CHAPTER TEN

POST-CCMP MANAGEMENT

OBJECTIVES

- 1) Create a stable and effective management structure for CCMP implementation.
- 2) Ensure widespread public agency participation/representation and use existing authorities to the maximum extent possible.
- 3) Develop and implement an integrated long-term monitoring plan for water quality and habitats/living resources issues with a coordinated data management strategy.
- 4) Track the progress of CCMP implementation (commitments, outcomes, and environmental effects), providing routine reporting and allowing for refining of management approaches.



MEASURABLE GOALS

The Peconic Estuary Program's measurable goals with respect to post-CCMP management and implementation are:

- Implement the Peconic Estuary Program Environmental Monitoring Plan. [See Action M-2]
- Produce status reports. [See Action M-3]
- Update municipal officials. [See Action M-4]
- Develop sub-watershed implementation plans (as measured by the number of sub-watershed plans initiated). [See Action M-5]



INTRODUCTION

The ultimate success of any National Estuary Program management conference can be measured by implementation of its Comprehensive Conservation and Management Plan (CCMP). Plan implementation requires a clear understanding among all participating entities concerning their responsibilities for actions recommended in the CCMP (Battelle et al., 1995).

The Peconic Estuary Program has recognized the need for establishing a long-term framework for Peconic Estuary management, as shown by the PEP goals and objectives at the beginning of this chapter. In light of the significance placed upon post-CCMP management and monitoring by Congress, the EPA, and the PEP Management Conference, the PEP Management Conference directed that a separate section of this Management Plan specifically deal with the issue of long-term management. Accordingly, this chapter of the CCMP includes not only a discussion on the critical issue of long-term institutional and organizational framework, but also a summary of other important parameters such as long-term monitoring, mechanisms for measuring progress, and data management.

INSTITUTIONAL FRAMEWORK

The PEP has selected a long-term institutional framework for post-CCMP management, which is to continue the existing management structure. Various alternatives were proposed in the Draft CCMP. These alternatives served as a starting point for the public as well as agencies and resource managers in the decision-making process. During the public comment period for the draft Management Plan, the PEP Management Conference sought input from interested parties regarding a final long-term institutional framework for post-CCMP management.

The three alternative frameworks proposed in the draft CCMP were:

- 1. Continuation of Existing Management Conference Structure (*Policy Committee*; *Management Committee*; *Citizens,Technical, and Local Government Advisory Committees*; *Natural Resources Subcommittee*; *and Program Office*);
- 2. Formation of a Regional Advisory Commission (formal, non-regulatory commission of East End town and village representatives); and,
- 3. Formation of the Pine Barrens Maritime Reserve Commission (*Modification of the Pine Barrens Maritime Reserve Act as a mechanism to involve State, County, and local governments in a regional implementation process*).

For the foreseeable future, the Management Conference will continue the existing Management Conference structure (see Appendix B). The PEP Program Office at the SCDHS Office of Ecology will continue to be a critical coordinating, management, and administrative body.

Continuation of Existing Management Conference Structure

At the core of the existing PEP Management Conference structure are the Management Committee and Program Office. (See Figure 10-1) The Program Office is located in the SCDHS Office of Ecology. The Management Committee consists of voting representatives from EPA, the NYSDEC, Suffolk County, local government, chairs of Citizens and Technical Advisory Committees, and



several other advisory members. (See Appendix B for a full discussion of the Management Conference Structure.)

The existing Management Conference structure remains intact. The Local Government Committee, Technical Advisory Committee, and Citizens Advisory Committee will continue to be integral to the long-term management process. The Citizens Advisory Committee will continue to maintain a vigorous public education and outreach program. The Technical Advisory Committee and the Natural Resources Subcommittee will provide technical guidance regarding long-term monitoring and assessment projects, technical implementation projects, and CCMP assessment and goal attainment. Local governments will be crucial to the implementation process itself with regard to issues such as land use, zoning, and implementation of nonpoint source control programs.

Both the Management Committee and Local Government Committee currently report to the Policy Committee. Under the Post-CCMP structure, both will continue to report to the Policy Committee, which will review and approve progress reports on implementation and sanction major new policy initiatives.

The Program Office will continue its management, coordination, and administration functions, as they are applicable to post-CCMP management, and as resources allow. Several responsibilities and functions outlined in the PEP *Management Conference Agreement* (June 1993) which will still be applicable to the post-CCMP period are noted as follows:

Management Responsibilities

- Communicate regularly with all PEP participants about activities and issues to ensure consensus and that all views are fairly represented in work products;
- Coordinate activities among Federal, State, County, and local agencies as well as the public sector to obtain program objectives;
- Manage the preparation of annual workplans and reports, in cooperation with all PEP participants;
- Coordinate conference activities in identifying and seeking alternative sources of funding for activities associated with the estuary system; and,
- Implement the CCMP.

Technical Responsibilities

- Oversee and assist in coordinating the planning, development, and implementation of all phases of the PEP; and
- Identify, participate in, and ensure the transfer of scientific/engineering information to PEP participants.



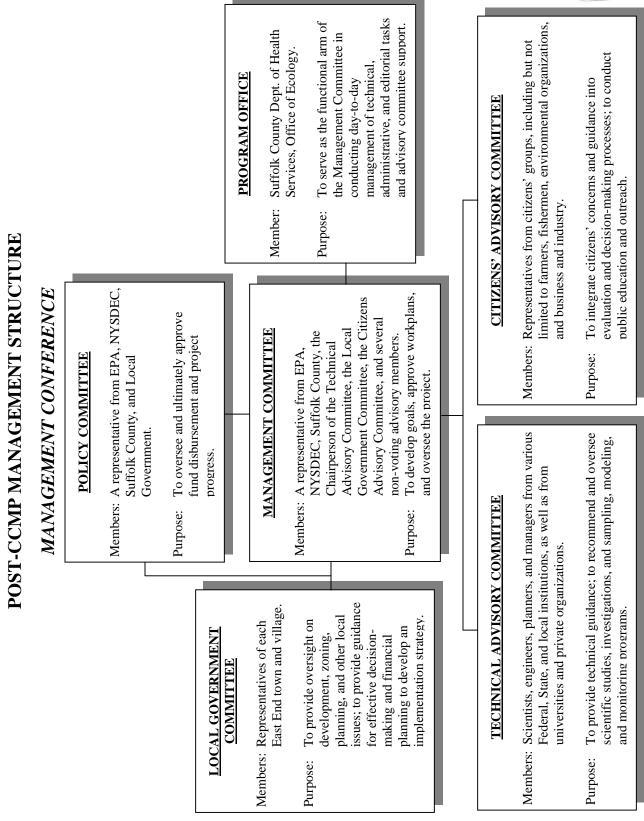


Figure 10-1. Peconic Estuary Program Post-CCMP Management Structure.



Program Administration

- Manage development of Requests for Proposals;
- Oversee the administration and performance of contracts and grants;
- Facilitate the convening of conferences and meetings;
- Prepare routine PEP status reports and program information. The Program Office and Suffolk County maintain the PEP worldwide web site and the Program Office library that contains a collection of program documents, reports, and maps; and,
- Prepare and distribute a periodic newsletter on the Peconic Estuary Program.

Administrative Support

- Routinely attend meetings of major committees;
- Ensure the transfer of all PEP materials (*e.g.*, work products, reports, meeting minutes, etc.) to the appropriate persons and locations; and,
- Receive and respond to requests for technical information and assistance regarding the PEP from the public, elected officials, EPA Headquarters, and others.

Benefits of Continuing the Existing Management Conference Structure

- The structure relies on a pre-existing framework that has been successful in integrating concerns and building consensus in an often complex and contentious process;
- The structure effectively involves numerous stakeholders closely in the management process;
- The Program Office, which benefits from decades of institutional environmental management continuity in eastern Suffolk County, is at the heart of the administration and management process;
- The NYSDEC (which administers State Bond Act funding) and EPA (which provides post-CCMP funding) will have active roles; and,
- The structure would not involve any new or major institutional expenditures and therefore would be relatively low cost (provided that all Committee representatives will continue to participate actively in committee activities without compensation and that staff from the SCDHS Office of Ecology can continue to dedicate a portion of their time to program coordination, as well as long-term monitoring and data management).



Drawbacks of Continuing the Existing Management Conference Structure

The following drawbacks of continuing the existing management conference structure were identified in the draft CCMP and will need to be considered and addressed in the implementation phase:

- The Management Conference structure is centered around the Management Committee
 that does not itself implement many of the recommended actions in the draft CCMP.
 This drawback may be overcome by close and active coordination with advisory
 committees and workgroups. Additional committees, such as a Habitat Restoration Work
 Group and the proposed Financing Work Group, can be integrated and can report directly
 to the Management Committee, or, in some cases, other committees, such as the Local
 Government Committee, as needed;
- The structure has no ability to raise revenues. This can be overcome by a coupling with a non-profit arm with fund-raising ability; and,
- The Management Conference structure does not have any direct regulatory or enforcement authority. Several Management Conference members have, on numerous occasions, expressed the opinion that a lack of direct regulatory or enforcement authority is highly desirable and is in the spirit of the consensus-building approach of the PEP Management Conference. Also, agencies that sit on the Management Conference do, of course, have regulatory authorities.

LONG-TERM MONITORING

Monitoring during CCMP implementation is needed to gather information on the changing state of the estuary system. This information can be used to prioritize activities and measure the success of management actions. Specific details regarding PEP post-CCMP monitoring efforts are included in the various main chapters of this draft management plan and the monitoring plan presented in Appendix I. The overall strategy for long-term monitoring is summarized below. Monitoring plan elements are summarized in **Table 10-1**.

A diagram of some of the major long-term monitoring topics for the PEP is shown in **Figure 10-2**. It is critical to emphasize that the PEP is a *management* program rather than primarily a research effort. Therefore, all monitoring efforts directly undertaken, coordinated, or overseen by the PEP must be primarily management-oriented. For example, the PEP would probably not perform a long-term zooplankton study merely to determine shifts in regional species composition abundance, but to ultimately enable evaluation of possible linkages to causal factors. PEP projects must be more determinate in terms of hypotheses and probable management utility. An appropriate research project would be to perform synoptic zooplankton and nutrient monitoring to determine whether changes in nutrient loading are adversely affecting that trophic level, in terms of abundance or species composition. More than just an academic or semantic issue, the clear definition of project objectives and management utility will have profound impacts on project types.

This is not to discount PEP involvement in long-term research projects. The PEP, as part of the CCMP, will continue to identify long-term research efforts necessary to characterize and understand basic processes and parameters. The PEP will also seek to procure sources of funding to support such research. In the case of Brown Tide, the PEP will actively participate in the Brown Tide Steering Committee.



Several of the PEP monitoring program topics in **Figure 10-2** will be performed as part of pre-existing programs (point source discharge data through SPDES permits; groundwater monitoring programs through the SCDHS, the Suffolk County Water Authority, NYSDEC, and other entities; coliform/shellfish sanitation program through NYSDEC, surface water monitoring program through SCDHS; etc.). Also, the NYSDEC will continue its finfish trawl surveys, and landings data for finfish and scallops will provide some indication of fisheries resources. Finally, Brown Tide research will be addressed through the Brown Tide Steering Committee, in which the PEP will continue to participate actively. Several possible funding sources are outlined in the Brown Tide chapter.

Even though the pre-existing long-term efforts will be ongoing, substantial effort will be required to compile, analyze, and use some of the data. The Management Committee will continue to identify entities that will commit resources to such data analysis and use. For example, the coliform and finfish trawl data is routinely collected, but requires substantial resources to compile and report for the PEP. Similarly, groundwater programs collect substantial data at the County and State levels, but compilation and use of data represents a formidable challenge.

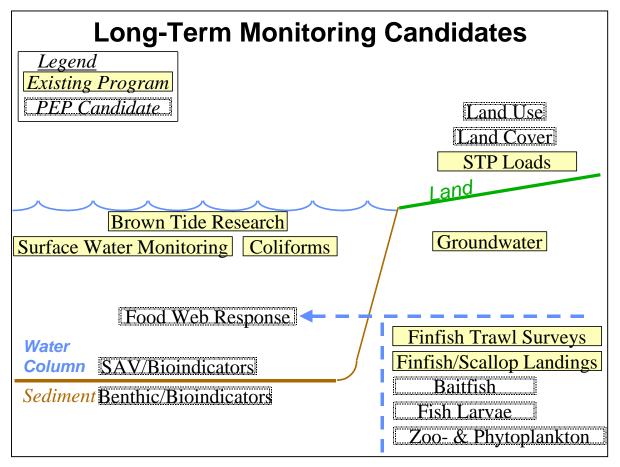


Figure 10-2. Long-Term Monitoring Topics.



Table 10-1. Environmental Monitoring Plan.

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SCDHS Bathing Beaches and Swimming Pools Program SCDHS Groundwater Monitoring (for nitrogen and pesticides) SCDHS North Creeks Study SCDHS Pfiesteria Monitoring SCDHS Routine Point Source Monitoring SCDHS Surface Water Quality Monitoring SCPD Land Use Monitoring Sediment Monitoring Shoreline Hardening Monitoring Submerged Aquatic Vegetation Long Term Monitoring Suffolk County Groundwater Model X Surface Water Monitoring for Toxics Two Stroke Marine Engine Inventory		\$35,000	
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Shoreline Hardening Monitoring X Submerged Aquatic Vegetation Long Term X Monitoring Suffolk County Groundwater Model X Surface Water Monitoring for Toxics X Two Stroke Marine Engine Inventory		25,000	
Submerged Aquatic Vegetation Long Term X Monitoring Suffolk County Groundwater Model X Surface Water Monitoring for Toxics X Two Stroke Marine Engine Inventory		35,000	
Monitoring Suffolk County Groundwater Model X Surface Water Monitoring for Toxics X Two Stroke Marine Engine Inventory		\$30,000	
Surfolk County Groundwater Model X Surface Water Monitoring for Toxics X Two Stroke Marine Engine Inventory			
Surface Water Monitoring for Toxics X Two Stroke Marine Engine Inventory			
Two Stroke Marine Engine Inventory			
		\$10,000	
	\$50,000	\$10,000	
USFWS National Wetlands Inventory X			
Total	\$1,332,500	\$922,500	



Even more difficult is procuring resources and funding sources for programs which are <u>not</u> preexisting. For example, there is currently no mechanism to perform routine, ongoing land use and land cover monitoring. Also, there are no long-term monitoring commitments related to baitfish, fish larvae, zooplankton and phytoplankton, submerged aquatic vegetation, and benthic communities. The PEP must procure commitments for carrying out and funding priority monitoring projects. This will involve a joint and cooperative effort between the Management Committee and Technical Advisory Committee.

The Management Committee will continue to evaluate costs and benefits of possible monitoring program options. Part of this analysis will include a weighing of the costs of given programs against the *likelihood* of success and the *value* of success. For example, it is possible that a prohibitively expensive program may not be possible, even though resulting data could be extremely valuable. Conversely, a project which cannot guarantee a high probability of intended results (*e.g.*, a usable bioindicator) could still be desirable, if the possibility of success is reasonable when weighed against modest project costs and a potentially high project utility.

The selection of monitoring parameters and programs must include commitments from entities to conduct the programs and dedication of sufficient resources to enable the efforts. The final monitoring plan contained in Appendix I conforms to *National Estuary Program Guidance*, *Comprehensive Conservation and Management Plans, Content and Approval Requirements* (EPA 1992). This guidance document emphasizes the need for clearly defined monitoring plans not only to measure the effectiveness of CCMP actions, but also to provide information necessary to redirect and refocus the CCMP. As required by EPA, the monitoring plan defines program objectives and performance criteria, describes testable hypotheses, and specifies monitoring variables and plan details.

Monitoring Priorities

EPA funding for establishing a long-term monitoring program is limited. Currently, the following priorities for use of PEP post-CCMP monitoring monies (NEP-funded) are as follows:

Water Quality

Continuation of the water quality monitoring program for purposes of establishing a long-term program, with linkages not only to Brown Tide and nitrogen and DO management, but also to the tidal creeks study, the submerged aquatic vegetation monitoring program, and, possibly, other programs. This also includes integrating groundwater quality data and input rates, particularly for key subwatersheds.

Sediment

Benthic mapping is needed to direct further long-term monitoring of sediment communities and other environmental issues.

Submerged Aquatic Vegetation

A long-term submerged aquatic vegetation program is needed to capitalize upon prior efforts and to establish trends in eelgrass and macroalgae abundance and distribution. Ideally, submerged aquatic vegetation will be linked with water quality as a bioindicator. Eelgrass restoration will be considered based on the results of the PEP habitat criteria study.



Other Projects

A small amount of funding will remain for additional living resources/habitat monitoring efforts. This could include establishing a long-term benthic monitoring study, possibly in conjunction with the tidal creeks study. Hopefully, prior efforts could be continued to evaluate water quality and sediment communities to support development of a meaningful bioindicator, although larger studies may be necessary to accomplish this. Another project option includes evaluating trends of baitfish abundance and distribution.

Additional Natural Resources Research and Monitoring Needs

The natural resources committee has identified several projects, which would require several hundreds of thousands of dollars in funding, to conduct important long-term monitoring and living resources projects. These projects include system-wide studies of benthic communities, baitfish, fish larvae, zooplankton, and phytoplankton. A formal project list and justification will be prepared by the Management Committee for further evaluation and consideration and additional funding sources will be sought. Candidates for funding may include the New York State Environmental Protection Fund and possibly the Suffolk County Capital Program (\$50,000 proposed for zooplankton and phytoplankton characterization, which would assist not only in Brown Tide research, but also in PEP long-term monitoring).

Land Use Monitoring

The continuing collection and analysis of land use data is, of course, a paramount long-term monitoring priority. It will be critical in linking land use trends with pollution loading, water quality, and habitat and living resources. It will also be an important tool in tracking the progress of CCMP implementation.

The Suffolk County Planning Department will be crucial to any long-term land use monitoring efforts. The Planning Department has a verified Geographic Information System (GIS) database for existing land uses at tax map scale for the Towns of Riverhead, Southold, Shelter Island, Southampton, East Hampton, and the Peconic River corridor in the Town of Brookhaven. The Planning Department also has a verified GIS database for existing zoning in this same region. Both of these databases should be updated on an annual basis to reflect conditions as of March 1 (tax status day). The update and maintenance of the GIS databases will require coordination of activities among the Planning Department, Suffolk County Real Property Tax Service Agency (SCRPTSA), town tax assessors and town planners. Suggested agency roles are as follows:

- Town tax assessors could provide a list to SCRPTSA of those parcels for which there has been a change in tax assessment code as of March 1. These lists could then be provided by SCRPTSA to the Planning Department for review, conversion into land use classification codes, and incorporation into the GIS land use database. The Planning Department would then make this updated land use database available to the towns for their use. This would include data in map format. Alternatively, the Planning Department could receive Real Property Transfer Reports (RP-5217) for review to monitor land use changes; and
- Town Planners could provide a list of any modifications to town zoning codes and maps to the Planning Department, which in turn would correct the GIS zoning database and provide the information to the towns for their use (includes map format).

If one or more of these procedures is implemented, annual updates of GIS products (i.e., databases, tabulations, trends, and maps at tax map scale) for existing land use and zoning, can be made



available for the PEP study area and towns as a whole. The databases would be maintained by the Planning Department to assure consistency in methodology application for the region.

Living Resources Monitoring Coordinator

The Management Conference recommends coordinating long-term monitoring program needs for field/living resources concerns by hiring at least one full-time staff person dedicated solely to conducting and, to some degree, coordinating these programs. This person would serve as an "environmental analyst," "biologist," or "marine conservation planner" and would oversee routine, limited submerged aquatic vegetation surveys, baitfish surveys, and/or other monitoring efforts. The person would also oversee the efforts of the agencies charged with collecting data and to keep track of those agencies' commitments to compile and report on their databases. Candidate agencies for providing or housing a staff person would be the NYSDEC, Cornell Cooperative Extension, The Nature Conservancy, or the SCDHS.

Until such a position is filled, the Management Conference will continue to conduct these monitoring efforts using voluntary contribution of multiple agency resources. An interim option is to contract out long-term monitoring tasks. A possible disadvantage of this approach would be a lack of institutional continuity and precarious annual funding sources.

In regard to these issues, the Management Committee will focus on sustainable, long-term databases which can be used to monitor the effects of CCMP implementation, rather than substantial short-term expenditures of funds to obtain limited characterizations which would not likely be useful in long-term monitoring, even though they could be of immediate scientific interest.

Living Resources Research Plan

The PEP, through the present Marine Conservation Planner, has prepared a Framework for Developing a Living Resources Research and Monitoring Plan. This Framework, which has been peer reviewed, will be revised based on peer review comments and integrated with other monitoring efforts (*e.g.*, sediment nutrient flux and toxicity) to update the existing plan, and to identify priority research areas and topics.

MEASURING PROGRESS OF CCMP IMPLEMENTATION

The PEP Management Committee evaluated various mechanisms for measuring progress of CCMP implementation, including technical/scientific measurements (*e.g.*, "bay quality indices"), performance standards, and other, more citizen-oriented mechanisms such as "government report cards." Reports summarizing the progress of various implementation mechanisms will be prepared by the PEP.

Dual Approach: Reports on Outputs and Outcomes

Reporting the status of CCMP implementation, and redirecting effort as needed, is crucial to successful implementation of the Plan. There are two types of measures of CCMP implementation:

- Outputs reviews to determine whether CCMP commitments have been met; and
- Outcomes reviews of progress using appropriate environmental indicators to determine whether the Peconic Estuary is responding as expected to pollution controls, and whether unanticipated environmental problems are emerging.



The CCMP provides a framework for tracking both outputs and outcomes. For outputs, each action in the CCMP identifies what is to be done, by when, and by whom. The PEP will review these commitments and recommend mid-course corrections as needed. For outcomes, the Environmental Monitoring Plan includes recommendations to periodically measure and report on a number of environmental indicators of the success of CCMP implementation. These indicators will tell us whether our goals and objectives are being met. The most important indicators are those, which involve measuring the ambient environment to assess whether beneficial uses are being restored, and whether the ecosystem is healthier and more productive as a result of actions taken. Other indicators involve measuring continuing loading of pollutants to the ambient environment.

Technical Measures

A variety of technical criteria or indices can be developed to assist in evaluating the outcomes of CCMP implementation and effectiveness of CCMP activities. Many of these criteria, including non-regulatory guidelines, are described in other chapters of this Management Plan, such as nitrogen guidelines and DO standards.

In developing indices, the Management Committee will emphasize integration of water quality and living resources, to the extent possible. Examples include water quality habitat criteria for submerged aquatic vegetation, and possibly use submerged aquatic vegetation as a bio-indicator of water quality and habitat quality. Also, benthic communities used as integrators of watershed stresses may be valuable bioindicators. These are, of course, subject to the findings of ongoing scientific studies being conducted by the PEP.

Coordination of scoping and design of a technical report, and its elements, will be performed by the PEP Management Conference. At a minimum, this report will include parameters such as groundwater quality changes, surface water nutrient trends, dissolved oxygen violations, and alterations in land use and land cover patterns.

Non-Technical Measures

Non-technical measures also can be used as tools for assessing CCMP implementation. Reports summarizing the progress of various implementation mechanisms will also be prepared as a mechanism for tracking progress. Implementation funding levels and appropriations will be included. New regulatory initiatives and enforcement of pre-existing initiatives also will be important.

Mechanisms such as preparing environmental "report cards" and government action "check lists," as outlined in *Measuring Progress of Estuary Programs, A Manual*, (EPA 1994) has been recommended. That manual also outlines a bay quality index, an aggregate index of various parameters to attempt to monitor long-term changes in bay quality. The report also emphasizes the importance of surveys and public education in the progress measurement process.

CCMP Reporting

Every three years, the PEP will prepare a report on the status and effectiveness of CCMP implementation, focusing on outputs, as required by EPA National Estuary Program Guidance. The report will include commitments for redirection of efforts as needed. One and one-half years after the first CCMP Implementation Report, and every three years after that, the PEP will also prepare a full account of the status and effectiveness of CCMP implementation, measured by the environmental outcomes being tracked through implementation of the PEP Environmental Monitoring Plan.



DATA MANAGEMENT

The December 1993 *Peconic Estuary Program Data Management Strategy* designated the SCDHS Office of Ecology as the repository of water quality data and most GIS data. The Program Office also became the prime repository for natural resource data on a provisional basis. Since that time, the USFWS has worked on several mapping efforts and has provided GIS coverages to the Program Office for storage and distribution. Suffolk County will continue its role as a water quality data repository and data management agency; a permanent long-term habitat and living resources data repository will need to be identified. The *Data Management Strategy* and related policies and practices will be periodically reviewed and updated, as needed.



POST CCMP MANAGEMENT ACTIONS

Within the CCMP, some steps within the actions have been identified as priorities, as indicated under the step number. The PEP will seek to implement priority actions in the near term. Priorities may be either new or ongoing, commitments or recommendations. Completing some priority actions does not require any new or additional resources, because they are being undertaken through "base programs" or with funding that has been committed. In other cases, in order to complete the priority actions, new or additional resources need to be secured by some or all of the responsible entities.

POST-CCMP MANAGEMENT ACTIONS

- M-1. Implement a Long-Term Management Structure.
- M-2. Conduct Monitoring and Coordinate Research.
- M-3. Produce Progress Reports and Manage Data.
- M-4. Update Municipal Officials.
- M-5. Develop Sub-Watershed Implementation Plans.
- M-6. Ensure Consistence with National and State Historic Preservation Laws and the Endangered Species Act when Implementing the CCMP.



M-1. Implement Long-Term Management Structure.

Addresses Post-CCMP Objectives 1 and 2.

Steps

M-1.1 Continue the current management conference structure. Review the effectiveness of this structure during Implementation Reviews, or as needed, and make changes as appropriate.

M-1.2 Continue to use SCDHS Office of Ecology as the PEP Program Office, to provide program administration, coordination, management, and technical support services.

Responsible Entities

M-1.1 PEP Management Conference (lead)

M-1.2 PEP (lead), SCDHS



M-2. Conduct Monitoring and Coordinate Research.

Addresses Post-CCMP Objective 3.

Steps

Priority

M-2.1 Implement the PEP Environmental Monitoring Plan and integrate/coordinate monitoring with research.
 M-2.2. Appoint a Living Resources Monitoring and Research Coordinator to develop and

M-2.3. Continue to fund the NYSDEC coordinator, particularly to coordinate management of

oversee the long-term habitat and living resources monitoring plan.

M-2.3. Continue to fund the NYSDEC coordinator, particularly to coordinate management of habitat and living resources issues in the post-CCMP period.

Responsible Entities

M-2.1 PEP Management Conference (lead)

M-2.2 PEP Management Conference

M-2.3 NYSDEC, EPA



M-3. Produce Progress Reports and Manage Data.

Addresses Post-CCMP Objective 4.

Steps

M-3.1 Produce Implementation Reports on outputs (attainment of CCMP commitments and recommendations), and reports on outcomes (environmental conditions and indicators).

M-3.2 Update the PEP Data Management Strategy to establish SCDHS as the continuing long-term data repository for water quality-related information. A permanent habitat and living resources data repository will need to be identified.

Responsible Entities

- M-3.1 EPA, NYSDEC, SCDHS, PEP Management Conference
- M-3.2 PEP Management Conference (lead)



M-4. Update Municipal Officials.

Addresses Post-CCMP Objective 3.

Steps

M-4.1 Update municipal officials on the Peconic Estuary Program. Provide educational **Priority** opportunities for these officials on the CCMP and technical issues.

Responsible Entities

M-4.1 PEP (lead)



M-5. Develop Sub-Watershed Implementation Plans.

Addresses Post-CCMP Objective 2.

Steps

M-5.1 Develop sub-watershed implementation plans integrating actions from all CCMP **Priority** chapters for one waterbody, embayment, or geographic area in each town, per year.

Responsible Entities

M-5.1 PEP (lead) with local officials, businesses, non-governmental organizations, and citizens



M-6. Ensure Consistency with National and State Historic Preservation Laws and the Endangered Species Act when Implementing the CCMP.

Addresses Post-CCMP Objective 2.

While this Comprehensive Conservation and Management Plan in and of itself will not have any effect on historic or prehistoric resources, there is the potential that individual actions of this plan that are subsequently implemented might. In compliance with Section 106 of the National Historic Preservation Act, if any Federal undertaking performed as part of the CCMP has the potential to have an effect on prehistoric or historic resources as a result of ground-disturbing activities, EPA will evaluate the need for the performance of an initial Stage IA cultural resources survey (CRS) and any necessary additional stages of survey, prior to project implementation, to identify areas sensitive for the discovery of prehistoric or historic resources. Coordination of any further cultural resources investigations will be carried out by the appropriate Federal agency. To the extent that such actions are State undertakings, NYSDEC will be the lead for consulting with the State Historic Preservation Officer.

Informal consultation pursuant to Section 7 of the Endangered Species Act has been initiated with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. While EPA believes that the CCMP will not have a negative effect on Federally-listed or proposed threatened or endangered species or their habitats, it is possible that some components of the CCMP may have to be modified based on input from these agencies. Any actions contemplated for the protection or enhancement of habitat for a Federally-listed species should be implemented with the consent of the Fish and Wildlife Service and the National Marine Fisheries Service.

Steps

M-6.1 Ensure consistency with National and State historic preservation laws and the Endangered Species Act when implementing the CCMP

Responsible Entities

M-6.1 EPA, NYSDEC, PEP

COSTS OF MANAGEMENT ACTIONS

The total cost of all new actions proposed in the Post CCMP chapter is \$1,525,000 in one-time costs and \$1,060,000 annually. The majority of these one-time and annual costs are for implementing the PEP Environmental Monitoring Plan. (See "Action Costs" in **Chapter 1** for an explanation of how these costs were determined.)

POST-CCMP MANAGEMENT ACTIONS SUMMARY TABLE

Table 10-2 provides the following summary information about each of the actions presented in this chapter.

Status

An action's status is designated in the table by either an "R" for "Recommendation" or a "C" for "Commitment." Actions that are commitments are being implemented because resources or funding and organizational support is available to carry them out. Actions that are "recommendations" require new or additional resources by some or all of the responsible entities. "O" refers to ongoing activities; "N" indicates new actions.

Timeframe

This category refers to the general timeframe for action implementation. Some actions are ongoing or nearing completion; implementation of other actions is not anticipated until some time in the future.

Cost

Information in the cost column represents the PEP's best estimate of the costs associated with action implementation. "Base Program" means that no new or additional funds will be needed outside of the responsible entity's operating budget to implement the action. Where additional funding is needed, resources to implement an action may be expressed in dollar amounts or work years or both. One full time equivalent employee or "FTE" is estimated as costing \$75,000 per year, which includes salary, fringe benefits and indirect costs. The "Action Costs" description in both the Overview and Finance Chapters provides a expanded explanation of base programs and action costs.

Table 10-2. Post-CCMP Management Actions.

Action		Responsible Entity	Timeframe	Cost	Status	
M-1	Implement a Long-Term Management Structure. (Objectives 1 and 2)					
M-1.1 Priority	Continue the current management conference structure. Review the effectiveness of this structure during Implementation Reviews or as needed, and make changes as appropriate.	PEP Management Conference (lead).	Post-CCMP	EPA – 02 FTE/yr NYSDEC – 0.2 FTE/yr SCDHS – 0.2 FTE/yr	С	
M-1.2 Priority	Continue to use SCDHS Office of Ecology as the PEP Program Office, to provide program administration, coordination, management, and technical support services.	PEP (lead), SCDHS.	Ongoing	\$75,000/yr, in EPA NEP Post-CCMP funds.	C/O	
M-2	Conduct Monitoring and Coordinate Research. (Objective 3)					
M-2.1 Priority	Implement the PEP Environmental Monitoring Plan and integrate/coordinate monitoring with research	PEP Management Conference (lead).	Post-CCMP	Some monitoring is ongoing; costs need to be specified for some new initiatives. PEP – 0.1 FTE/yr Costs for Environmental Monitoring Plan: Annual costs: \$ 910,000 One-time costs: \$1,512,000	C/O; R/N	

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Table 10-2. Post-CCMP Management Actions. (continued)

	Table 10-2. Tost-Cevii Wanagement Actions. (Continued)					
	Action	Responsible Entity	Timeframe	Cost	Status	
M-2.2 Priority	Appoint a Living Resources Monitoring and Research Coordinator to develop and oversee the long-term habitat and living resources monitoring plan.	PEP Management Conference.	Post-CCMP	\$50,000 annually for coordinator.	R	
M-2.3 Priority	Continue to fund the NYSDEC coordinator, particularly to coordinate management of habitat and living resources issues in the post-CCMP period.	NYSDEC, EPA.	Ongoing	\$75,000 per year, in EPA NEP post-CCMP funds.	C/O	
M-3	Produce Progress Reports and Manage Data. (Objective 4)					
M-3.1 Priority	Produce Implementation Reports on outputs (attainment of CCMP commitments and recommendations), and reports on outcomes (environmental conditions and indicators).	EPA, NYSDEC, SCDHS, PEP Management Conference.	CCMP Implementation Reports: June 2001 and every three years thereafter Environmental Outcomes Reports: Dec 2002 and every three years thereafter	EPA – 0.1 FTE/yr NYSDEC – 0.1 FTE/yr SCDHS – 0.1 FTE/yr	C/O	
M-3.2	Update the PEP Data Management Strategy to establish SCDHS as the continuing long-term data repository for water quality-related information. A permanent habitat and living resources data repository will need to be identified.	PEP Management Conference (lead).	Post-CCMP for data management strategy update.	Base Programs for data management strategy update. Costs to be determined for long-term habitat and living resources data management. PEP – 0.1 FTE/yr	С	

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 Table 10-2. Post-CCMP Management Actions. (continued)

	Action	Responsible Entity	Timeframe	Cost	Status
M-4	Update Municipal Officials. (Objective 3)				
M-4.1 Priority	Update municipal officials on the Peconic Estuary Program. Provide educational opportunities for these officials on the CCMP and technical issues.	PEP (lead).	Post-CCMP and annually thereafter.	EPA – 0.1 FTE/yr NYSDEC – 0.1 FTE/yr SCDHS – 0.1 FTE/yr	C/N
M-5	Develop Sub-Watershed Implementation Plans. (Objective 2)				
M-5.1	Develop sub-watershed implementation plans integrating actions from all CCMP chapters for one waterbody, embayment, or geographic area in each town, per year.	PEP (lead) with local officials, businesses, non-governmental organizations, and citizens.	Post-CCMP	Estimate: \$100,000/yr to initiate new projects. Technical support: EPA – 0.1 FTE/yr NYSDEC – 0.1 FTE/yr SCDHS – 0.1 FTE/yr	C/N
M-6	Ensure Consistency with National and State Historic Preservation Laws and the Endangered Species Act when Implementing the CCMP. (Objective 2)				
M-6.1	Ensure consistency with National and State historic preservation laws and the Endangered Species Act when implementing the CCMP.	EPA, NYSDEC, PEP	Post-CCMP	Base Program, as needed	C/N





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