

COUNTY OF SUFFOLK



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DEPARTMENT OF HEALTH SERVICES

MARY E. HIBBERD, M.D., M.P.H.
COMMISSIONER

MEMORANDUM

To: Rick Balla, USEPA

From: Vito Minei, P.E., Program Manager *amf*
Peconic Estuary Program

Date: December 11, 1995

Re: FY95 Workplan and Budget

Enclosed is the revised Peconic Estuary Program (PEP) FY 95 Workplan and Budget.

/amf
Enclosure

PECONIC ESTUARY PROGRAM

FY95 WORKPLAN AND BUDGET

Submitted by:

Peconic Estuary Program
Management Conference

Revised November 30, 1995

**Peconic Estuary Program (PEP)
FY95 Workplan and Budget**

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PECONIC ESTUARY PROGRAM

FY 95 WORKPLAN

1. INTRODUCTION

The Peconic Estuary system consists of over 100 distinct bays, harbors, embayments and tributaries, which cover an area of over 100,000 acres. The population of the East End towns surrounding the Peconic Estuary system is 115,000 year-round (1989 estimate), increasing to over 280,000 during the summer. These residents and visitors use the system and its resources extensively for beach-going, swimming, boating, fishing, shellfishing, and water-dependent industries, 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 (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 persistence of brown tide. The effects of these problems are a significant threat to the health of the Peconic Estuary system and its resources.

2. OVERALL FUNDING SOURCES

The core FY95 budget (see Table 1) reflects the following sources of funding:

EPA FY95 Base Funding	\$ 800,500
Non-Federal Match	480,576
Other FY 95 Funding Sources	396,409
TOTAL	\$1,677,485

The non-federal match consists of Suffolk County Department of Health Services (SCDHS), New York State Department of Environmental Conservation (NYSDEC) and Suffolk County Planning Department in-kind services and Suffolk County Capital funds which will be available in FY 95 for Brown Tide research.

Currently, the non-federal match of \$480,576 constitutes 37.5% of the \$1,281,076 budget which includes federal NEP funding and non-federal match; this is significantly higher than the 25% minimum commitment. The actual match for the FY95 period is expected to greatly exceed the commitment reflected in the budget table. For example, SCDHS is anticipated to expend \$1.205 million (personnel, equipment, supplies, etc.) to directly support the PEP in calendar year 1994. This

Pocomic Estuary Program - FY 95 and Proposed FY96/FY97 Program Budget

TASK	First Year (FY94, & FY93 Incentive) NEP Funding	FY 95 NEP Funding	Proposed FY 96 NEP Funding	Anticipated FY 97 Funding	FY 95 Non-Federal Match	Other FY 95 Funding Sources	Total FY95 Funding
A: TECHNICAL PROGRAM TASKS							
1: Land Use/Env. Resources and Underwater Land	80,000	50,000	0	0	152,000	---	202,000
2: Economic Value Assessment and Financing Plan	15,000	60,000	100,000	40,000	---	---	60,000
3: Natural Resources							
a: Living Resources/Habitat Characterization (USFWS)	0	10,000	0	0	---	---	10,000
b: Shellfish survey/mgt., incl. substrate data	0	59,500	0	0	---	---	59,500
c: SAV management	75,000	20,000	40,000	0	---	---	20,000
d: Priority species management^^	15,000	0	30,000	0	---	---	0
e: Wetlands - status and trends**	0	0	0	0	---	95,000	95,000
f: Wetlands tech./assessment/report**	0	0	0	0	---	---	0
g: Integrated Natural Resources Management Plan	0	0	20,000	40,000	---	---	0
h: Fisheries Characterization (DEC)	0	5,000	0	0	---	---	5,000
i: Sediment Analysis	0	6,500	0	0	---	---	6,500
j: Annotated Bibliography	0	20,000	0	0	---	---	20,000
k: Creeks - Natural Resource Management	0	0	60,000	0	---	---	0
4: Water Quality							
a: Toxics/Sediment Management	50,000	0	0	40,000	---	---	0
b: Monitoring program and long-term monitoring^	100,000	100,000	100,000	100,000	156,086	---	256,086
c: Groundwater Discharge Determination	40,000	50,000	25,000	0	20,000	70,000	140,000
d: Surface Water Modelling	75,000	45,000	50,000	55,000	---	---	45,000
e: Groundwater Underflow Measurement	0	30,000	0	0	---	---	30,000
f: Sediment Nutrient Flux****	100,000	20,000	0	0	---	80,000	100,000
g: Sediment Accretion Study	0	0	50,000	0	---	0	0

Peconic Estuary Program - FY95 and Proposed FY96FY97 Program Budget (continued)

TASK	First Year (FY 94 & FY93 Incentive)/NEP Funding	FY 95 NEP Funding	Proposed FY 96 NEP Funding	Anticipated FY 97 Funding	FY 95 Non-Federal Match	Other FY 95 Funding Sources	Total FY95 Funding
5: Integrated Modelling / GIS	0	0	0	0	---	---	0
6: Brown Tide Research	0	0	0	0	41,743	---	41,743
7: Peer Technical Evaluations	---	4,500	5,000	5,000	---	---	4,500
B: BASE PROGRAM ANALYSIS	0	0	0	0	---	---	0
C: DRAFT CCMP PREPARATION (Tech. Staff)	0	0	0	0	---	---	0
D: REPORT - PREPARATION/REPRODUCTION*	5,000	5,000	40,000	95,000	---	---	5,000
E: TAC AND LGC ADMINISTRATION	10,000	10,000	10,000	10,000	---	---	10,000
F: TRAVEL	10,000	10,000	0	0	---	---	10,000
G: NYSDEC/SCDHS STAFF***	110,000	120,000	120,000	120,000	74,448	---	194,448
H: PROGRAM OFFICE ^^	60,000	75,000	75,000	75,000	36,299	---	111,299
I: PUBLIC PARTICIPATION	100,000	100,000	75,000	100,000	---	---	100,000
J: ACTION PLAN DEMONSTRATION PROJECTS^	---	---	---	---	---	151,409	151,409
K: ACTION - ORIENTED MANAGEMENT (NATURAL RESOURCES AND WATER QUALITY) - SUBWATERSHED FOCUS	---	---	---	120,000	---	---	0
TOTAL	730,000 FY 94 105,000 FY 93 10,000 Local Govt	800,500	800,000	800,000	480,576	396,409	1,677,485

NOTES: * In FY96, \$30,000 for writer/editor, \$10,000 for reproduction; In FY97, \$35,000 for writer/editor, \$50,000 for final report reproduction, \$10,000 for miscellaneous reproduction, \$3,000 of FY 94 money used for Program Office expenses.
 ** Status and Trends study to be funded over two years with \$95,000 from EPA Marine and Wetland Protection Branch; technology assessment report to be prepared by Management Conference participants.
 *** \$70,000 for NYSDEC staff, and \$50,000 for SCDHS staff
 **** Tentative funding allocation: 20,000 federal NEP moneys, \$80,000 of Clean Water Act Sec.604(b) moneys from New York State.
 ^ Baseline Monitoring Program: \$20,000 for marine monitoring equipment, \$25,000 for groundwater investigations equipment, \$2,000 for computer/drafting supplies, \$33,000 for laboratory equipment/supplies and \$20,000 for salary reimbursement for monitoring personnel (e.g., overtime reimbursement).
 ^^ Program Office: \$30,000 for Clerk Typist, \$10,000 for office equipment, \$20,000 for salary reimbursement, \$15,000 for computer equipment/supplies.
 ^^ Priority Species Management task will require in-kind contribution from Management Conference participants (e.g., USFWS, NYSDEC)
 ^^^ \$60,000 in APDP funding, 75,000 in 104(b)(3) funding, and 16,409 in Sec. 319 funding.
 Non-Federal Match Breakdown for FY 95:
 - SCDHS: 266,833 (monitoring program {156,085}, groundwater discharge determination {20,000}, staff {54,448}, and program office {36,299})
 - Suffolk County Capital Funds: \$41,743 (Brown Tide research)
 - NYSDEC: \$20,000 in in-kind services (in Line G)
 - Suffolk County Planning Dept.: \$152,000 (land use task)
 Other Funding Source Breakdown FY 95:
 - USGS: \$60,000 (groundwater discharge determination)
 - USEPA: \$95,000 for wetlands.
 - NYSDEC: \$80,000 in Clean Water Act, Section 604 (b) moneys.
 Changes from prior budget: 3b (+40,000 FY95, -40,000 FY96), 3c (+20,000 FY95, -20,000 FY96), 3j (+20,000 FY95, -20,000 FY96), 3k (+60,000 FY95), 4f (-80,000 FY95 NEP, +80,000 FY95 604(b)).

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is significantly greater than the \$210,000 received by SCDHS for the FY 93 incentive and FY94 NEP grants. Moreover, unfunded SCDHS support (\$995,000) is substantially larger than the entire \$740,000 in baseline NEP funding provided by USEPA.

In addition, the PEP has secured \$151,409 for Action Plan Demonstration Projects, though funding provided under Sections 320, 319, and 104(b)(3) of the Clean Water Act (see attachment C). Also, New York State has made \$88,500 available for Nonpoint Source Management projects in the watershed under 319 of the Clean Water Act. Finally, Cornell Cooperative Extension received \$5,000 under the National Environmental Education Act to develop a Peconic Estuary primer.

3. PROGRAM STATUS

Given the significant difficulties in program start-up, Action Plan consensus-building, timing of funding, and consultant selection, the progress of the PEP has been remarkable. A program *Overview and Status Report* (October 26, 1994) is included in Attachment A. This includes program goals and objectives, historical background, all program funding to date, and the status of program activities. The document also includes an overview of the Action Plan, which was adopted by the Policy Committee on August 18, 1994.

The Management Conference believes that the *Overview and Status Report* provides, in summary format, compelling evidence that the PEP has effectively administered the funding it has received to support appropriate and necessary efforts which will result in a truly comprehensive, meaningful, and site-specific CCMP. Especially significant are the following factors which, individually and collectively, make the PEP unique:

- * the focus on timelines and early action, which has already resulted in a firm "no net increase of 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 modelling)
- * 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 which will be essential to PEP

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management, and which may eventually serve as models for other programs (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 being performed to support these tasks
- * the level of involvement of all levels of government, which has resulted in the preparation of the Base Programs Analysis draft nonpoint source program inventory in November, 1994.
- * the goal of integrated ecosystem/water quality management, supported by a comprehensive Geographic Information System model.

The PEP has been quite successful in adhering to product timelines, including timing guidance and requirements from USEPA and the schedule set forth in the Management Conference Agreement. An update of the status of the timing for Management Conference Agreement commitments is as follows:

- Conference Agreement and Year 1 Workplan deadline: July 1993;
 - * Actually adopted: June 25, 1993
- Public Participation Strategy deadline: Oct. 1993
 - * Outline adopted: June 25, 1993
- Program Office establishment deadline: Oct. 1993
 - * Program Office agreed upon: June 25, 1993; began role immediately
- Data Management Strategy deadline: Oct. 1993
 - * Draft strategy produced in September 1993; final strategy issued December 22, 1993
- Base Programs Analysis deadline: July 1994
 - * Preliminary programmatic recommendations included in Action Plan in December 1994.
 - * Draft nonpoint source inventory produced: November 1994
 - * Full programs inventory target: July 1996
 - * Target for preliminary analysis and recommendations for all programs based on systematic and comprehensive inventory: December 1996
- Characterization Report (trend study, cause/effect study, loading study) deadline: July 1994
 - * Brown Tide Comprehensive Assessment and Management Program was accepted as a

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preliminary characterization report for purposes of developing an Action Plan in July 1994. The findings, conclusions, and recommendations have been fully incorporated in the Action Plan.

- Draft CCMP target (includes characterization summary based on new PEP information) is now January 1996, based on program extension.
 - * Preliminary Working Draft CCMP produced: Nov. 1995
 - * Preliminary Draft CCMP target; Jan. 1996
 - * Interim CCMP target: July 1996

- Final CCMP deadline: July 1997 (submitted to USEPA Administrator)
 - * Target: July 1997
 - * The New York State Department of State will need to review the CCMP and specify its consistency with the New York State Coastal Zone Management Plan prior to submittal to the EPA Administrator

Discussion

The Conference Agreement indicates that the Preliminary CCMP was to identify actions and include cost estimates of, and financing options for, actions identified (p. 12). The FY 94 Workplan goes further to specify that the Preliminary CCMP will include the Action Plan, a CCMP outline, a preliminary base programs analysis, and an identification of research and management needs (p. 20).

Although the PEP has never formally issued a document entitled "Preliminary CCMP," it has, in fact, done exactly that in the form of an expanded Action Plan and a CCMP outline. The term "preliminary CCMP" was avoided, as the Action Plan was structured around Brown Tide Comprehensive Assessment and Management Plan (BTCAMP) recommendations, and it was agreed that the CCMP would have a much different format. The association of the Action Plan with an eventual CCMP engendered confusion and controversy, since several Management Conference participants felt that the format could be inflexibly fixed by the Action Plan. Also, several elements of the draft and final CCMP were missing, or not explicitly segregated in separate sections, in the Action Plan. Thus, it was accepted that the Action Plan contained a particular basis for the draft CCMP, but should not be considered a CCMP in and of itself.

The Action Plan went beyond merely specifying actions, and actually identified cost estimates, timing, gaps in research and management, and deficiencies and potential redundancies and inconsistencies in programs. Thus, the Action Plan contained all of the Management Conference commitments for a preliminary CCMP, except for the draft CCMP outline.

The Action Plan was produced in draft form in December 1993, and was refined a number of times prior to its acceptance in August 1994, and finalization for distribution in December 1994.

In view of the Action Plan process, the Management Conference commenced the independent

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process of preparing a separate draft CCMP outline. A draft outline was produced in June 1994. Acceptance of a final outline (see Attachment B) occurred at the December 1, 1994 Management

Committee meeting.

4. ELEMENTS OF THE WORKPLAN IN RELATION TO THE NATIONAL ESTUARY PROGRAM PURPOSES

Purpose 1. ASSESS TRENDS IN THE ESTUARY'S WATER QUALITY, NATURAL RESOURCES, AND USES.

The Peconic Estuary Program Management Conference will use the Brown Tide Comprehensive Assessment and Management Program as background to provide information on trends in nutrients, brown tide, and other general water quality parameters (e.g., temperature, salinity, turbidity, etc.) and physical characteristics. Additional historical and current data sets on toxic contaminants, habitat quantity and quality (e.g., wetlands, eelgrass, etc.), abundance of finfish, shellfish, and wildlife, land uses, and pathogen contamination will be identified and analyzed to determine trends in these ecological parameters. Trends in the uses of the estuary will be determined through examination of the economic value of the system in terms of commercial and recreational fishing, tourism, water-dependent recreational activities (e.g., boating, swimming), and other activities.

Purpose 2. IDENTIFY CAUSES OF ENVIRONMENTAL PROBLEMS BY COLLECTING AND ANALYZING DATA.

The Management Conference will use the data sets collected above to identify the environmental problems of the system, and to identify critical data gaps that need to be filled. (Some of the environmental problems in the western portion of the system have already been identified by BTCAMP.) Based on this assessment, the Peconic Estuary Program will sponsor monitoring and research to fill critical data gaps that will help identify the causes of environmental problems. All data that is collected during the course of this study will be input into the selected data and information management system and used for modelling purposes as necessary.

Purpose 3. ASSESS POLLUTANT LOADINGS IN THE ESTUARY AND RELATE THEM TO OBSERVED CHANGES IN WATER QUALITY AND NATURAL RESOURCES.

The Management Conference will use BTCAMP to provide information on nutrient loadings. Additional work will be conducted to assess the sediment flux of nutrients. Loadings of pathogens will be assessed through site-specific data collection and monitoring. Loadings of other pollutants will be assessed if identified as potential problems in existing or newly collected data sets or by characterizations of the priority problems. These loadings will be related to the impairments

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identified in the estuary, such as a reduction in certified areas for shellfishing and declines in the distribution and abundance of submerged aquatic vegetation.

Purpose 4. RECOMMEND AND SCHEDULE PRIORITY ACTIONS TO RESTORE AND MAINTAIN THE ESTUARY, AND IDENTIFY THE MEANS TO CARRY OUT THESE ACTIONS (I.E., THE CCMP).

An initial Action Plan has been developed by the Management Committee and approved by the Policy Committee, with input from the Citizens Advisory Committee (CAC), Technical Advisory Committee (TAC), and Local Government Committee (LGC). The Action Plan includes commitments for action by Federal, state, county, and local governments. This Action Plan was adopted on August 18, 1994, and finalized on December 1, 1994 based in large part on recommendations provided in the BTCAMP summary document.

The CCMP will address the priority problems identified in the Peconic System by the Management Conference and provide recommendations and commitments for action by all levels of government. An outline for the CCMP has been developed by the Management Committee with assistance from the Citizens Advisory, Technical Advisory and Local Government Committees. This, along with commitments for action highlighted in the Action Plan, serves as the foundation for the preliminary draft CCMP. A revised preliminary working draft CCMP was produced in November 1995 and will be released for public input in January 1996. In addition to commitments for action, this draft will include a summary of characterization efforts and, a preliminary finance plan. An interim CCMP will be released in July 1996 including recommendations and commitments for the most serious and pervasive problems facing the Peconic Estuary and its watershed. The final CCMP, prepared by July 1997, will include a consistency report and a monitoring plan as well as subwatershed plans. It will be released following a public comment period and USEPA administrative review. Writing and coordination of the CCMP will be initially undertaken cooperatively by USEPA, New York State, and Suffolk County program coordinators with input as described above; a professional technical writer will work on document refinement.

Purpose 5. ENSURE COORDINATION OF IMPLEMENTATION AMONG FEDERAL, STATE, AND LOCAL PARTICIPANTS IN THE CONFERENCE.

The Final CCMP will likely include both commitments and recommendations. Management Conference Participants recognize that completion of the CCMP is not the end of the process, but rather that it is the implementation to follow that is important to protect and restore the Peconic Estuary. It will also be necessary to periodically review progress of actions and monitoring results, and adjust program priorities and activities accordingly. Continued coordination at all levels of government, with the private sector, and with citizens will be important in this regard. The CCMP will include a Post-CCMP management structure and financing options to support this continuing

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effort.

Purpose 6. MONITOR THE EFFECTIVENESS OF ACTIONS TAKEN UNDER THE PLAN.

Ongoing monitoring activities such as Suffolk County water quality sampling, and the New York State Department of Environmental Conservation's shellfish sanitation program and finfish survey will continue throughout the program. An integrated monitoring plan incorporating the ongoing activities will be developed pending assessments of the priority problems in the study area. This monitoring plan will be included as part of the CCMP. The development of biocriteria will help to ensure the effectiveness of actions taken under this plan.

In addition to monitoring water quality and natural resources-related parameters, the management conference participants will also address intermediate indicators which may be used to assess the effectiveness of actions. These intermediate indicators track action or behavior undertaken by persons or organizations that can affect water and natural resource quality, but do not measure end results. Examples including tracking progress of estuary protection actions undertaken by governments, businesses (such as those using hazardous materials), households, and boaters.

Purpose 7. ENSURE THAT FEDERAL ASSISTANCE AND DEVELOPMENT PROGRAMS ARE CONSISTENT WITH THE GOALS OF THE PLAN.

Relevant Federal, state, and local programs are being reviewed in the Base Program Analysis to determine if such programs are consistent with, and further the purposes and objectives of, the CCMP. This task will be included as part of the CCMP. Enforceable actions will be incorporated into the State's Coastal Management Plan.

5. PECONIC ESTUARY PROGRAM ADMINISTRATION

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.

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.

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6. OVERALL PROGRAM APPROACH

The Peconic Estuary Program will follow 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 of and further our knowledge of the Peconic Estuary System. It can be further broken down into three categories: 1) extending the geographic scope of BTCAMP, and 2) performing detailed natural resources investigations, 3) conducting management efforts, additional research and pilot demonstration projects (including brown tide research).

The administrative/regulatory element will include, but not be limited to, an inventory of applicable Federal programs for purposes of consistency review, development of procedures for ensuring that programs are consistent with recommendations of the Peconic Estuary Program, a program analysis with respect to Federal, state, and local water quality and natural resources management, and a detailed set of recommendations regarding implementation, including a financial component.

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.

7. KEY SECOND YEAR ACTIVITIES

The following are key second year activities, along with the federal funding required to conduct the activities. The activities are summarized in Table 1. The anticipated third and fourth year activities which will be necessary to support the CCMP are also included in Table 1; they will be described in detail in the third and fourth year workplans.

A) Technical Program Tasks

As a general policy, PEP research will be management-oriented. Even though many of the PEP activities are labelled as "research", all of the "research" activities will, to the maximum practicable extent, be management-oriented. The baseline information which is being obtained in the characterization phase is not only required by the Clean Water Act, but also is critical to assess status and trends for use in informed alternative evaluation and ultimate management decision-making. New data is being collected only in cases where the Management Conference has identified data

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needs which must be filled to support CCMP management decisions.

The technical program tasks are designed to address the priority problems of the Peconic Estuary System as discussed in the Management Conference Agreement. In terms of water quality, high priority issues include Brown Tide, nutrients, pathogens, and, to a lesser extent, toxics. Characterization of living resources and habitat is also a high priority and is necessary to provide a foundation for effective management to mitigate threats by pollution, development, and overuse.

The project descriptions include funding allocation which reflects the relative importance of the tasks with regard to continued herein PEP goals as well as anticipated efforts required to accomplish these tasks. Precise project details and requirements will be specified by the Management Conference as the PEP proceeds.

Tasks will be designed and conducted in a manner which will maximize geographic information system (GIS) use to manage resulting data. GIS mapping will occur as funding for specific tasks permits.

Tasks also will conform to the data management strategy, (December 22, 1993). The strategy will be designed to maximize accessibility and usefulness of data by systematically integrating the data management needs of the various project tasks.

The core technical program tasks are summarized as follows:

- 1) Drainage Basin-Land Use and Environmental Resources and Underwater Land Use Ownership and Evaluation (\$50,000 federal NEP funding)

In order to relate land use activities to surface water quality, it will be necessary to analyze changes in land use and environmental resources over a given time period with respect to changes in surface water quality in the Peconic System. Moreover, the presence, extent and value of the environmental resources are constraints on the land available for development. Therefore, this task will identify stormwater runoff drainage and groundwater contributing areas impacting surface water quality; quantify past, present and future (saturation population) land use; and determine the distribution of, and recent changes in environmental resources in these areas, to the extent possible. The implications of these changes on marine surface water quality and natural resources will be discussed in subsequent tasks. The ultimate goal of this task will be to provide information which can be compiled with water quality and habitat information so that integrated modelling efforts and management decisions can occur. This work has been performed in detail for the western portion of the study area in BTCAMP. The PEP is extending this effort to eastern portions of the study area.

In addition to land use impacts on the water quality and biological integrity of the Peconic Estuary, there are a number of surface water uses and activities which affect the estuary. In inventorying surface water uses, consideration will be given to an identification of existing

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uses relating to: commercial and recreation fishing; shellfishing beds (closed and open); navigation channels and public and private dredging areas; the allocation of surface waters for public and private marinas, boat launches, mooring and anchorage facilities; and structures in and over surface waters such as docks, piers and boathouses. One critical need is an inventory of ownership and jurisdiction of underwater lands within the estuary. This inventory should identify the use of underwater lands, grants and leases.

The characterization of surface water uses and underwater lands will provide a basis for: identifying surface water uses and their compatibility with existing regulations including upland zoning and water quality classifications; identification of small harbor areas essential to the marine related trades and recreation uses; evaluation of the effects of marine uses on water quality and natural resource values; identifying uniformity or gaps in jurisdiction over activities occurring within or on surface waters; and interpretation of the Public Trust Doctrine and public and private rights to recreational use of and access to surface waters and natural resources.

\$50,000 will be allocated to the Suffolk County Planning Department to continue land use efforts in the second year of the PEP. Land use support will continue, but additional federal funding requirements are not anticipated.

2) Estuarine Use and Economic Value Assessment and Financing Plan (\$60,000 federal NEP funding)

A consultant will perform a data compilation of available information regarding estuarine uses and the economic value of the Peconic Estuary in terms of commercial and recreational fishing, tourism, swimming, boating, and other water-dependent industries and activities. This information will be used in subsequent management activities. This task will also identify additional data needed for adequate characterization and management. A financing plan will also be developed. \$15,000 in federal and local funding was allocated to the consultant in FY94 to perform preliminary direct economic support analysis. Work on completing a full valuation of market and non-market resources will be initiated in the second year using \$60,000 in federal funding. \$140,000 will be needed in FY96 and FY97 to complete these tasks.

3) Natural Resources Characterization Studies

a) Living Resources Characterization (\$10,000 federal NEP funding)

No such document exists for the Peconic Estuary. Similar characterizations have been useful references for local and state agencies when making management decisions or performing remedial actions (\$10,000 federal funding to the U.S. Fish and Wildlife Service through an Interagency Agreement with EPA).

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- b) Perform a Shellfish Survey of the Open Water of the Peconic System. (\$59,500 federal NEP funding)

The most recent NYSDEC assessment of open water shellfish populations was completed in 1980-81. The PEP study will allow managers to focus on protecting productive areas, and on remediating closed areas containing large populations of shellfish. This task will be coordinated by NYSDEC and will include field sampling of shallow waters and deep waters, and will include a review of available historical information (\$59,500 federal NEP funding).

- c) SAV Management (\$20,000 federal NEP funding)

SAV management/planning will now begin issuing FY 95 moneys, and will continue in FY 96. The PEP will use the funds to support development of a management plan, based on the first year characterization study.

- d) Wetlands Status and Trends

EPA's Marine and Wetland Protection Branch has budgeted \$95,000 for the USFWS wetlands status and trends project. This funding will cover both years of the project.

- e) Wetlands Technology Assessment Report

A summary of ongoing historical efforts, and their results, will be prepared for the Peconic Estuary. Staff will coordinate this effort.

- f) Fisheries Characterization (\$5,000 federal NEP funding)

\$5,000 of federal funding will be used to partially defray expenses of compiling NYSDEC trawl survey data.

- g) Sediment Analysis (\$6,500 federal NEP funding)

Sediment samples will be analyzed to improve the PEP benthic characterizations.

- h) Annotated Bibliography (\$20,000 federal NEP funding)

The PEP will support the development of a full annotated bibliography, covering relevant natural resources issues.

4) Evaluate Water Quality and Trends

- a) Monitoring Program (\$100,000 federal NEP funding)

The initial monitoring program was based on the review and evaluation of the historical

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data and on the information obtained from ongoing research and demonstration projects. The program includes investigations of surface water conditions and point and nonpoint source inputs, especially in the eastern study area and smaller embayments. The initial program expanded the monitoring from 9 routine stations to 21 stations (weekly or biweekly); additional point source and "intensive run" monitoring will occur. \$45,000 in federal funding for year 2 of this task will be used for equipment to enable SCDHS to perform surface water and groundwater monitoring. \$20,000 in federal funding will also be used to defray the cost of overtime for support personnel, \$33,000 in federal funding will be used to purchase and lease necessary laboratory equipment, and \$2,000 in federal funding will be used for computer/drafting supplies. Monitoring will be focused on Brown Tide and other algae, nutrient components and coliforms. Toxics and other monitoring may also occur as needed. SCDHS local match in the form of in-kind services is anticipated to greatly exceed the NEP federal funding for this task.

b) Groundwater and Surface Water Modelling (\$95,000 federal NEP funding)

Evaluation of data, including comparisons with historical data and modelling efforts, will be performed for groundwater and surface water. \$45,000 of the funding for this task will be used for the surface water modelling hydrodynamic and water quality consultant in the second year of a four year effort. The consultant will expand and improve prior modelling efforts by refining the link-node network in the eastern portion of the study area, performing detailed modelling for localized embayments, and incorporating an interactive sediment component of the model. The model will be used to evaluate management measures and support management recommendations, such as nutrient and coliform management. An additional \$50,000 will be allocated to the United States Geological Survey (USGS) to develop a groundwater underflow characterization via modelling, and/or other estimation procedures in the second year of three year effort. The USGS will provide \$25,000 in match, and, SCDHS will provide well over \$20,000 in service, to support this groundwater effort. Data evaluation will deal with nutrients, coliforms and toxics. Toxics are also dealt with in a specific research effort.

c) Groundwater Underflow Measurement (\$30,000 federal NEP funding)

Direct measurement of groundwater underflow will be taken at key areas of the main bay system and in site-specific creeks and embayments utilizing "state-of-the-art" continuous flow measurement, data logging and retrieval equipment. The resulting information will be critical in verifying groundwater underflow estimates, and will be an essential component in the surface water modelling task. \$30,000 in federal funds will be used for this task.

d) Sediment Flux Study (\$100,000 federal funding; \$80,000 CWA 604(b), \$20,000 NEP)

Based on preliminary analysis, sediment flux has been found to be the largest single source of nitrogen to the Peconic River and Flanders Bay. Several sites are being

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sampled to better assess sediment nutrient contribution. \$100,000 will be allocated to support the second year of a sediment flux monitoring program: \$20,000 in NEP funds and \$80,000 in Clean Water Act Section 604(b) funds for water quality management planning and implementation from the New York State DEC.

5) Integrated Modeling/Geographic Information Systems (GIS)

Although this task was considered important, limited funding necessitated its deferral. As this task would provide a long-term monitoring, assessment, and management tool. It will be reconsidered for funding in years 3 and 4.

6) Brown Tide Research (\$41,743 Suffolk County Capital Funding)

Brown Tide research will focus on onset, persistence, and cessation of the bloom, as well as bloom impacts on shellfish. The Brown Tide research will emphasize field investigations, where possible.

7) Peer Technical Evaluations (\$4,500)

Moneys have been set aside to support peer technical evaluations and other related activities.

B) Base Programs Analysis

A crucial part of the Peconic Estuary Program is to characterize and understand the scope and effectiveness of existing federal, state, and local laws, regulations and programs that deal with managing coastal related issues. All federal, state and local agencies represented on the Management Conference have been asked to compile descriptions of their respective nonpoint programs which may be relevant to the Peconic Estuary Program. This and other information will be used to prepare a revised Base Program Analysis nonpoint source inventory by December 1995, a nonpoint source plan by March 1996, and a full program inventory by June 1996. The final base program analysis will be complete by June 1996. The objective of the Base Program Analysis Report (Management Conference Purpose 5) is to prevent duplicated efforts by the various regulatory agencies and to identify gaps and weaknesses in ongoing management and regulatory programs.

C) Draft CCMP Preparation

The primary goal of a NEP Management Conference is to develop and oversee the implementation of a Comprehensive Conservation and Management Plan to protect and improve the water quality of nationally significant estuaries that are threatened by pollution, development, or overuse. The CCMP uses scientific and technical information collected, synthesized, and analyzed during the course of the NEP, along with information from other sources, to develop, recommend, and commit to management actions that will result in the

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clean-up and preservation of our waterways. Thus, development of a CCMP addresses Management Conference Purpose 4 of Section 320 of the Clean Water Act: recommend and schedule priority actions to restore and maintain the estuary, and identify the means to carry out these actions.

Development of the CCMP will follow a rigid schedule. A working draft of the CCMP was completed by November 1995. It will be prepared by staff from USEPA, NYSDEC, and SCDHS as directed by the Management Committee, with input from the Local Government Committee, and the Citizens and Technical Advisory Committees. The draft CCMP will consist of a summary of all Peconic Estuary Program activities conducted to date, their status and findings, and a general heading outline for the CCMP prepared according to guidelines. When possible, the draft CCMP will include estimates of costs of the actions identified for immediate implementation. This draft CCMP will also include a base program analysis, an evaluation of the scope and effectiveness of existing programs. In addition, the draft CCMP will reflect the status of ongoing processes of federal consistency review, development of implementation and finance strategies, and monitoring of effectiveness of actions. One final element to be included in the draft plan is the identification of new research questions that need to be answered to develop relevant management actions.

D) Report Reproduction (\$5,000 federal NEP funding)

Report reproduction and distribution (e.g., preliminary CCMP) will require \$5,000 of federal funding.

E) Support of Technical Advisory Committee and Local Government Committee (\$10,000 federal NEP funding)

The Technical Advisory Committee and Local Government Committee will each be allocated \$5,000 to support committee activities, including administrative costs associated with reproduction and mailings. The LGC, in cooperation with EPA, New York State, Suffolk County and other PEP participants will be pursuing the preparation of a consolidated "No Discharge" Designation for the Peconic Estuary if it is determined feasible.

F) Travel (\$10,000 Federal Funding)

PEP participants may attend national training and information exchange sessions. Therefore, USEPA has allocated \$10,000 which may be needed to defray travel costs.

G) NYSDEC/SCDHS Staff (\$120,000 federal NEP funding)

NYSDEC will receive \$70,000 to fund one full-time Peconic Estuary Program Coordinator; SCDHS will receive \$50,000 to defray administrative program support (e.g., salary reimbursement). The purpose of this support will be to carry out day-to-day work required by the Management Conference. This includes coordinating intra-agency and

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inter-governmental activities regarding the Program, and conducting meetings to formulate advisory positions on all topics. These support employees will be responsible for preparing and developing annual workplans and budgets, progress summaries, the Base Programs Analysis, the CCMP and its various components, and other work products required by the Program, in cooperation with Management Conference. New York State Department of Environmental Conservation is also coordinating development of a water quality preservation policy for the waters east of Flanders Bay.

H) Program Office (\$75,000 federal NEP funding)

SCDHS serves as the PEP Program Office. The roles and responsibilities of the Program Office are defined in the Management Conference Agreement. The budget for the Program Office is contained in Table 2.

TABLE 2
SCDHS Program Office Budget

<u>Program Management Needs</u>	<u>Itemized Expenditures</u>	<u>Subtotals</u>	<u>Total</u>
Secretarial (full time; includes overhead and fringe)		\$30,000.00	
Office Equipment		10,000.00	
Photocopy Machine	\$4,200.00/yr		
Furniture for secretary and citizen rep. + file cabinets, terminals, etc.	<u>5,800.00</u>		
Salary Reimbursement for Project Manager		\$20,000.00	
Computer Equipment/Supplies		<u>15,000.00</u>	
			\$75,000.00

- I) Citizens' Advisory Committee Program (\$100,000 federal NEP funding) (Public Participation Strategy Summary provided by CAC)

"Informing and involving the public and getting its support can be the most difficult aspect of an estuary program, yet it is the cornerstone of a successful NEP program . . .

"Because so much is at stake, it is important to put the best talent, adequate resources, and full program commitment into designing and executing an effective process for public participation and commitment . . ." USEPA Journal, SAVING BAYS AND ESTUARIES

A proposal for an effective Public Participation and Outreach Program has been developed to ensure full public participation and understanding leading to a successful Peconic NEP.

The proposed program is based on:

1. USEPA National Estuary Program as outlined in "Saving Bays and Estuaries: A Primer for Managing Estuary Programs."
2. The mission of the PEP: A CCMP for the restoration and preservation of the Peconic Estuary system.
3. The mission of the PEP CAC: a) to assist the Management Committee in communicating with key segments of the public and b) to create a groundswell of public opinion, through an organized program, that will lead to actions to engender the political will necessary to adopt and implement the CCMP for the Peconic Estuary.

The proposed program incorporates the concerns and suggestions of the various Focus Groups of the current NEP CAC and builds on the successful public participation and outreach program of the BTCAMP CAC. The strategies and techniques proposed are deemed vital to creating a climate that will result in an exchange of understanding leading to support and action.

The proposed program recognizes the need for a positive approach to the East End business community, a segment of the public vital to CCMP implementation. It also recognizes the need to reach out to that segment of the general public which has not been involved. These needs were emphasized by several CAC Focus Groups in their written reports to the CAC Chairman. A component of the program is to help people feel good about living, working, playing and visiting in the Peconic Watershed, one of the "last great places in the western hemisphere" (as designed by the Nature Conservancy) and that the Peconic Estuary is dear to their hearts - a commonly held treasure that they should care for. "People will protect what they love." (Jacques Cousteau)

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The messages to the public will follow a watershed, ecological theme "It's all connected" and emphasize that everyone can do something to help the bays.

The CAC strategy will also involve the Management Committee, Local Governmental Committee and Technical Advisory Committee and will help to support their efforts and help to build trust in government. For a fully-effective public education strategy, all NEP committees should integrate their outreach efforts with the CAC.

In order to ensure that scarce resources are utilized effectively, the proposal includes materials for use in Town Halls, etc. Members of the NEP committees will be featured in the proposed television program and in other components of the program.

The Peconic NEP Public Participation/Outreach Plan has four major components:

- ▶ develop an education and awareness campaign;
- ▶ citizen action plans based on BTCAMP and NEP fundings;
- ▶ explaining the problems and solutions as identified and interpreted by the Management Conference; and
- ▶ develop a long-range sustainable education plan.

The Public Participation/Outreach Plan is designed to comport with the general categories of public participation proposals as set forth in USEPA guidance. These categories are summarized as follows:

- ▶ projects designed to provide the public with information necessary to participate in the selection of estuary management options for the CCMP; and
- ▶ projects designed to demonstrate the effectiveness of public education as a management strategy for preventing or decreasing pollutant loadings or use impacts on estuarine resources.

The proposal includes a first year priority budget as presented in Table 3. The plan recommends that the CAC continue to raise supplementary, non-NEP funds for education programs not funded by NEP. There will be no money used on inappropriate, expensive-to-produce materials. All education and promotion materials will be attractive, easy to read and developed to lead to action. In-kind services will be donated. All materials also will be reviewed by appropriate NEP committee for approval. All major budget item activities shall be individually awarded on a competitive Request For Proposals basis coordinated by the CAC.

TABLE 3
 CITIZENS ADVISORY COMMITTEE
 DRAFT BUDGET - Year 2*

<u>Basic Education Program</u>	
Quarterly Newsletter	4,000
Other elements (CAC organization and coordination; mailing list development, workshops and conferences)	8,000
<u>Expanded Education Program</u>	
Reprint existing and produce new educational materials that describe the bay's resources and support CCMP:	15,000
a. Update and reprint copies of The Boaters Guide and Healthy Bayscapes	5,000
b. Other Items	2,000
Public Opinion Poll	2,500
<u>Awareness Campaign</u>	
12 Sixty-second PSA's for radio	\$ 13,000
½ hour Magazine Format TV Show for 8 Weeks	20,500
Community Planning & Implementation Conference on our Coastal Environment & CCMP	15,000
<u>Citizen Action Plans</u>	
Citizen Action Plans based on priority list developed by CAC and including a Volunteer Monitoring Program	\$ 20,000 ¹
Public Participation Coordination **	30,000
TOTAL	\$135,000

NOTE: This budget assumes that in-kind services and other grant dollars will be brought in as a percentage match for all budgeted activities. In fact, it is estimated that potential in-kind professional skills and services of members of the CAC are valued at \$80,000 to \$100,000 per year.

* \$100,000 of NEP CAC budget will be used for these tasks; additional funds will be sought to make up the remaining \$35,000, or some tasks will be deferred to the FY96 budget

** SCDHS Program Office will provide clerical support.

¹ CAC will seek 50% match funding from local government 5 towns to bring Action Plans up to \$40,000.

PECONIC ESTUARY PROGRAM (PEP)

STATUS REPORT



Includes:

- I. Status of First Year Tasks and Second Year Workplan (p.1)
 - A. *Brown Tide Monitoring and Research (p.1)*
 - B. *Water Quality and Sediment-Related Tasks (p.2)*
 - C. *Natural Resources Tasks (p.5)*
 - D. *Estuarine Use and Economic Value Assessment (p.6)*
 - E. *Demonstrations/Implementation Projects (p.6)*
 - F. *CCMP Preparation (p.6)*
 - G. *Base Programs Analysis (p.7)*
 - H. *Second Year Workplan (p.7)*
- II. Action Plan, Program Projects and Tasks (p.8)
- III. Program Funding and Support (p.10)
- IV. Program Background (p.12)
 - V. Timetable for Major Project Milestones (p.14)
- VI. Management Conference Structure (p.15)
- VII. Study Area Map (p.16)



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