those listed in the existing four Horsely & Witten Subwatershed Management Plans of Hashamomuck Pond, Reeves Bay, West Neck Bay, and Meetinghouse Creek); or support development of a new Stormwater Management Strategy in a subwatershed that has yet to be comprehensively studied and provided with detailed Best Management Practices for stormwater.

Milestone/due date: 2009

Related CCMP Action: P-4.1, CCMP Page 5-19

Budget: \$104,000 Federal Funds

Responsible Entities: TBD; will be awarded competitively

Outcomes:

Short Term:

Following the construction of various stormwater retention systems, as indicated in the Subwatershed Management Plans, increases in water quality of water bodies previously impacted by stormwater runoff may be realized.

Intermediate:

As a result of public outreach, to be included in stormwater management efforts, attitudes and homeowner practices may be changed and efforts to mitigate the impacts of stormwater will be carried out.

Changes in Pressure Targets:

The finalization of the TMDL for Nitrogen in the Peconic Estuary has led to increased awareness and need for measures to be taken to decrease nitrogen loading into impaired waterbodies throughout the Peconic Estuary.

Long Term:

Meeting nitrogen and pathogen reduction requirements (as per the TMDLs for nitrogen and pathogens) improving water quality and re-open shellfish beds in areas impacted by stormwater inputs are all possible long-term outcomes of effective stormwater management.

PART III: GRANTS/FUNDING TO LOCAL ENTITIES

1. FUNDS LEVERAGED FOR 2008

The Peconic Estuary Program has documented \$28,112,669.30 in leveraged funds for 2007 (see Appendix B). Actual leveraged dollar amounts are likely higher but the calculation is not fully possible at this time due to delayed reporting by some program participants. A more accurate, larger amount will be entered into the NEPORT system by September 15, 2008. The PEP is therefore presenting a highly documented, but also highly conservative figure for leveraged funds.

The attached accounting details the following:

- *Suffolk County Department of Health Services Marine Monitoring Program* - Laboratory, monitoring vessel fuel, ice, equipment and supplies costs for water quality monitoring in the Peconic Estuary
- *Suffolk County Department of Health Services Personnel* - SCDHS personnel time dedicated to Peconic Estuary Program initiatives
- *Suffolk County Water Quality Protection and Restoration Program (1/4% Sales Tax)* - The sales tax revenues from this County program are used for three distinct categories: open space acquisition, farmland easements, and water quality improvement

projects. The funds appropriated in 2007 for water quality improvement projects in the Peconic Watershed are reported herein.

- *Community Preservation Fund (2% Real Estate Transfer Tax)* - The Community Preservation Fund raised over \$96 million, in 2007, for land acquisition and the purchase of development rights. In the decade since its inception, the CPF has generated over \$508 million. The five east end towns located in the Peconic Estuary study area have contributed to these values. Approximately one-half of the land area in the Townships of Riverhead, Southold, Southampton and East Hampton, and the entire town of Shelter Island, are situated within the Peconic Estuary watershed. The appropriate leveraging information for this source is broken down into the amount generated by these towns.

2. NON-FEDERAL MATCH FOR 2008

The non-Federal match is provided by Suffolk County (\$470,750) and the New York State Department of Conservation (\$121,000). The Suffolk County match includes Suffolk County personnel working on behalf of the PEP (PEP Program Office Line Item; \$19,000). A significantly higher amount of in-kind Program Office personnel funds are generated yearly, but for the purposes of the FY08 grant, only a small percentage of this figure will be reported as match; the actual amount will be seen in the leveraging information in the FY09 Workplan. The majority of match is accounted for through Peconic-related projects funded by the Suffolk County Capital Programs (\$451,750). These Capital Programs are as follows:

- CP 8235: Submerged Aquatic Vegetation (Eelgrass) Restoration and Monitoring Strategy
 - \$25,000; To be contracted to Cornell Cooperative Extension of Suffolk County
- CP 8235: Water Pollution Control and Planning Study
 - \$24,750; TBD
 - To be contracted competitively
 - A study to address concerns related to pollution inputs into the surface water and/or groundwater of the Peconic Estuary will be conducted
- CP 8228: Study for the Occurrence of Brown Tide in Marine Waters
 - \$275,000; To support the SC Water Quality Monitoring Program
 - A new sampling vessel will be purchased with these funds
 - The antiquated vessel previously used to collect water quality samples in the Peconic Estuary needs to be replaced to ensure continued monitoring activities are successful
 - At grant close-out, this vessel will continue to be used to support Federal Clean Water Act - National Estuary Program functions.
- CP 8224: *Cochlodinium Polykrikoids* Study
 - \$127,000; To be contracted to Cornell Cooperative Extension of Suffolk County

The NYSDEC portion of the non-federal match will be accounted for using the following Bond Act project:

- Peconic River Fishway
-\$121,000; Town of Riverhead

3. COOPERATIVE AGREEMENT ALLOCATIONS FOR 2008

Category	Federal Contribution	Non-Federal Contribution	Total
1. Personnel*	\$163,309	\$13,669	\$182,309
2. Fringe Benefits	\$63,691	\$5,331	\$69,022
3. Travel	\$0	\$0	\$0
4. Equipment	\$0	\$275,000	\$0
5. Supplies	\$4,750	\$0	\$0
6. Contractual	\$360,000	\$297,750	\$415,750
7. Construction	\$0	\$0	\$0
8. Other	\$0	\$0	\$0
9. Total Direct Charges	\$591,750	\$591,750	\$941,320
10. Indirect Charges	\$0	\$0	\$0
11. Program Income	\$0	\$0	\$0
TOTAL	\$591,750	\$591,750	\$1,183,500

*Federally Funded Personnel Itemization	Salary	Fringe	Total
County Coordinator	\$53,237.00	\$20,763.00	\$74,000.00
Boat Operator**	\$56,115.00	\$21,885.00	\$78,000.00
Chemist I**	\$53,957.00	\$21,043.00	\$75,000.00
TOTAL	\$163,309.00	\$63,691.00	\$227,000.00

***The funding provided to these positions reflect salaries in excess of one year in order to accommodate task timelines arriving at a common endpoint. The numbers depicted in the table above represent the cost to fund the Boat Operator for 1.3 years and the Chemist I for 1.5 years.*

*Non-Federally Funded Personnel Itemization	% Time towards In-Kind Match	PEP Related Salary
Division Director (Program Mgr)	7.69% 10.69%	\$19,000
TOTAL		\$19,000

Note: \$13,669 (direct salary) x 1.39 (fringe benefits multiplier) = \$19,000

Fringe benefits include retirement, life/health/dental insurance, social security, etc.