

# **MASSACHUSETTS BAYS PROGRAM (MBP)**

## **Federal FY 03 ANNUAL WORKPLAN**

### **PREFACE**

In September 1996, the Environmental Protection Agency (EPA) approved the Comprehensive Conservation and Management Plan (CCMP) for the Massachusetts Bays Program (MBP). The CCMP's Action Plans can be collectively described as a "blueprint" for restoring and protection the water quality and living resources of the Bays and their watersheds. Title III of the Estuaries and Clean Waters Act of 2000 authorized the use of Section 320 to develop and implement Comprehensive Conservation and Management Plans. This Act is now the funding authority for this work plan.

In April 2002, the Management Committee approved MBP's Strategic and Funding Plan (provided with last year's work plan) which provides the next more specific level of planning from the CCMP by spelling out a more focused three-year strategy for MBP activities and grant seeking. The workplan is the last level of planning. It describes the specific activities, with accompanying budget, which the MBP will undertake between July 1, 2003 and June 30, 2004 (State Fiscal Year 2004 (SFY 2004)), using state and federal monies.

### **OUTLINE**

#### **Background**

#### **Goals and Accomplishments for 2002 – 2003**

- I. Progress on Goals
  - A. Strategic Plan Update
- II. Goal Descriptions and Transferability
  - A. Central Staff
  - B. Regional/Local Governance Committees
    1. Eight Towns and the Bay
    2. Salem Sound Coast Watch
    3. Metro Boston
    4. South Shore
    5. Cape Cod

#### **Program Goals and Focus for 2003 - 2004**

- I. Overview
- II. New Initiatives
  - A. Central Staff
  - B. Regional/Local Governance Committees

#### **Administrative and Financial**

- I. Staff and Responsibilities
- II. Leveraged funds
- III. Budget and Match
- IV. Travel documentation

## Background

When the CCMP was originally drafted, the MBP worked with approximately 300 individuals representing numerous agencies, organizations, and municipalities to identify necessary environmental actions and responsible parties for these actions. Upon completion, the CCMP contained approximately 400 pages organized into eleven chapters. Chapter five, the centerpiece of the Management Plan, describes seventy-two action items categorized into fifteen major action plans for protecting and preserving the Bays' resources. The action plans articulate a number of recommended steps that should be taken to restore and protect the Massachusetts Bays ecosystem. These action plans address the following areas of concern:

1. Protecting Public Health
2. Protecting and Enhancing Shellfish Resources
3. Protecting and Enhancing Coastal Habitat
4. Reducing and Preventing Stormwater Pollution
5. Reducing and Preventing Toxic Pollution
6. Reducing and Preventing Oil Pollution
7. Managing Municipal Wastewater
8. Managing Boat Wastes and Marina Pollution
9. Managing Dredging and Dredged Materials Disposal
10. Reducing Beach Debris and Marine Floatables
11. Protecting Nitrogen-Sensitive Embayments
12. Enhancing Public Access and the Working Waterfront
13. Planning for a Shifting Shoreline
14. Managing Local Land Use and Growth
15. Enhancing Public Education and Participation

In 1998, the MBP held a Visioning Workshop to establish program priorities. At the workshop, attended by the MBP staff and members of the Management Conference, the group prioritized the seventy-two CCMP action items. The group agreed that the MBP should focus on the five action plans that contained the majority of the "urgent" action items. These priority action plans included Action Plans 2 (Shellfish), 3 (Habitat), 4 (Stormwater), 7 (Wastewater), and 14 (Land Use).

A second Visioning Workshop was held in 2001 with the goal of revising and updating the CCMP. During this workshop, working groups were established to review each of the five priority action plans and determine the need for any new action plans. The need for the following two new action plans was also identified:

16. Preventing Marine Invasive Species
17. Monitoring the Marine Environment

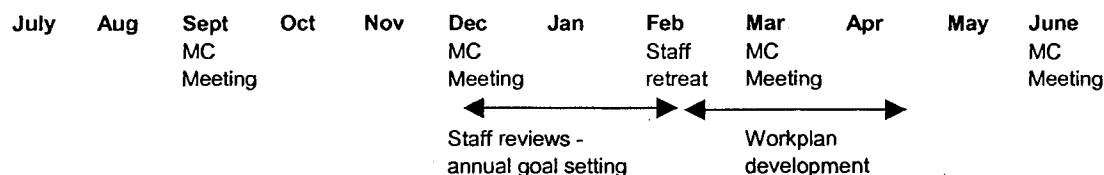
Since the 2001 Workshop, the MBP has been in the process of revising and updating the CCMP. Many of the priority action items have been revised to include the implementation

process that has evolved for those plans. Many of the actions that were described in these Plans are underway - some with little direct involvement from the staff of the Massachusetts Bays Program. The central staff is currently working on an environmental tracking system aimed at measuring the progress of the CCMP Action Plans. As a first step towards this goal, in 2002, the MBP completed a Strategic and Funding Plan aimed at measuring the MBP's progress towards achieving goals addressed in the CCMP.

The Strategic and Funding Plan identified goals and relevant measures of success (based on the CCMP Action Plans) for the program staff to focus on and work towards from January 2002 to December 2005. Goals were divided into two categories: 1) creating environmental results and 2) building organizational sustainability. The next section contains a report and spreadsheet that summarizes the progress that was made on the Strategic Plan in FY 02.

Each year, between December and March, the MBP staff members work together to develop new initiatives aimed at advancing the goals and objectives outlined in the CCMP and the Strategic Plan. These initiatives are presented to the Management Committee for their approval in early March.

*The Massachusetts Bays Program annual work plan timeline:*



## Goals and Accomplishments for 2002 - 2003

### I. Progress on Goals

#### A. Strategic Plan Update

In February 2003, the Massachusetts Bays Program central and regional staff were asked to submit a report to the program manager on which 'Measures of Success' related to the Strategic Plan they had worked on in the previous year. Collectively, over the past year, the MBP staff worked on 23 of the 31 measures of success related to creating environmental results. While the sub-regions varied in the types of projects they worked on, each sub-region worked to some degree on projects related to Habitat, Stormwater, and Land Use. Staff also worked on eight of the 14 measures of success related to building organizational sustainability. The central staff took the lead with the 'Measures of Success' in this category though some regions held volunteer events and/or workshops with local officials that were also counted towards enhancing organizational sustainability.

Each region also worked on additional topics that were not necessarily addressed in the Strategic Plan including work related to sediment toxicity, coastal bank erosion, coastal storm hazards, offshore aquaculture, stormwater BMPs and new technologies, eco-landscaping, open space residential designs, hydrology studies, Community Preservation Act assistance, coastal infrastructure, clean boating, and alternative energy sources. Though these topics were not specifically addressed in the strategic plan, MBP staff have been encouraged to continue their work in these areas so long as they are relevant to the goals outlined in the CCMP.

Table Definitions

CS – Central Staff

UNS – Upper North Shore

SS – Salem Sound

MB – Metro Boston

SoS – South Shore

CC – Cape Cod

O – ongoing action

C – project will be completed by 2005

I – project will be initiated by 2005

X – progress has been made in this category

Total possible – Total number of measurable results describe in Strategic Plan

Progress to date – Number of measurable results that have been worked on thus far

## Massachusetts Bays Program Strategic Plan 2002 - 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 1: Protect and Enhance Shellfish Resources (from Action Plan 2)</b>								
1.a. Complete the Interagency Agreement that defines agency roles and contributions. (I)						X	X	X
1.b. Initiate implementation measures in one priority site in 2003 and 2004. (I)							X	
1.c. Complete implementation measures in one priority site by December 2005 (C).							X	
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>
<b>Goal 2: Protect and Enhance Coastal Habitat (from Action Plan 3)</b>								
2.a. Target five towns each year for technical and grant-writing assistance to complete an Open Space Plan, local Wetlands Bylaw and other habitat protection tools. (O)		X		X	X	X	X	X
2.b. Complete the Wetlands Health Assessment Toolbox manual. (C)	X						X	X
2.c. Maintain the number of trained volunteers and local officials each year in the Wetlands Health Assessment Toolbox program; applied for funding to expand WHAT into another sub-region. (O)	X		X				X	X
2.d. Initiate two wetlands restoration priority efforts based on inventory of tidally restricted wetlands. (I)		X	X	X		X	X	X
2.e. Develop and complete one ACEC Management Plan in Mass. Bays region. (I,C)		X				X	X	X
2.f. Initiate three anadromous fish restoration and/or monitoring projects. (I)		X	X	X	X	X	X	X
2.g. Participate in at least one Gulf of Maine Council meeting and/or planning session each year. (O)	X					X	X	X
<b>Subtotal</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>7</b>

## Massachusetts Bays Program Strategic Plan 2002 – 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 3: Reduce and Prevent Stormwater Pollution (from Action Plan 4)</b>								
3.a. Target five municipalities each year to provide technical assistance and grant writing support for implementing the stormwater policy, Phase II requirements, and resource protection efforts, including ensuring stormwater mitigation in development and redevelopment plans and creating local stormwater utilities. (O)		X	X	X	X		X	X
3.b. Provide workshops or other technical assistance to train local officials on the implementation of the DEP Stormwater Policy and on Stormwater Phase II requirements. (O)		X			X		X	X
3.c. Revise and update the stormwater policy. (I,C)							X	
3.d. Complete the highway stormwater manual and related workshops. (I)							X	
3.e. Set and make available to municipalities standards for tying in stormwater to state storm drain systems. (I,C)							X	
3.f. Engage DEP, MHD, MDC and others in meetings, discussions and workshops. (O)		X		X	X		X	X
3.g. Assist in grant writing to fund environmental analyses and stormwater projects. (O)		X	X	X	X		X	X
<b>Subtotal</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>7</b>	<b>4</b>
<b>Goal 4: Manage Municipal Wastewater (from Action Plan 7):</b>								
4.a. Provide technical assistance to local officials toward development of wastewater management plans. (O)		X					X	X
4.b. Provide workshops and technical assistance to local Boards of Health, health agents, systems engineers/installers, and homeowners regarding on-site wastewater challenges. (O)							X	
<b>Subtotal</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>

## Massachusetts Bays Program Strategic Plan 2002 – 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 5: Manage Local Land Use and Growth (from Action Plan 14):</b>								
5.a. Hold regular workshops and provide networking opportunities to municipalities regarding locally implementable smart growth tools, including bylaws. (O)		X		X	X		X	X
5.b. Specifically spell out and adopt Smart Growth principles into body of CCMP. (C)	X			X			X	X
5.c. Hold, attend regular meetings of existing North Shore, Urban, and Cape Cod Conservation Commission Networks (Con Comm. Networks). (O)		X	X	X		X	X	X
5.d. Initiate South Shore Conservation Commission Network. (I)							X	
<b>Subtotal</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>3</b>
<b>Goal 6: Prevent Marine Invasive Species (from Action Plan 16)</b>								
6.a. Seek funding to develop a monitoring strategy and conduct a rapid assessment in coastal resource areas for the presence of invasive species. (I)	X		X				X	X
6.b. Hold resource/research conference regarding marine invasive species. (I)	X						X	X
6.c. Develop and distribute public education material on invasive species. (I)	X		X			X	X	X
6.d. Develop a monitoring strategy for new and existing vectors within water-based industries. (I)							X	
<b>Subtotal</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>3</b>

## Massachusetts Bays Program Strategic Plan 2002 - 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 7: Monitor Marine Waters (from Action Plan 17):</b>								
7.a. Identify and hold gatherings of coastal partners to develop plan. (I)	X					X	X	X
7.b. Develop, design and produce a State of the Coast report together with CZM and Buzzards Bay Project. (I)				X			X	X
7.c. Provide local technical and grant-writing assistance for implementation of the state and federal Beaches Acts. (O)			X				X	X
7.d. Work with EPA, CZM and New England NEPs to conduct research on coastal condition indicators. (I)	X		X	X			X	X
<b>Subtotal</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>4</b>
<b>Total</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>7</b>	<b>9</b>	<b>31</b>	<b>23</b>



## Massachusetts Bays Program Strategic Plan 2002 – 2005


II. Build organizational sustainability for the Massachusetts Bays Program.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 1: Strengthen the identity and influence of the MBP.</b>								
1.a. At least 100 individuals attend the resource/research conference as part of the Healthy Habitats Initiative. (I)	X						X	X
1.b. Develop "messages" and a marketing/outreach strategy. (I,O)							X	
1.c. Update the MBP constituency mailing list. (I,O)	X		X				X	X
1.d. Develop and distribute a current, appealing portfolio of outreach materials. (I,O)							X	
1.e. Hold two local volunteer appreciation events. (O)			X		X		X	X
1.f. Hold one local case study/networking workshop targeted toward municipal officials. (I,O)					X		X	X
1.g. Complete CCMP revision process with strong participation from citizens, communities and government. (I,C)	X						X	X
1.h. Hold CCMP revision event in conjunction with National Estuaries Day celebration. (I,C)							X	
<b>Subtotal</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>5</b>
<b>Goal 2: Identify and pursue alternative funding.</b>								
2.a. Apply for at least two non-EPA funding sources for MBP Strategic Focus and Funding Zone areas. (I)							X	
2.b. Develop and implement a plan for seeking non-EPA sources to maintain funding for MBP Strategic Focus and Funding Zone areas financed. (O)	X						X	X
2.c. Develop and implement a plan for expanding non-EPA sources to fund other MBP Strategic Focus and Funding Zone areas. (O)							X	
<b>Subtotal</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>


## Massachusetts Bays Program Strategic Plan 2002 – 2005

II. Build organizational sustainability for the Massachusetts Bays Program.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 3: <i>Ensure effectiveness of MBP structure for managing implementation.</i></b>								
3.a. Identify changes needed to move from planning to management of implementation. (O)	X						X	X
3.b. Develop proposed improvements to structure to strengthen local implementation efforts. (O)	X						X	X
3.c. Complete one-on-one meetings with partners to more clearly define roles and improved accountability for actions. (O)							X	
<b>Subtotal</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>
<b>Total</b>	<b>6</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>14</b>	<b>8</b>

### III. Goal Descriptions and Transferability

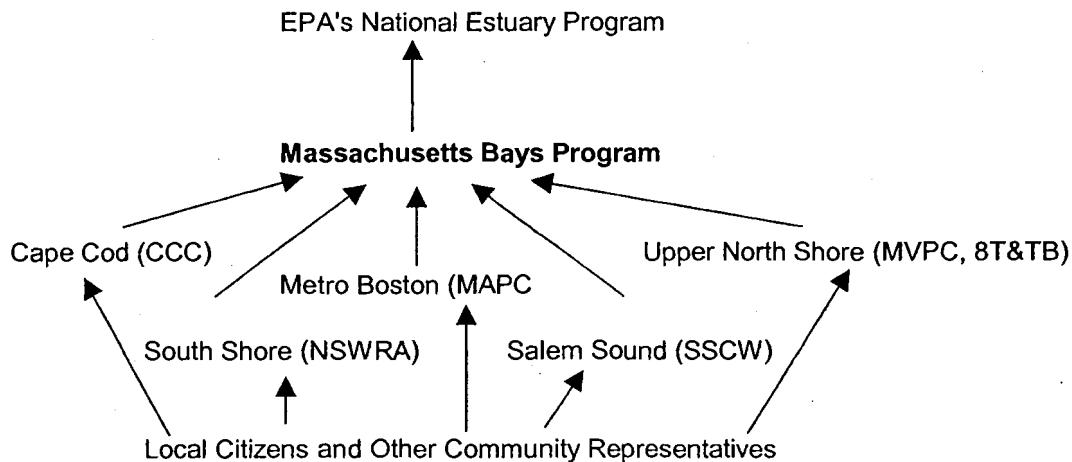
This section provides additional details of the goals and actions that were undertaken between July 1, 2002 -June 30, 2003. For those actions that specifically relate to goals described in the strategic plan, the goal number is identified with the action. For example "SG 2a" refers to Goal 2a in the Strategic Plan which reads, "Target five towns each year for technical and grant writing assistance to complete an Open Space Plan..."

Those successes that MBP believes could be transferable to other NEPs are noted with the symbol: 

Tasks that are ongoing are noted with the symbol: 

The Massachusetts Bays Program continues to use a bottom-up approach to Bays protection. The program staff work with a variety of community members including citizens, non-profit and corporate representatives, educators, scientists, and other national, state, and local government workers.

*The Massachusetts Bays Program's bottom-up approach:*











While the CCMP is intended to guide the action of the multiple stakeholders involved in protecting Massachusetts and Cape Cod Bays, the Strategic Plan (based on the CCMP) is used by the MBP staff to identify priority program actions. The MBP staff however are not limited by the goals and actions addressed in the Strategic Plan. Thus, they are allowed and encouraged to seize opportunities that have the potential to benefit the ecological integrity of the Bays region.

## **A. Central Staff**


The MBP central staff includes the Executive Director, Deputy Director, Program Manager and Outreach and Events Coordinator. The central staff is responsible for facilitating, supporting, and otherwise coordinating implementation of the CCMP, with oversight from the Management Committee. The central staff generally focuses on CCMP actions that require coordination on a bays-wide level such as marine monitoring and invasive species. The central staff also represents the MBP in regional and national forums that are of relevance to the MBP and the National Estuary Program.







As part of the major accomplishments for FFY02, the central staff:

### **1) Protecting and Enhancing Coastal Habitat (3)**

-   Conducted training for volunteers and monitoring with volunteers for wetlands health assessments on the North Shore. Participation by approximately 40 volunteers. Secured funding for continued training in the summer of 2003 (SG 2c).
-  Served as the lead contact to the Gulf of Maine Council for Massachusetts on habitat restoration (SG 2g).
-   Continued wetlands health assessment research on tidally restricted sites on Cape Cod. This research is used to test new methods for the ongoing volunteer wetland health assessment program. Continued coordination on wetlands research with EPA's Office of Research and Development in Narragansett, Rhode Island to develop rapid assessment methods for measuring wetland condition.
-  Worked with an interagency committee to develop a salt marsh restoration policy for Massachusetts.
-  Submitted comments on research priorities for Stellwagen National Marine Sanctuary program review.
-  Presented scientific and programmatic results at various forums from the Wetlands Health Assessment work on Cape Cod and the North Shore to various state, federal, and local groups.



### **2) Preventing Aquatic Invasive Species (16)**

-  Worked with MIT Sea Grant and the seven Northeast NEPs to plan the 2003 Rapid Assessment Survey (RAS) for marine invasive species. Held taxonomy training workshop on ascidians for RAS participants (SG 6a).




-  Sponsored a regional conference on marine invasive species in mid-November at the New England Aquarium. Over 130 attendees from various state agencies, non-profit organizations, and research institutions participated in the conference. The conference offered many opportunities for regional cooperation and discussions on the invasive species issue (SG 6b).
-  Assisted with the development of the state Aquatic Nuisance Species Management Plan and co-chaired the working group. The Management Plan was approved by the Federal Task Force in November 2002. The MBP is now working with the working group to begin implementing a number of tasks that are described in the plan particularly those that are related to marine invasive species pathways and outreach (SG 6c).
-  Designed a guide for aquatic pet owners on invasive species and organized a workshop for aquatic pet stores and regional aquarium societies aimed at developing best management practices for the prevention of aquatic invasions. Led a discussion at the annual meeting of the Aquatic Gardener's Association on invasion prevention strategies (SG 6c).
-  Received funding from National Sea Grant to create educational materials on aquatic invasive species for non-English speaking communities that will be distributed throughout the Northeast region (SG 6c).
- Presented research on invasive species pathways at various venues around the country including the EPA Tech Transfer Conference in Cocoa Beach, FL, the Northeast Marine Invasive Species Conference in Boston, MA, and the Third International Marine Bioinvasions Conference in San Diego, CA. The results of the study have been used to guide pathway prevention strategies in the Northeast. Efforts are currently underway to replicate the survey in other coastal regions around the country (SG 6c).
-  Worked with US Fish and Wildlife Service to coordinate and deliver a workshop for saltwater and freshwater aquaculturists on developing best management practices for the prevention of aquatic invasive species (SG 6c).
-  Co-chaired the Policy Committee of the Northeast Regional Panel of the Aquatic Nuisance Species Task Force (NEANS panel). Compiled a database of invasive species legislation and activities for the panel.
- Submitted comments on NAISA reauthorization through the NEANS panel.

- Worked with MIT-Sea Grant, the Massachusetts Office of Coastal Zone Management, and the NEANS panel on the development of a regional ballast water management plan. The working group held a workshop with stakeholders in September 2002. A second workshop has been planned for September 2003.

### 3) Monitoring the Marine Environment (17)

-  Held a Regional Coastal Monitoring Summit in an effort to assist northeast National Estuary Programs and New England states with the development of marine monitoring programs. As part of a follow up to the Summit, met with Wells National Estuarine Research Reserve and CZM to discuss next steps for the development of a coordinated habitat monitoring plan for emergent marsh systems (SG 7a).
-  Coordinated and co-chaired regional efforts to develop a multi-state approach to the National Coastal Assessment. Assisted with regional planning meetings, as well as the development of a proposal for two regional workshops on monitoring (SG 7d).

### 4) Building Organizational Sustainability

-  Provided support to the Coastal Advocacy Network by coordinating meeting space and updating CAN mailing list (SG-OS 1c).
-  Incorporated CCMP revisions, including two next action plans on Preventing Marine Invasive Species and Monitoring the Marine Environment. Final Revised CCMP will be completed by the fall of 2003 (SG-OS 1g).
-  Began researching and taking initial steps towards development of a 'Friends of the Massachusetts Bays' organization to provide support to MBP (SG-OS 2b).
- Served on steering committee of EPA's Coastal Technology Transfer Conference aimed at showcasing NEP contributions to estuary management.
- Participated in ANEP Legislative Subcommittee.
- Led session at NEP Meeting in Ocean City, Maryland regarding advantages, disadvantages and process of establishing non-profit organizations to support NEPs.

## B. Local Governance Committees

Key action efforts of the Local Governance Committees (LGC) (staffed by the Regional Technical Staff) are discussed by region, then action plan:



## 1. Eight Towns and the Bay (8T&B):

### A. Priority Action Plans

#### 1) Protecting & Enhancing Shellfish Resources (2)


- Chaired working group consisting of federal (USGS, EPA, ACOE), state (DEP, DMF) and local (MRWC, CDM) representatives on developing a large-scale toxicity study on re-suspension of soft sediment in the Merrimack and potential impacts to shellfish. EPA is considering conducting the sediment analysis and ACOE is looking into potential funding mechanisms for the project (estimated cost of \$500,000). First draft of project proposal has been reviewed with an estimated start-up date in 2004.
- Designed EPA approved stormwater assessment plan and performed sampling on Small Pox and Meader Brooks in Salisbury, MA for determining bacterial and TSS loading to downstream shellfish beds. Sampled ten stormwater outfalls, three instream locations during both wet and dry weather events, and used GPS to assess associated catch basin network in the Small Pox/Meader Brook watershed. Interpreted data and made recommendations for BMP implementation.

#### 2) Protecting and Enhancing Coastal Habitat (3)





- Wrote grant for and provided assistance to MA Wetlands Restoration Program and Trustees of Reservations on salt marsh restoration in the Town of Newbury (Newman Road) (SG 2d).
- Worked with multiple partners to determine the potential of restoring a 150-acre marsh habitat (Plumbush Creek) in Newbury, involving re-establishment of tidal creek that is currently blocked by a major road crossing (SG 2d).
-  Assisted NOAA, Ducks Unlimited, Town of Essex and MA Wetlands Restoration Program to complete 19-acre marsh restoration project by restoring tidal flow under Island Road in Essex (SG 2d).
- Initiated efforts and provided grant writing assistance with the City of Gloucester to resize and restore partially collapsed culvert under Atlantic Avenue for anadromous fish enhancement (SG 2f).
-  Assessed Mill River system in Rowley with MA DMF for river herring spawning habitat and fish ladder installation for future restoration. Assessment revealed that sites had good potential for encouraging spawning. Submitted Letter of Intent for fishway funding to Gulf of Maine Council. Site is now listed on state list for restoration, awaiting direction from DMF (SG 2f).

- Actively participated in the review and modeling strategy for the restoration of the North Pool at the Plum Island Wildlife Refuge. A dike has inhibited salt water flushing to the North Pool and caused it to become a freshwater system. Worked with USGS to develop pore water and soil monitoring standards for the site.

### **3) Reducing & Preventing Stormwater Pollution (4)**

- Assisted Town of Salisbury with application (funding received FY03) for MA CZM Coastal Pollution Remediation grant program to complete a stormwater assessment program on Small Pox and Meader Brooks (SG 3g).
-  Developed Stormwater BMP Conceptual Design project for north shore coastal communities for Massachusetts Watershed Initiative funding through the Massachusetts Executive Office of Environmental Affairs (SG 3g).
- Designed Priority Stormwater Sites Project, wrote grant, and received funding from Essex County Community Foundation for assessing priority sites in each of the nine coastal communities for assistance with Phase II stormwater rule implementation plans (SG 3g).


### **4) Managing Local Land Use and Growth/Green Neighborhoods (14)**

-   Actively participated in Green Neighborhoods Alliance; provided technical assistance and outreach to multiple municipalities which resulted in adoption of Open Space Residential Design by-law by the coastal Town of Newbury, Groveland, West Newbury, Rowley, Ipswich, and Gloucester as well as several other communities. Core member and advisor of newly established working group, Green Landscape Alliance (SG 5a).
-  Created and presented PowerPoint presentation on land development and ecological landscape practices to Conservation Commission Networks, Ecological Landscape Association workshop, and Great Marsh Network.
-  Developed preliminary plan and spearheaded environmental landscape design demonstration project with Coastal Zone Management, Ipswich River Watershed Association, and the Town of Ipswich at the Ipswich group home site. In addition to agency funds, this included obtaining donations for installation labor, compost material, a stormwater collection and recharge system, and some plants and materials.
- Assisted in grant writing for funding an Assessment of the Economic Impacts Study of the Great Marsh on the north shore region. If funded, this study would be useful for enhancing policies aimed at protecting salt marsh habitats.




## **B. Other Action Plans**

### **1) Enhancing Public Education and Participation (15)**

-  Held community site visits in Amesbury, Salisbury, Rowley, Ipswich, Essex, Rockport, and Gloucester to improve visibility of MBP and 8T&B. Site visits also helped to expand 8T&B membership in Amesbury, Rowley, and Gloucester.







### **2) Managing Boat Wastes and Marina Pollution (8)**

-  Secured funding for map development, brochure layout, and printing for the Merrimack River Estuary better boating brochure and assisted on brochure text writing. Map shows pump out locations.

## **2. Salem Sound Coastwatch:**





### **A. Priority Action Plans**

#### **2) Protecting and Enhancing Coastal Habitat (3)**

-   Implemented volunteer salt marsh monitoring at all sites within *Wetland Health Assessment Toolbox (WHAT) Program*, entered data, conducted data analysis, and produced report on findings. Information was shared with local resource managers to facilitate better management decisions with respect to enhancing and protecting salt marshes. Several years of data will be needed before the effectiveness of the restoration can be determined (SG 2c).
- Expanded Smelt Habitat Restoration Project on North River by planting and caring for native plantings along the banks of the North River in Salem/Peabody. This effort followed an enhancement of the river bottom, during which gravel was placed along the sandy substrate to enhance spawning conditions, and was part of a project funded by Fish America Foundation and the NOAA Restoration Center. DMF will monitor the site for future spawning (SG 2f).
- Participated in press event announcing City of Salem's designation by EPA as one of three Flagship Beach sites in Massachusetts.
-   Conducted site clean-ups at Beverly beaches in association with Coastal Zone Management's Annual Coastsweep event.
- Conducted a volunteer clean-up along the banks of the North River, in Salem and Peabody, removing two truckloads of trash from the river and its riparian habitat.
-   Monitored tidepools with volunteers as part of the Adopt-a-Tidepool project, a long-term monitoring program, in partnership with Massachusetts Audubon Society, directed at increasing regional, scientific understanding of the ecological health of

rocky, intertidal habitats. Conducted Tidepool Mini-Conference for volunteers and the general public to present results to date from Adopt-a-Tidepool Program, provide training in species identification, and recruit new volunteers.


## **2) Reducing and Preventing Stormwater Pollution (4)**

-  Assisted the cities of Salem and Beverly with completing their Phase II permit application and associated requirements (SG 3a).
- Worked with region's health agents to identify public education/awareness issues associated with beach water quality and developed outreach materials to effectively address these needs. Previous studies showed that local streams that are draining into Salem Sound are unsafe for swimming due to high bacterial counts. This information was provided to the public through beach postings, maintained by the city's board of health (SG 3a).
-  Initiated work with local environmental consulting firm on a 319 grant-funded stormwater retro-fit demonstration project (SG 3g).
-   Developed 2003 program plan for outfall monitoring in the South Essex sewer district and the city of Salem (*Clean Beaches & Streams Program*) and secured funding for laboratory funding and other program expenses.
- Met with Salem DPW Assistant Director to discuss Salem's new storm drain mapping project and SSCW role in providing data collection through water sampling for the project.

## **3) Managing Local Land Use and Growth (14)**

- Participated in North River Canal Corridor Working Group. Consulted separately with group members and local residents to identify and discuss specific issues of environmental concern associated with proposed land use plan in Salem and Peabody.
- Provided technical assistance to neighborhood group in Beverly concerned about local development proposal and to examine impacts on wetlands.
- Participated in Marblehead Citizens Advisory Committee for proposed assisted living center development at site of former Chadwick Lead Mills, Marblehead.



## **2) Preventing Marine Invasive Species (16)**

-  Re-structured data collection methods of Adopt-a-Tidepool Program to better incorporate marine invasive species (MIS) monitoring. Began planning to incorporate MIS data from program into regional databases such as that of the

Northeast Regional Panel of the Aquatic Nuisance Species Task Force (SG 6a & 6c).


- Assisted Manchester Coastal Stream Team with Purple Loosestrife Removal effort at Dexter Pond.

#### **5) Monitoring the Marine Environment (17)**

-  Began sample collection and laboratory testing (for *Enterococci* and fecal coliform bacteria) at prioritized outfall sites along the watershed's coastline that flow directly to Salem Sound. The results from this testing showed that flows are contaminated. The results were shared with regional partners and managers to facilitate remediation, and with the general public to provide timely information related to potential health risks associated with recreation at those sites (SG 7c).
-  Conducted local event in association with upcoming National Water Quality Monitoring Day, coordinating volunteers in the collection and testing of water samples in each of the six communities within Salem Sound Watershed, and entered data into national EPA database.
- Worked with the Manchester Coastal Stream Team on several ongoing projects (including monitoring and riparian plantings) and researched a no-salt zone in the Manchester watershed. This no-salt zone would serve to protect the fragile freshwater resources in the watershed.

### **B. Other Action Plans**

#### **1) Managing Boat Wastes and Marina Pollution (8)**

-  Distributed approximately 75 bilge socks to local boat owners/operators with "clean boating" educational materials.

#### **2) Enhancing Public Education (15)**




- Conducted a North River Awareness Week, a week-long series of presentations and demonstration programs designed to highlight the ecological, biological, historical, and recreational values of the North River, and the role of neighborhood residents in shaping the River's future. Conducted Natural History Outings for SSCW members, a continuing series of field trips designed to increase awareness and understanding of the watershed's natural resources.
- Designed and developed an educational sign for the North River highlighting efforts to restore and protect the river and the habitat needs of anadromous fish and the role of the public in the river's recovery and protection. The city of Salem provided funding for the sign.

- Assisted Northeast Environmental Education Partnership (NEEP) with Science Curriculum Frameworks Project to assist regional educators, and brochure development.


### **3. Metro Boston LGC:**

#### **A. Priority Action Plans:**




##### **1) Protecting and Enhancing Coastal Habitat (3)**

- Worked with CZM staff and NOAA to develop a work plan for the restoration of Parkhurst Marsh in Quincy. In consultation with NOAA staff, it was determined that basic tidal hydrology must first be determined before the project can proceed under Gulf of Maine funding (SG 2d).
- Worked with the Massachusetts Wetlands Restoration Program staff, Norfolk County Mosquito Control, Fore River Watershed Association, and NOAA to develop and submit a grant application to the Fish America Foundation to restore a tidally restricted wetland at the Great Esker Park Marsh in Weymouth. Restoration will include volunteer monitoring through the FWRA and the development of education materials by the Massachusetts Bays Program (SG 2d).
- In conjunction with the Fore River Watershed Association and the Division of Marine Fisheries, succeeded in establishing a Rainbow Smelt (*Osmerus mordax*) restoration strategy for the Monaquot River. Strategic steps include funding a discharge rating curve and staff gauge to determine freshwater base flows in the Monaquot River, improving adult smelt passage in the Smelt Brook tributary to the Monaquot, stabilizing river bank areas to support smelt spawning habitat, seeking to have all new stormwater inputs into the Monaquot River meet MA DEP Best Stormwater Practices and eliminating the remaining sewer overflow to the river. MBP staff will work with the Division of Marine Fisheries and the Fore River Watershed Association to submit an anadromous fish habitat restoration grant application under the American Rivers/NOAA Community Restoration Program (SG 2g).
-   Developed and submitted proposals to the Massachusetts Watershed Initiative (MWI) Teams for municipal technical training and outreach to map the remaining tidally restricted salt marshes within the Boston Harbor watershed.
-  Researched funding resources to help increase public access to Mother Brook in Dedham.


## **2) Reducing & Preventing Stormwater Pollution (4)**

-  Provided technical assistance, in conjunction with the Massachusetts Shellfish Restoration Program, to implement CPR 319 grants in Revere. The grants will be used to construct a wetland and associated BMP's in the Trifone Brook watershed in Revere. Trifone Brook has been a major source of nonpoint source pollution to shellfish beds downstream in the tidal areas of the Pines and Saugus Rivers. Further progress with this project is dependent upon the city of Revere providing the matching funds that are needed. The MBP is also mediating discussions between the Massachusetts Highway Department and the Department of Environmental Protection on a policy for restoring the marsh (SG 2d).

## **3) Managing Local Land Use and Growth/Green Neighborhoods (14)**

- Received funds from the Executive Office of Environmental Affairs 418 program to design Swampscott Community Development Plan. Organized and facilitated informational meeting with town. Approximately 35 citizens attended meeting to hear reports from town board representatives and department heads on issues of land use, natural resources, transportation and economic development (SG 5a).
-  Worked with the Office of Coastal Zone Management to coordinate the Urban Conservation Commission Network. The UCCN meets monthly and provides technical assistance to local officials from urban communities on issues such as stormwater, coastal access, saltmarsh restoration, brownfield reuse and other coastal issues (SG 5c).
-  Participated in DEP/MEMA funded Multi-Hazard Pre-Disaster Mitigation Plan project. Ten Boston Harbor communities will receive technical assistance to identify areas at risk of damages from natural hazards, evaluate their existing protection measures, and develop land use strategies to reduce future damages from natural hazards.
-  Continued to foster a relationship with the City of Chelsea and the Chelsea Creek Action Group to help implement their management plans for Chelsea Creek. Will continue to provide technical assistance in the form of grant writing, facilitation, access and landscape improvements funding and permitting assistance.

## **4) Monitoring the Marine Environment (17)**

-  Worked with CZM North Shore and CZM Boston Harbor staff to develop regional water quality monitoring forums. The regional monitoring forums will collect local data on the condition of coastal waters using multiple parameters that the Gulf of Maine Council will compile into a comprehensive assessment of water quality and monitoring efforts throughout the Gulf of Maine. Assessment is expected to be released in 2004 and will culminate in a region-wide conference (SG 7a).


#### **4. South Shore LGC:**

##### **A. Priority Action Plans**



###### **1) Protecting Coastal Habitat (3)**

- Developed and implemented the Third Herring Brook Restoration Initiative in conjunction with Massachusetts Riverways Program, the North South River Watershed Association (NSRWA), and National Marine Fisheries Service (SG 2f).
- Worked with CZM, Save Our Pond (Scituate), NMFS, and Army Corps of Engineers to mediate the impacts of tidal restrictions on Musquashcut Pond in Scituate. Partners needed to meet in order to determine ownership of the tidal valve that was causing the restriction.




###### **2) Reducing Stormwater Impacts (4)**

-  Organized a "Stormwater Seminar for Land Use Officials" with Plymouth's Director of Planning and Planning Board. Attendees included planning board members, conservation commissioners, zoning board members, and other local officials. Program provided participants with stormwater basics, an overview of best management practices, funding sources, and case studies. Seminar proceedings are available that include meeting minutes and copies of the presentations. As a follow-up to the seminar, the MBP staff member organized a field trip to Rhode Island to visit a site where porous pavement has been used (SG 3b).
- Actively participated in Stormwater Working Groups in the towns of Plymouth, Pembroke, Hanover, Kingston, Cohasset, Duxbury, and Marshfield. Helped developed seven grant proposals to analyze stormwater runoff into Plymouth Harbor and install stormwater BMPs. Proposals were submitted to CZM's Coastal Pollution Remediation Program and DEP's 319 Program (SG 3g).


###### **3) Managing Local Land Use and Growth (14)**

-  Facilitated networking among Community Preservation Committee members in the towns of Duxbury, Norwell, Marshfield, Scituate, Cohasset, and Plymouth by hosting an email listserve and quarterly evening meetings. Such networking opportunities allow CPC members to share ideas and challenges about how to implement the CPA to meet the community's open space, affordable housing, and historic preservation goals. The MBP staff member is in the process of developing a website to better assist this network (SG 5a).
-  Developed a Watershed Friendly Landscaping outreach initiative with local landscaping group and NSRWA that included guest lectures, a website, water bill stuffers, and email newsletters. Secured funding from water suppliers in eight

communities. Organized an evening presentation of these concepts to interested homeowners.

-   Began developing a Smart Growth training workshop for local land use decision makers (Planning Board, Conservation Commissions, Community Preservation Committee members, Boards of Health, etc.) in conjunction with Department of Housing and Community Development and EOEA's Community Preservation Initiative.
-  Initiated a Green Neighborhoods Alliance of coastal developers and municipal officials on the South Shore, modeled after the successful program on the North Shore that was developed by CZM/MBP.

#### **4) Monitoring the Marine Environment (17)**

-  Participated in ongoing monthly water quality testing lead by the NSRWA, including River Watch Monitoring, Stream Teams, and monthly testing with the Division of Marine Fisheries to maintain softshell clam bed openings at the mouth of the North and South Rivers in Marshfield/Scituate.

### **B. Other Action Plans**

#### **1) Managing Boat Waste (8)**

- Wrote a grant proposal in conjunction with NSRWA and the Urban Harbors Institute to study pump out facilities on the South Shore and help marina owners apply to the Clean Vessel Act program to fund new facilities. Study will consist of surveys to assess pump out availability and need for boater education. The ultimate goal is to develop a pump out management plan for the region.
- Facilitated a Pump Out Working Group for the North and South Rivers by working with local marina owners, Scituate, and Marshfield to create a Memorandum of Understanding to share pump out responsibilities and equipment.



#### **2) Enhancing Public Education and Participation (15)**

- Organized and ran three outreach events: the Great River Race, the House Tour, and Photo Contest. Served as an educator during River Adventures Camp, and helped teach twenty-four teenagers about watershed ecology, river history, and general environmental principles.
- Wrote and edited multiple press releases about Massachusetts Bays Program projects in the south shore region.


## **5. Cape Cod Coastal Resources Committee (CRC):**

### **A. Priority Action Plans**



#### **1) Protecting and Enhancing Coastal Habitat (3)**

- Reviewed and provided technical assistance on development of several LCPs (Local Comprehensive Plans). Consulted with Falmouth Coastal Committee regarding development of Coastal Plan (SG 2a).
-  Facilitated dialogue among local and state officials, funders and stakeholders pertaining to the restoration of tidally restricted sites identified in the Cape Cod Atlas of Tidally Restricted Wetlands. One site (Bridge Creek, Barnstable) is currently under construction. Two other sites (Herring River, Wellfleet and Bridge Street, Dennis) are in the scoping phase. Funding is also being sought for the two latter projects (SG 2d).
- Coordinated discussion of the status of the Sandy Neck ACEC, Massachusetts' first designated coastal Area of Critical Environmental Concern. The town of Barnstable and other stakeholders are trying to determine a funding strategy for the Sandy Neck ACEC Management Plan. The town is considering forming a non-profit organization for the ACEC (SG 2e).
- Worked with Brewster Conservation Agent to identify a potential site for anadromous fish restoration (SG 2f).
-  Provided technical support, coordination and review of a regional effort to assess the cumulative impacts caused by a proliferation of residential docks and piers, and to evaluate existing and potential tools to curtail these impacts.

#### **2) Managing Municipal Wastewater (7)**


-  Coordinated contractors working on resource assessment projects and scientists assisting with the review of MWRA experimental protocol and documentation.

#### **3) Managing Land Use and Growth (14)**

-  Provided assistance to the Cape Cod Commission and local communities during the review of more than ten development proposals, three draft and final Local Comprehensive Plans, and two Districts of Critical Planning Concern.
-  Worked with a modeling team from NASA to develop a spatial growth model projecting development scenarios and the interplay of local bylaws, zoning restrictions, and various storm situations. The model was based on the town of Yarmouth but can be applied to most other coastal towns. The computer program



has the potential to be extremely useful for town managers trying to predict future growth scenarios. The MBP technical assistant is working with the team to identify potential funding sources to complete the project.

- Collaborated with a group from the University of Rhode Island working under federal contract to study local and regional decisions and the effects of climate change.
-  Provided technical assistance to the Cape Cod Commission in framing a scope of work and response to the Massachusetts Emergency Management Agency. This work resulted in the award of a \$50,000 contract to undertake a regional approach to hazard mitigation planning for Cape Cod.

#### **4) Preventing Marine Invasive Species (16)**



- Reviewed and provided input on the Cape Cod Commission's *Technical Bulletin on Invasive Species for Coastal Developers*. Spoke with members of the Northeast Regional Panel of the Aquatic Nuisance Species Task Force to discuss use of technical bulletin as a model local program as they develop their regional rapid response plan (SG 6c).

#### **5) Monitoring the Marine Environment (17)**


- Facilitated discussions of prior marine monitoring efforts and pervasive challenges that have to date forestalled the inception of a cohesive monitoring network. The organizations involved in these monitoring efforts have often used different equipment and different QAPPs. As a first attempt to resolve these discrepancies, began working with the staff from the local Center for Coastal Studies to develop a framework for a monitoring network in Cape Cod Bay (SG 7a).

### **B. Other Action Plans**


#### **1) Protecting Nitrogen Sensitive Embayments (11)**

-   Collaborated with staff from the Woods Hole Research Institute working with software developed by the NOAA Coastal Service Center to map the extent of impervious surface coverage in Cape communities. Worked with investigators to determine how the software can be used by decision makers in local communities.

#### **2) Enhancing Public Access and the Working Waterfront (12)**

-  Developed a draft framework for the incorporation of "Marine Infrastructure" as a class of public works for inclusion in the Cape's Regional Infrastructure Plan.

### **3) Planning for a Shifting Shoreline (13)**

-  Worked with a citizen's task force convened by the Town of Falmouth to assess the status of Falmouth's shoreline and compile recommendations to ensure a more sustainable future for these resources.

### **4) Enhancing Public Education and Participation (15)**

- Collaborated with Cape Cod Commission media relations staff to update the Coastal element of the Cape Cod Commission's web page.
- Met with staff from the Massachusetts Maritime Academy to develop a cooperative program for classroom participation by MBP staff and follow-up work and internships for students. Taught a class on coastal resources and outlined three projects that students could work on for partial course credit as interns.
- Participated as an invited panelist for a public discussion of Cape Cod Bay Monitoring coordinated by the Center for Coastal Studies, a local marine science organization.

## **Program Goals and Focus for 2003 - 2004**

### **I. Overview**

In the coming year, MBP staff will continue to focus on the goals and actions outlined in the three-year Strategic Plan. MBP staff will also continue to work on opportunistic bays protection efforts that are beyond the scope of the Strategic Plan but are in line with the goals of the CCMP. Some of the new projects that have been initiated or planned for the coming year are described in the next section. It is important to note that this is not an exhaustive list of the projects that are planned for 2003-2004. Other ongoing activities related to CCMP implementation will continue and we expect that new project opportunities will emerge that are unpredictable at this time.

Most of the funds that are received from EPA are used to provide technical assistance throughout the region by supporting MBP staff salaries. The staff then raises funds or works with partners to identify additional funding sources that may be needed for project implementation. In 2003-2004, a small percentage of the annual grant from EPA will also be used to develop new outreach materials for the program.

Where possible, throughout the next section, we have attempted to estimate the dollar amount for the projects with which the MBP is involved in. We intend to include more specific cost estimates in future work plans.

## **II. New Initiatives**

### **A. Central Staff**

#### **1) Protecting and Enhancing Coastal Habitat (3)**

- *Regional Wetland (Salt Marsh) Monitoring Protocol.* Mass. Bays, along with Office of Coastal Zone Management and EPA's Research Laboratory in Narragansett, Rhode Island, have developed a research proposal for the development and application of standard protocols for assessing the response of salt marsh wetlands to stressors. If funded by EPA, this project will develop the tools to more accurately report on the condition of salt marshes. Work is expected to begin in the summer of 2003.

#### **2) Managing Municipal Wastewater (7)**

- Extend technical assistance to the Combined Sewer Overflow (CSO) Task Force on wastewater issues for Metro Boston. While scientists and nonprofits have participated in discussions on CSOs, progress has been slow due to the lack of participation by state policy and management staff. Mass Bays plans to work with 'Save the Harbor' to provide advice and technical assistance to improve efforts and actions by the group (SG 4a).

#### **3) Preventing Marine Invasive Species (16)**

- *2nd Northeast Rapid Assessment Survey.* In August 2003, the Massachusetts Bays Program, in conjunction with the seven other northeast NEPs will conduct the second northeast rapid assessment survey. Samples will be collected from docks and piers and rocky substrates in the intertidal zone. The cost for this survey is estimated to be \$72,000. In 2002, the MBP received approximately \$50,000 for the survey from EPA's Aquatic Nuisance Species Grant program (SG 6a).
- *Non-shipping Transport Vector Research and Outreach.* The Mass. Bays Program will continue its pioneering work on non-shipping transport vectors for marine invasive species. In the coming year, the transport vector survey (developed by Weigle) will be made available to other NEPs and interested parties via an interactive website, additional vectors that were not addressed in the initial survey will be investigated, and the program will continue to develop ANS outreach materials for aquatic pet owners, multi-lingual populations, and other non-shipping vectors. In 2002, the MBP received \$8500 for pet industry outreach materials from EPA's Aquatic Nuisance Species Grant program and \$25,000 for multi-lingual outreach materials from Sea Grant's Aquatic Nuisance Species Grant program. (SG 6c & d).
- *Rapid Response Protocol.* The Mass. Bays Program is working with the Office of Coastal Zone Management and the Northeast Regional Panel of the ANS Task Force to develop a rapid response protocol in the Northeast. The protocol will include a model rapid response plan for state agencies that will include fundamental pre and post invasion rapid response steps, and recommendations to NEANS Panel

members for translating these actions to appropriate state representatives. CZM has received funding for this protocol through Sea Grant's Aquatic Nuisance Species Grant Program.

#### **4) Monitoring the Marine Environment (17)**

- *Regional Monitoring Network and Plan for Massachusetts Bays.* Following on the successful 2002 Marine Monitoring Summit to establish a regional monitoring network in the northeast, Mass. Bays will work with EPA and Battelle to sponsor a Coastal Indicators Workshop. Mass. Bays will work with the regional monitoring network to develop a marine monitoring plan with a focus on coastal indicators. Outreach materials will be developed to translate the scientific findings from these efforts to the general public (SG 7a).
- *State of the Bay Conference.* In cooperation with the Office of Coastal Zone Management and the Gulf of Maine Council, the Mass. Bays Program will begin to prepare for the 2004 State of the Bays conference. Mass Bays will work with CZM to synthesize the regional volunteer monitoring efforts into a bay-wide synthesis on coastal condition during 2004. This synthesis will be presented at the State of the Bay Conference and will also be used in a Gulf of Maine-wide effort to produce a regional synthesis. The cost for the State of the Bay Conference is estimated to be \$30,000. In the coming year, the MBP will seek funds for this conference from local private foundations and other grant sources (SG-O 1a).

#### **5) Enhancing Public Education (15)**

- *Massachusetts Bays Outreach Campaign.* In the coming months, the Mass. Bays Program intends to hire a new outreach coordinator. The outreach coordinator will develop an outreach strategy including a new suite of outreach materials for the program and will work with the regional staff to disseminate these materials throughout the region. The estimated cost for these new outreach materials is approximately \$30,000. \$20,000 of the annual EPA grant will be used towards the development of these materials. The outreach coordinator will seek additional funding sources for the remainder of these costs (SG-O 1a, b, & d)

#### **6) Developing a Funding Strategy (0)**

- Over the past year, the Management Committee of the Mass. Bays Program has been working to implement the funding strategy developed as part of the Strategic Plan for the program. Where possible, the MBP staff will continue to support the Management Committee with this effort (SG-O 2b & c).

## **B. Regional/Local Governance Committees**

### **1) Eight Towns and the Bay** (*Planned Total Budget for Regional Technical Assistance \$59,944*)

#### **Protecting and Enhancing Coastal Habitat (3)**

- Assist with funding process, fieldwork, and permitting for several saltmarsh restoration projects including Newman Road, North Pool, Eastern Point, and Plumbush Creek (SG 2d).
- Assist Powwow River Association with anadromous fishway project. Funding is available through grant programs such as those offered by the Gulf of Maine Council. The staff member will work with the Association to identify the next steps needed with this project (SG 2f).

#### **Reducing Stormwater Impacts (4)**

- Spearhead working group of local Public Works Departments to assist with Phase II implementation and coordinate with local conservation commissions and planning boards on stormwater issues (SG 3a).
- Conduct priority stormwater assessment for each of the nine coastal communities and implement stormwater BMPs.

#### **Managing Land Use and Growth (14)**

- Complete environmental landscape demonstration project at Ipswich group home and produce outreach materials and presentation. Work with Green Neighborhoods, Green Landscape Alliance, and IRWA on additional environmental landscape demonstration projects.

#### **Other Action Plans**

- Publish and distribute the Boaters Guide to the Merrimack River Estuary. Funding was received from a local private foundation for the design and distribution of the flyer. The brochure will include a map of pump out facilities in the region. Following distribution, the staff member will interview local harbormasters and marina owners to assess the effectiveness of the brochure.

### **2) Salem Sound** (*Planned Total Budget for Regional Technical Assistance \$59,944*)

#### **Protecting and Enhancing Coastal Habitat (3)**

- Conduct additional habitat restoration efforts on the North River, further enhancing potential spawning habitat for Rainbow Smelt, and establish additional partnerships in support of this initiative. SSCW hopes to capitalize on the success of its recent efforts to restore and enhance spawning habitat for smelt on the North River, in Salem and Peabody, by conducting additional improvement to the habitat at appropriate adjacent sections of the river where suitable habitat may exist. Habitat

improvements will cost approximately \$10,000 – funds are currently being sought for this project (SG 2f).

- Create and coordinate a North River Stream Team to serve as a consistent, sustainable stewardship force for the river. The North River has been subject to tremendous impact by local land use and development over the years, including heavy pollution from the industrial era. The Salem Sound coordinator will facilitate the start-up and training of a “North River Stream Team” to provide consistent, effective, local stewardship for the river. As a first step toward this goal, Salem Sound Coastwatch will sponsor a North River Awareness Week, to be held May 11-17, 2003. The cost of this outreach event is estimated to be \$4,000. Funds will be sought from local private foundations.

#### **Reducing Stormwater Impacts (4)**

- Work with the City of Salem and Weston & Sampson, Inc. to inventory and map Salem’s entire storm drain system. The consultant firm Weston & Sampson, Inc., with the assistance of SSCW, received a \$45,000 state grant to conduct this inventory and analysis of the City of Salem’s storm drain system. SSCW will be performing some of the secondary-level data collection in the field for this project. The \$45,000 grant from the state is to be matched by an additional \$45,000 from City of Salem. SSCW share of this project is valued at approx \$5,000 (SG 3e).
- Conduct a Salem Sound Shoreline Survey to collect data and map all stormwater outfalls (natural and built) along the entire watershed’s coastline, and collect for testing a minimum of 100 water samples from a prioritized list of these sources. SSCW has applied to serve as subcontractor for the City of Beverly to conduct a Shoreline Survey and Source Identification (SSASI) project throughout the Salem Sound watershed, and perform water quality sampling at a prioritized list of sites selected from those identified in this study. This is part of a 604(b) grant project (valued at \$30,000) that SSCW wrote on behalf of Beverly, and SSCW is currently awaiting a decision from Beverly as to their selection of subcontractor (SG 3e & g).

#### **Other Action Plans**

- Research and acquire designation as a No Discharge Area (NDA) for Salem Sound. In an effort to encourage clean boating practices and to decrease pollution to Salem Sound associated with vessels. SSCW maintains interest in applying for NDA status within the Sound. This would require the completion of all proper steps toward filing an NDA application and submission of a draft application to the Massachusetts Office of Coastal Zone Management.

#### **3) Metro Boston** (*Planned Total Budget for Regional Technical Assistance \$59,944*)


##### **Protecting and Enhancing Coastal Habitat (3)**

- Work with the Division of Marine Fisheries and Fore River Watershed Association to secure funding for restoration of anadromous fish habitat and salt marshes in the

Fore River watershed area, with a focus on the Monaquot River subwatershed (SG 2d & f).

- Collaborate with the Massachusetts Wetlands Restoration Program, the EPA and the Metropolitan Area Planning Council to research and create a proposal for an atlas of tidally restricted areas in Metro Boston such as those completed on the south shore and Cape Cod. Atlas may also include other limiting conditions such as filled and contaminated areas. Federal and state grant programs will be researched to determine potential source for funding (SG 2d).

#### **Managing Land Use and Growth (14)**

-  Work with the Green Neighborhoods Alliance to develop "smart growth" alternatives for urban areas that include efficient building design, mixed-use developments, innovative stormwater treatment techniques and compact housing types. Since there is a limited amount of green space available in urban areas, traditional smart growth strategies are not applicable. The focus is instead on making the best use of redevelopment areas. This effort was initiated by the city of Revere who asked the MBP how "smart growth" principles could be applied to an urban setting (SG 5a).
- Expand outreach and training for the North Shore Sites of Concern Study completed by the Massachusetts Watershed Initiative. This is an interactive software tool that allows local municipal managers to create and maintain sites of concern and brownfields within a local and regional context. Only limited training for municipal users was conducted following this project's completion in July 2002.
- Act as the lead planner for the Community Vision and Development Plan for the town of Winthrop: organize and hold a community visioning session and draft a community visioning statement, organize and facilitate public forums on natural resources, housing, economic development and transportation. A series of maps will accompany the forum process for each element and will culminate in a final "Putting It All Together" map showing community preferences for each of the four elements and accompanying narrative on how to achieve their choices. Period of the project run from September 1, 2002 to June 30, 2004.
- Collaborate with Metro Boston LGC members and non-governmental organization representatives within the East Boston/Chelsea community to help facilitate agreements on and implement the Chelsea Creek Visioning Plan of 2002.

#### **4) South Shore** *(Planned Total Budget for Regional Technical Assistance \$59,944)*

##### **Reducing Stormwater Impacts (4)**

- Organize a training workshop for local officials on the implementation of the DEP Stormwater Policy and on Stormwater Phase II requirements, to help them incorporate stormwater BMPs into development plans and to mitigate stormwater impacts at priority resource areas. MBP has been working closely with the South Shore Coordinator of Coastal Zone Management to provide technical assistance to municipal officials through Stormwater Working Groups in each town. While Phase II requirements are understood by most DPWs, the other department, boards and committees also need to be supportive of the town's compliance efforts (SG 3b).

##### **Managing Land Use and Growth (14)**

- Host a Green Neighborhoods Alliance "kick-off" conference to introduce interested citizens on the South Shore to the concepts, garner support for the initiative, and recruit Alliance members. This meeting is tentatively planned for the spring or early summer of 2003. This will follow the successful model of the program on the North Shore, initiated by MBP and CZM. The leaders of the North Shore effort will provide presentations and supporting materials. The intended result of the Alliance is to help communities implement bylaw and regulation changes to be more hospitable to smart growth tools, such as Open Space Residential Design, Low Impact Development techniques, Transfer of Development Rights, etc (SG 5a).
- Provide technical and grant-writing assistance to towns to adopt Open Space Plans, local Wetlands Bylaws and other smart growth tools. Not all South Shore Communities have a currently certified Open Space Plan, and many do not have Wetland Bylaws that are stricter than the MA Wetland Protection Act. Some communities do not even have a full-time Conservation Agent on staff. These towns are particularly in need of technical assistance from the MBP (SG 5a).
- Reinvigorate the South Shore Conservation Commission Network/Local Governance Committee. Until recently, the Massachusetts Watershed Initiative had a strong network of south shore elected officials and conservation commission members that regularly met to address environmental issues impacting the south shore region. The south shore MBP staff member played a significant role in the coordination of this network. The MWI program was recently cut from the state's environmental budget. The MBP staff member will work to ensure that the SSCCN/LGC continues (SG 5d).
- Assist Open Space Committees and Community Preservation Committees in submitting proposals to the Self Help Program to acquire open space funding. Once a community has a currently certified Open Space Plan, they are eligible to participate in the state's Self Help funding program, which reimburses towns for money spent on open space acquisition. Many communities do not participate in this program because they do not have the discretionary funds to invest in open



space, even if it is to be reimbursed at a later date. Those communities that have passed the Community Preservation Act can use CPA funds to purchase open space, and then apply to have the funds reimbursed by Self Help. This reimbursement would allow CPA funds to go much further towards achieving community preservation goals.

- In conjunction with MAPC, assist South Coastal communities with efforts to develop or revamp their local hazard mitigation plans, and to formulate strategies to reduce risks to private and public property through zoning changes and other measures.

#### **Other Action Plans**

- In conjunction with local harbor masters and regional marine businesses, develop a North and South River boating brochure that summarizes current regulations, pump out facility information, and the how appropriate boating practices can protect the river ecosystem. Develop additional education and outreach materials including key chains, signage, buoys, and boat flags. This is part of the larger Pump Out initiative on the North and South Rivers, being led by NSRWA in conjunction with municipal officials from Marshfield and Scituate. The ultimate goal of these efforts is to have the N&S Rivers designated as a No Discharge Area.
- In partnership with the Herring River Stream Team and the North River Commission, create adequate signage that will notify boaters of the North River 6 mph speed limit and the importance of "no wake" zones in this tidal estuary. This need was identified by NSRWA Stream Team members, who have documented sedimentation as a pollution problem in the region.
- Create a North River Recreation Guide based on the popular pocket-sized South River Recreation Guide for boaters and hikers along the South River. The South River Recreation Guide has been a useful tool for education and outreach, as it helps locals and visitors alike personally experience the river and surrounding watershed area, and cultivate a stewardship ethic of the resource.

#### **5) Cape Cod** *(Planned Total Budget for Regional Technical Assistance \$59,944)*

##### **Managing Land Use and Growth (14)**

- Continue to assist municipalities with the review of technically complex development projects, the development of Local Comprehensive Plans, Special Area Management Plans for Areas of Critical Environmental Concern, revision of local bylaws and ordinances, and the development and inception of regional Districts of Critical Planning Concern (SG 5a).
- Use the Cape Cod Commission's Build-Out Model to inform local decision makers about the costs and benefits of creating Local Comprehensive Plans to control development (SG 5a).

- Coordinate a project involving Cape Cod Commission staff and municipal personnel focusing on both regional and local Pre-Disaster Mitigation Planning. Due to the general characteristics of Cape Cod, the project will emphasize coastal storm effects and development patterns, and their interplay with emergency response. This project has been funded by the Massachusetts Emergency Management Agency (\$50,000), the Cape Cod Commission (~\$80,000), and the local communities (15 towns @ \$20,000/town).
- Assist with the planning and presentation of findings from a regional study focusing on the management of impacts from the proliferation of residential docks and piers. Regional staff will lead an effort to tailor a set of tools for municipalities interested in curtailing these impacts. The effort may include direct guidance to local conservation commissions or the refinement of a model bylaw that can be used to protect fragile habitats or preserve sensitive public resources threatened by the cumulative impacts of multiple private structures.
- Continue to provide technical support to the Cape Cod Commission during its analysis of private and public development projects affecting coastal resources, and stress the need for post-project monitoring and the design of sustainable projects. Upcoming projects include proposals to construct new municipal beach sites, redevelopment of a co-managed (federal and local) municipal marina site and development of a new municipal marina.
- Provide technical expertise to the Cape Cod Commission to ensure that marine infrastructure is adequately addressed in the Regional Infrastructure Plan.

#### **Other Action Plans**

- Work with an interdisciplinary group from the University of Rhode Island to study the effects of local and regional decision making as it relates to the effects of climate change on the human environment.

## **Administrative and Financial**

### **I. Massachusetts Bays Staff and Responsibilities**

#### **A. Central Staff**

**Jan P. Smith** is the Executive Director. Jan manages the program and serves as the lead administrator for the program's grant and contracts. He serves as the primary contact for interagency coordination with state and federal agencies, and in particular with the host agency CZM. Jan also serves as the science and technical manager for program efforts, particularly for shellfish bed restoration, stormwater, habitat protection and restoration, and marine monitoring.

**Paula Jewell** is the part-time Deputy Director and assists the Director with program administration, as well as directs the program planning and policy development. Paula is responsible for strategic and financial planning. Paula also coordinates outreach efforts, with input from the Director and other staff.

**Shannon Weigle** is the Program Manager. Shannon assists with grant writing and general program management for the central and the regional staff and also serves as the lead for program efforts on invasive species. Shannon also assists with program planning and policy development and with a variety of tasks for the Director and Deputy Director.

**Christian Krahforst** is the Marine Monitoring Scientist for the Mass Bays Program. Christian has been working for the CZM Program managing the Coastal Assessment efforts for EPA with close coordination with the Mass Bays Program. Beginning with the next fiscal year, Christian will work directly for the Mass Bays Program on the development of a Mass Bays monitoring strategy, indicator development (including an indicator development workshop), and on a variety of other regional and bay-wide forums aimed at analyzing the water quality condition of the Bays. He will continue to manage the Coastal Assessment efforts and the costs for his position will be shared with EPA.

The Outreach Coordinator position is currently vacant, but is expected to be filled in May 2003. This staff member will develop and implement the program's outreach strategy, assist the director with program management and policy issues, coordinate meetings, and handle some of the administrative duties for the program.

#### **B. Regional Staff**

**Peter Phippen** serves as the regional coordinator for Eight Towns and the Bay, the Upper North Shore Local Governance Committee. Peter is based at the Merrimack Valley Regional Planning Council and works with the eight towns in his region to implement the CCMP through various projects and other efforts. Peter serves as the local liaison for the MBP to his towns and to local nonprofit groups and state agencies. Peter provides grant writing and technical assistance to his region.

**Rob Gough** serves as the regional coordinator and program manager at Salem Sound Coast Watch (SSCW). Previously called Salem Sound 2000, SSCW is a regional nonprofit organization based in Salem, Massachusetts. SSCW serves as the coordinator for the Local Governance Committee consisting of the six Lower North Shore communities. Rob works with his communities to implement local projects and other efforts related to the CCMP. Rob serves as the local liaison for the MBP to his towns and to other local nonprofits and state agencies working in his region. Rob also provides grant writing and technical assistance to his region.

**Sam Cleaves** serves as the regional coordinator for the Metro Boston region and is based at the Metropolitan Area Planning Council. Sam runs two LGCs, the Metro

North LGC and the Metro South LGC and works to assist with grant writing and project implementation for CCMP actions. Sam also coordinates with other nonprofit groups and state agencies working in the Metro Boston coastal watershed.

**Wendy Garpow** is the regional coordinator for the South Shore sub-region and is based at the North and South Rivers Watershed Association, a regional nonprofit organization. Wendy performs functions similar to the other regional staff but also works particularly on smart growth initiatives within her region.

**Steve Tucker** is the regional coordinator for Cape Cod and is based at the Cape Cod Commission, the regional planning agency for Cape Cod. Steve performs functions similar to the other regional staff and has a particular interest in monitoring wastewater discharged from the eastern Massachusetts outfall pipe (maintained by the Massachusetts Water Resources Authority) and its impact on water quality in Cape Cod Bay.

## **II. Leveraged Funds (See Attachment A)**

### III. Budget and Match

#### A. Budget Overview for State Fiscal Year July 1, 2003 – June 30, 2004

<i>2004 Projected Program Income</i>	
EPA Grant	
Base Grant	\$300,000
Congressional Earmark	\$196,685
NEP Travel	\$10,000
<i>Subtotal</i>	<i>\$506,685</i>
EOEA Budget (state FY2004 funds)	\$75,000
Carryover from unexpended funds (FY 03), less continued contract obligations	\$93,744
<b>TOTAL</b>	<b>\$675,429</b>

Note that carryover funds result from an unexpected staffing vacancy (six months) and staff maternity leaves. Also the media training planned for FY02 will be provided through another partner (Waquoit Bay Estuarine Research Reserve).

<i>2004 Projected Expenses</i>	
Task 1 Program Coordination	
Central Staff	\$287,709
Office Operating Expense	\$53,000
NEP Travel	\$10,000
Task 2 Regional Technical Assistance	\$299,720
Task 3 Support for Friends of Mass Bays	\$25,000
<b>TOTAL</b>	<b>\$675,429</b>

#### B. Budget Justification

Workplan Tasks are designed to demonstrate implementation of the CCMP's Action Plan in five ways:

1. Coordination and transfer of technical assistance;
2. Development and implementation of innovative management approaches;
3. Creative technologies and techniques that prevent, reduce, or eliminate pollution;
4. Outreach to and education of the public regarding the protection of the Massachusetts and Cape Cod Bays; and
5. Demonstration of grant funding leveraged from other sources for CCMP implementation efforts, as described in attached matrix.

## Task 1. Program Coordination

Objectives: MBP Central Staff will continue to provide technical assistance and administrative oversight and guidance to the MBP Committees, agencies, and communities according to CCMP Action Plan priorities. Staff will conduct outreach activities to develop community and legislative support for implementing the CCMP. Provide grants administration support, as well as meeting planning and support services for the Management (and its Executive Committee) and Technical Advisory Committees. Seek and apply for grant funding to support projects that carry out CCMP Action Plans, in coordination with the Regional Technical Assistance program, as well as for Program-wide projects. Work with the Association of National Estuary Programs (ANEP) to further overall national estuary program goals and objectives.

### Activities:

#### a. Support program staff

Executive Director (full-time, state position):

\$102,830 = \$70,000 (base) + \$16,170 (fringe @23.1%) + \$16,660 (indirect @23.8%)

Outreach and Policy Coordinator (full-time, state position):

\$61,698 = \$42,000 (base) + \$ 9,702 (fringe @23.1%) + \$9,996 (indirect @23.8%)

Deputy Director (part-time, contract position):

\$42,711 = \$32,500 (base) + \$2,000 health stipend + \$8,211 (indirect @ 23.8%)

Program Manager (part-time, contract position):

\$39,616 = \$ 30,000 (base) + \$2,000 health stipend + \$ 7,616 (indirect @ 23.8%)

Marine Monitoring Scientist (part-time, contract position)

\$ 40,854 = \$ 31,000 (base) + \$ 2,000 health stipend + \$ 7,854 (indirect @ 23.8%)

**Total: \$287,709**

#### b. Office operating expenses, printing, supplies, support for workshops

The program anticipates publishing new outreach materials from the efforts of the new Outreach and Policy staff person and to support additional regional workshops to provide technical assistance to assist local officials and citizens with CCMP implementation efforts.

Publications and Printing \$ 20,000, Workshops \$ 10,000, and Office Operating Expenses \$ 23,000

**Total: \$53,000**

c. NEP travel budget

For the coming FFY03, staff will again attend all ANEP/EPA-sponsored meetings for the NEPs, currently planned for Seattle, Washington in September and for Washington, DC in March. Staff will also attend and present at the Estuarine Research Federation meetings in Seattle just prior to the fall ANEP/EPA meetings also in Seattle. Staff will also participate in the regional Northeast panel meetings for Aquatic Nuisance Species in fall 2003 and spring 2004. It is also anticipated that there will be regional NEP meetings, as well as spring and fall meetings of the New England Estuarine Research Society, as well as regional meetings of the Gulf of Maine Council Habitat Restoration Committee.

**Total: \$10,000**

Task 2: Provide Regional Technical Assistance

Objective 1: Through the Regional Planning Agencies, the MBP Technical Assistants (TAs) support the MBP's five regional networks or Local Governance Committees (LGCs) with trained, professional, technical services, a key element of successful CCMP Action Plan implementation at the local level. Further, the MBP staff has helped leverage over \$700,000 in grants in the year 2000 for water quality improvement projects which also directly support and demonstrate CCMP implementation. Please see the attached matrix that outlines grants received with MBP assistance.

Activities: The MBP Regional TAs will provide ongoing specialized local technical assistance through the five regional organizations to support Action Plan prioritization, implementation, and monitoring. Regional activities will include involving local officials in the demonstration of CCMP implementation; assisting in the development and implementation of local source identification and remediation projects (including serving as regional liaisons to the Interagency Shellfish Clean Water Initiative); assisting in the identification of and application for funding sources; assisting in planning workshops; coordinating regional and local CCMP monitoring activities; and providing technical support for and assistance to the five regional LGCs.

**Total portion of EPA budget to fund Regional TA Activities: \$224,720.**

*Total cost is \$299,720 and is reduced by \$75,000 from match from state FY04 budget.*

Contract for each Regional Technical Assistant = \$ 48,450 x 5 = \$ 242,100 + \$ 57,620 (indirect @ 23.8%) = \$ 299,720

Task 3: Support for the development and implementation of a funding strategy for the Massachusetts Bays' Program

A contractor will be sought to initiate the development and implementation of a component of the funding strategy, as outlined in the financial plan produced in FY02. This will include the

development of additional funding sources from non-governmental contributions to support the implementation of outreach and legislative strategies and to assist with the formation of a non-profit organization to work with the Mass Bays Program. The goals will be to create a self-sustaining non-profit organization to support outreach efforts and the implementation of the CCMP.

***Total cost is \$ 25,000***



**C. Match for EPA grant to Mass Bays Program for State Fiscal Year July 1, 2003 – June 30, 2004**

<b>Source of Match</b>	<b>Match Amount</b>
Merrimack Valley Planning Council*	\$55,000
Cape Cod Commission*	\$68,100
North and South Rivers Watershed Association*	\$5,416
Metropolitan Area Planning Council*	\$49,000
Salem Sound Coastwatch*	\$6,000
State cash match	\$75,000
State grants to Mass. Bays communities for land acquisition <sup>†</sup>	\$248,169
<b>TOTAL MATCH</b>	<b>\$506,685</b>

\* Regional match includes salary plus in-kind support.

<sup>†</sup> Land acquisition program run by EOEa, funds represent those allocated to Mass Bays communities.

**III. Travel Expenses for State Fiscal Year July 1, 2002 – June 30, 2003**

<b>Executive Director</b>	<b>Dates</b>	<b>Cost</b>
ANEP/EPA meetings in Ocean City, MD	October 15-18, 2002	\$900.00
EPA Technology Transfer Conference in Cocoa Beach, FL (presented paper)	January 26-31, 2003	\$732.00
Gulf of Maine Council Habitat Restoration Committee Meeting in Claire, Nova Scotia	October 7-10, 2003	\$446.00
Regional Marine Monitoring Summit (sponsored by EPA and Northeast NEPs) in Durham, NH	December 10-12, 2003	\$226.00
ANEP/EPA meetings in Washington, D.C.	March 16-20, 2003	\$1,270.00
Miscellaneous local travel within Mass Bays region for various meetings and wetlands research	Throughout the year	\$1,423.00
Northeast Panel of Aquatic Nuisance Species in Hadley, MA	December 16-17, 2003	\$121.00
<i>Gulf of Maine Habitat Restoration Committee in Nova Scotia and New Brunswick*</i>	May 2003	\$650
<i>Northeast Panel of Aquatic Nuisance Species in Boothbay Harbor, ME*</i>	May 2003	\$400
<i>Spring meeting of the New England Estuarine Research Society in Dartmouth, MA*</i>	May 2003	\$100

<b>Deputy Director</b>		
ANEP/EPA meetings in Ocean City, MD	October 15-18, 2002	\$853.00
Miscellaneous local travel within Mass Bays region for various meetings		\$418.00
<b>Program Manager</b>		
ANEP/EPA meetings in Ocean City, MD	October 15-18, 2002	\$894.00
EPA Technology Transfer Conference in Cocoa Beach, FL (presented paper)	January 26-31, 2003	\$968.00
3 <sup>rd</sup> International Marine Bioinvasions Conference in San Diego, CA (presented paper)	March 15-19, 2003	\$1,342.00
<i>Northeast Panel of Aquatic Nuisance Species in Boothbay Harbor, ME (for two staff)*</i>	May 2003	\$400
<b>Outreach and Events Coordinator</b>		
Local Travel		
<b>TOTAL TRAVEL</b>	--	<b>\$11,143.00</b>

\* Planned meeting and anticipated travel costs.

# MASSACHUSETTS BAYS PROGRAM (MBP)

## Federal FY 04 ANNUAL WORK PLAN

### PREFACE

In September 1996, the Environmental Protection Agency (EPA) approved the Comprehensive Conservation and Management Plan (CCMP) for the Massachusetts Bays National Estuary Program (MBP). The CCMP's Action Plans can be collectively described as a "blueprint" for restoring and protection the water quality and living resources of the Bays and their watersheds. Title III of the Estuaries and Clean Waters Act of 2000 authorized the use of Section 320 to develop and implement Comprehensive Conservation and Management Plans. This Act is now the funding authority for this work plan.

MBP's Strategic and Funding Plan, which will be revised in 2005, provides the next more specific level of planning from the CCMP by spelling out a more focused three-year strategy for MBP activities and grant seeking.

The following Annual Work Plan is the last level of planning. It describes the specific activities, with accompanying budget, which the MBP will undertake between July 1, 2004 and June 30, 2005 (State Fiscal Year 2005 (SFY 2004)), using state and federal monies.

### OUTLINE

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B. Regional/Local Governance Committees	
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## BACKGROUND

When the CCMP was originally drafted, the MBP worked with approximately 300 individuals representing numerous agencies, organizations, and municipalities to identify necessary environmental actions and responsible parties for these actions. Upon completion, the CCMP contained approximately 400 pages organized into eleven chapters. Chapter Five, the centerpiece of the Management Plan, described seventy-two action items categorized into fifteen major action plans for protecting and preserving the Bays' resources. The action plans articulated a number of recommended steps that should be taken to restore and protect the Massachusetts Bays ecosystem. These action plans addressed the following areas of concern:

1. Protecting Public Health
2. Protecting and Enhancing Shellfish Resources
3. Protecting and Enhancing Coastal Habitat
4. Reducing and Preventing Stormwater Pollution
5. Reducing and Preventing Toxic Pollution
6. Reducing and Preventing Oil Pollution
7. Managing Municipal Wastewater
8. Managing Boat Wastes and Marina Pollution
9. Managing Dredging and Dredged Materials Disposal
10. Reducing Beach Debris and Marine Floatables
11. Protecting Nitrogen-Sensitive Embayments
12. Enhancing Public Access and the Working Waterfront
13. Planning for a Shifting Shoreline
14. Managing Local Land Use and Growth
15. Enhancing Public Education and Participation

In 1998, the MBP held a Visioning Workshop to establish program priorities. At the workshop, attended by the MBP staff and members of the Management Conference, the group prioritized the seventy-two CCMP action items. The group agreed that the MBP should focus on the five action plans that contained the majority of the "urgent" action items. These priority action plans included Action Plans 2 (Shellfish), 3 (Habitat), 4 (Stormwater), 7 (Wastewater), and 14 (Land Use).

A second Visioning Workshop was held in 2001 with the goal of revising and updating the CCMP. During this workshop, working groups were established to review each of the five priority action plans and determine the need for any new action plans. The need for the following two new action plans was also identified:

16. Preventing Marine Invasive Species
17. Monitoring the Marine Environment

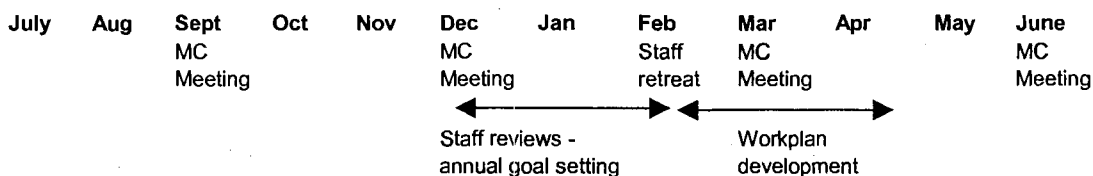
Since the 2001 Workshop, the MBP has revised and updated the CCMP. Most of the actions that were described in these Plans are underway. The central staff is currently

working on an environmental tracking system aimed at measuring the progress of the CCMP Action Plans. As a first step towards this goal, in 2002, the MBP completed a Strategic and Funding Plan aimed at measuring the MBP's progress towards achieving goals addressed in the CCMP.

The Strategic and Funding Plan identified goals and relevant measures of success (based on the CCMP Action Plans) for the program staff to focus on and work towards from January 2002 to December 2005. Goals were divided into two categories: 1) creating environmental results and 2) building organizational sustainability. The next section contains a report and spreadsheet that summarizes the progress that was made on the Strategic Plan in FY 03.

Each year, between December and March, the MBP staff members work together to develop new initiatives aimed at advancing the goals and objectives outlined in the CCMP and the Strategic Plan. These initiatives are presented to the Management Committee for their approval in early March.

*The Massachusetts Bays Program annual work plan timeline:*



## Goals and Accomplishments for 2003-2004

### I. Progress on Goals

#### A. Strategic Plan Update

The Massachusetts Bays Program continues to pursue actions highlighted in the Strategic Plan. Collectively, over the past year, the MBP staff worked on 24 of the 31 measures of success related to creating environmental results. While the sub-regions varied in the types of projects they worked on, each sub-region worked on projects related to Habitat, Stormwater, and Land Use. Staff also worked on 13 of the 16 measures of success related to building organizational sustainability. The central staff took the lead with the 'Measures of Success' in this category though some regions held volunteer events and/or workshops with local officials that were also counted towards enhancing organizational sustainability. An important component of building organizational sustainability is the establishment of a non-profit partner to the MBP.

Each region also worked on additional topics that were not necessarily addressed in the Strategic Plan including green landscaping, managing boat wastes, increasing

public education and awareness, sediment toxicity, coastal bank erosion, coastal storm hazards, climate change, stormwater BMPs and new technologies, open space residential design, hydrology studies, Community Preservation Act assistance, and alternative energy sources. Though these topics were not specifically addressed in the strategic plan, MBP staff has been encouraged to continue their work in these areas because they are relevant to the goals outlined in the CCMP.

Below are definitions of abbreviations used in the Strategic Plan matrix that follows:

Table Definitions

CS – Central Staff

UNS – Upper North Shore

SS – Salem Sound

MB – Metro Boston

SoS – South Shore

CC – Cape Cod

O – ongoing action

C – project will be completed by 2005

I – project will be initiated by 2005

X – progress has been made in this category

Total possible – Total number of measurable results describe in Strategic Plan

Progress to date – Number of measurable results that have been worked on thus far

## Massachusetts Bays Program Strategic Plan 2002 - 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 1: Protect and Enhance Shellfish Resources (from Action Plan 2)</b>								
1.a. Complete the Interagency Agreement that defines agency roles and contributions. (I)	X						X	X
1.b. Initiate implementation measures in one priority site in 2003 and 2004. (I)							X	
1.c. Complete implementation measures in one priority site by December 2005 (C).							X	
<b>Subtotal</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>
<b>Goal 2: Protect and Enhance Coastal Habitat (from Action Plan 3)</b>								
2.a. Target five towns each year for technical and grant-writing assistance to complete an Open Space Plan, local Wetlands Bylaw and other habitat protection tools. (O)		X	X	X	X	X	X	X
2.b. Complete the Wetlands Health Assessment Toolbox manual. (C)	X						X	X
2.c. Maintain the number of trained volunteers and local officials each year in the Wetlands Health Assessment Toolbox program; applied for funding to expand WHAT into another sub-region. (O)	X		X			X	X	X
2.d. Initiate two wetlands restoration priority efforts based on inventory of tidally restricted wetlands. (I)		X	X	X	X	X	X	X
2.e. Develop and complete one ACEC Management Plan in Mass. Bays region. (I,C)		X				X	X	X
2.f. Initiate three anadromous fish restoration and/or monitoring projects. (I)		X	X	X	X	X	X	X
2.g. Participate in at least one Gulf of Maine Council meeting and/or planning session each year. (O)	X					X	X	X
<b>Subtotal</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>7</b>	<b>7</b>

## Massachusetts Bays Program Strategic Plan 2002 – 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 3: Reduce and Prevent Stormwater Pollution (from Action Plan 4)</b>								
3.a. Target five municipalities each year to provide technical assistance and grant writing support for implementing the stormwater policy, Phase II requirements, and resource protection efforts, including ensuring stormwater mitigation in development and redevelopment plans and creating local stormwater utilities. (O)		X	X	X	X		X	X
3.b. Provide workshops or other technical assistance to train local officials on the implementation of the DEP Stormwater Policy and on Stormwater Phase II requirements. (O)		X			X		X	X
3.c. Revise and update the stormwater policy. (I,C)							X	
3.d. Complete the highway stormwater manual and related workshops. (I)							X	
3.e. Set and make available to municipalities standards for tying in stormwater to state storm drain systems. (I,C)							X	
3.f. Engage DEP, MHD, MDC and others in meetings, discussions and workshops. (O)	X	X		X	X		X	X
3.g. Assist in grant writing to fund environmental analyses and stormwater projects. (O)		X	X	X	X		X	X
<b>Subtotal</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>7</b>	<b>4</b>
<b>Goal 4: Manage Municipal Wastewater (from Action Plan 7):</b>								
4.a. Provide technical assistance to local officials toward development of wastewater management plans. (O)		X			X	X	X	X
4.b. Provide workshops and technical assistance to local Boards of Health, health agents, systems engineers/installers, and homeowners regarding on-site wastewater challenges. (O)							X	
<b>Subtotal</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>



## Massachusetts Bays Program Strategic Plan 2002 – 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 5: Manage Local Land Use and Growth (from Action Plan 14):</b>								
5.a. Hold regular workshops and provide networking opportunities to municipalities regarding locally implementable smart growth tools, including bylaws. (O)		X		X	X	X	X	X
5.b. Specifically spell out and adopt Smart Growth principles into body of CCMP. (C)	X			X			X	X
5.c. Hold, attend regular meetings of existing North Shore, Urban, and Cape Cod Conservation Commission Networks (Con Comm. Networks). (O)		X	X	X		X	X	X
5.d. Initiate South Shore Conservation Commission Network. (I)					X		X	X
<b>Subtotal</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>
<b>Goal 6: Prevent Marine Invasive Species (from Action Plan 16)</b>								
6.a. Seek funding to develop a monitoring strategy and conduct a rapid assessment in coastal resource areas for the presence of invasive species. (I)	X		X				X	X
6.b. Hold resource/research conference regarding marine invasive species. (I)	X						X	X
6.c. Develop and distribute public education material on invasive species. (I)	X		X			X	X	X
6.d. Develop a monitoring strategy for new and existing vectors within water-based industries. (I)							X	
<b>Subtotal</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>3</b>

## Massachusetts Bays Program Strategic Plan 2002 - 2005

I. Produce significant environmental results in the MBP region.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 7: Monitor Marine Waters (from Action Plan 17):</b>								
7.a. Identify and hold gatherings of coastal partners to develop plan. (I)	X					X	X	X
7.b. Develop, design and produce a State of the Coast report together with CZM and Buzzards Bay Project. (I)	X						X	X
7.c. Provide local technical and grant-writing assistance for implementation of the state and federal Beaches Acts. (O)			X				X	X
7.d. Work with EPA, CZM and New England NEPs to conduct research on coastal condition indicators. (I)	X		X	X			X	X
<b>Subtotal</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>4</b>
<b>Total</b>	<b>12</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>31</b>	<b>24</b>

## Massachusetts Bays Program Strategic Plan 2002 – 2005


II. Build organizational sustainability for the Massachusetts Bays Program.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 1: Strengthen the identity and influence of the MBP.</b>								
1.a. At least 100 individuals attend the resource/research conference as part of the Healthy Habitats Initiative. (I)	X						X	X
1.b. Develop "messages" and a marketing/outreach strategy. (I,O)	X						X	X
1.c. Update the MBP constituency mailing list. (I,O)	X		X				X	X
1.d. Develop and distribute a current, appealing portfolio of outreach materials. (I,O)							X	X
1.e. Hold two local volunteer appreciation events. (O)			X		X		X	X
1.f. Hold one local case study/networking workshop targeted toward municipal officials. (I,O)					X		X	X
1.g. Complete CCMP revision process with strong participation from citizens, communities and government. (I,C)	X						X	X
1.h. Hold CCMP revision event in conjunction with National Estuaries Day celebration. (I,C)							X	
<b>Subtotal</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>7</b>
<b>Goal 2: Identify and pursue alternative funding.</b>								
2.a. Apply for at least two non-EPA funding sources for MBP Strategic Focus and Funding Zone areas. (I)	X						X	X
2.b. Develop and implement a plan for seeking non-EPA sources to maintain funding for MBP Strategic Focus and Funding Zone areas financed. (O)	X						X	X
2.c. Develop and implement a plan for expanding non-EPA sources to fund other MBP Strategic Focus and Funding Zone areas. (O)							X	
<b>Subtotal</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>

## Massachusetts Bays Program Strategic Plan 2002 – 2005

II. Build organizational sustainability for the Massachusetts Bays Program.	Regional and Sub-regional Progress to Date						Yearly Goals Achieved	
	CS	UNS	SS	MB	SoS	CC	Total Possible	Progress to Date
<b>Goal 3: <i>Ensure effectiveness of MBP structure for managing implementation.</i></b>								
3.a. Identify changes needed to move from planning to management of implementation. (O)	X						X	
3.b. Develop proposed improvements to structure to strengthen local implementation efforts. (O)	X						X	X
3.c. Complete one-on-one meetings with partners to more clearly define roles and improved accountability for actions. (O)	X						X	X
<b>Goal 4: <i>Work with private interests to explore the feasibility of establishing a non-profit partner to the MBP.</i></b>								
4.a. Address role of non-profit partner in staff retreat, staff meetings and ongoing discussions.	X	X	X		X	X	X	X
4.b. Attend and guide initial planning meetings of non-profit task group.	X						X	X
4.c. Develop MOA together with non-profit organization to ensure careful mutual growth and operations.								
<b>Subtotal</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>4</b>
<b>Total</b>	<b>9</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>16</b>	<b>13</b>

## II. Goal Descriptions and Transferability

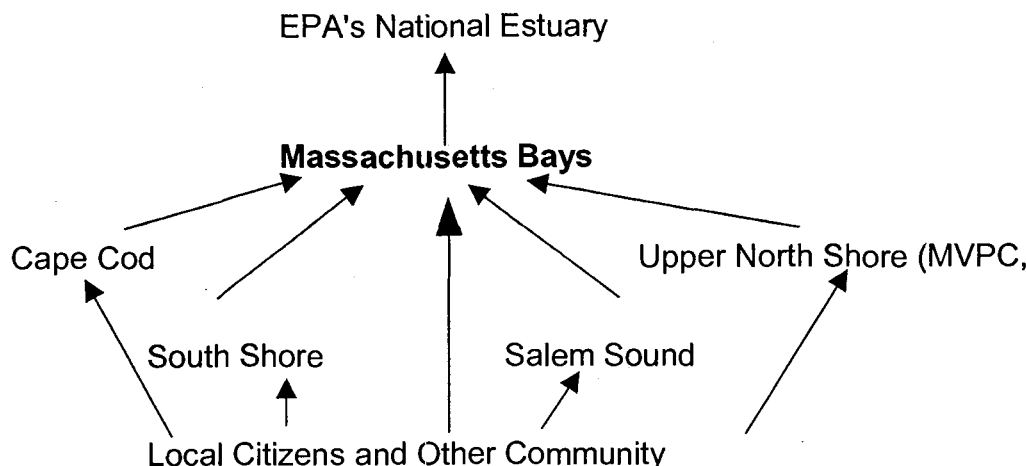
This section provides additional details of the goals and actions that were undertaken between July 1, 2003 -June 30, 2004. For those actions that specifically relate to goals described in the strategic plan, the goal number is identified with the action. For example "SG 2a" refers to Goal 2a in the Strategic Plan that reads, "Target five towns each year for technical and grant writing assistance to complete an Open Space Plan..."

Those successes that MBP believes could be transferable to other NEPs are noted with the symbol: 

Tasks that are ongoing are noted with the symbol: 

The Massachusetts Bays Program continues to use a community-based approach to Bays protection. The program staff works with a variety of community members including citizens, non-profit and corporate representatives, educators, scientists, and other national, state, and local government workers.

*The Massachusetts Bays Program's community-based approach:*











While the CCMP is intended to guide the action of the multiple stakeholders involved in protecting Massachusetts and Cape Cod Bays, the MBP staff uses the Strategic Plan (based on the CCMP) to identify priority program actions. However, the MBP staff is not limited by the goals and actions addressed in the Strategic Plan, and are encouraged to seize opportunities that have the potential to benefit the ecological integrity of the Bays region.

## **A. Central Staff**


The MBP central staff includes the Executive Director, Deputy Director, Program Manager and Outreach and Policy Coordinator. The central staff is responsible for facilitating, supporting, and otherwise coordinating implementation of the CCMP, with oversight from the Management Committee. The central staff generally focuses on CCMP actions that require coordination on a bays-wide level such as stormwater, marine monitoring and invasive species. The central staff also represents the MBP in regional and national forums that are of relevance to the MBP and the National Estuary Program.

As part of the major accomplishments for FFY03, the central staff:









### **1) Protecting and Enhancing Coastal Habitat (3)**

-   Conducted training for, and monitoring with, volunteers regarding wetlands health assessments on the North Shore and on Cape Cod (participation by approximately 70 volunteers). Secured funding for continued training in the summer of 2004 in both locations. (SG 2c)
-  Served as the lead contact to the Gulf of Maine Council for Massachusetts on habitat restoration and on habitat monitoring. Assisted with the writing of a Gulf of Maine Habitat Restoration Strategy. Participated in grant decisions. (SG 2g).
-   Continued wetlands health assessment research on tidally restricted sites on Cape Cod to test new methods for the ongoing volunteer wetland health assessment program. Continued coordination on wetlands research with EPA's Office of Research and Development in Narragansett, Rhode Island to develop rapid assessment methods for measuring wetland condition using EPA's proposed three-tier approach. (SG 2d)
-  Participated in workgroups to assist with the development of revisions to the management plan and on research priorities for Stellwagen Bank National Marine Sanctuary.
-   Presented scientific and programmatic results at various forums from the Wetlands Health Assessment work on Cape Cod and the North Shore to various state, federal, and local groups and at the Estuarine Research Federation meetings in Seattle, WA. (SG 2c)

### **2) Preventing Aquatic Invasive Species (16)**





-  In July 2003, worked with seven other NEPs and MIT Sea Grant to conduct the Rapid Assessment Survey for marine invasive species in the Northeast. Focused on fixed docks and piers at 20 different sites between Casco Bay, Maine and New York

Harbor. Worked with MIT Sea Grant to finalize the species lists. (SG 6d)




-  Presented preliminary results from the Rapid Assessment Survey at the Estuarine Research Federation meetings in Seattle, WA in September 2003 and at the ANEP/EPA meetings in Washington DC in March 2004. (SG 6b).
-   Assisted with the development of the state Aquatic Nuisance Species Management Plan and co-chaired the working group. The Federal Task Force approved the Management Plan in November 2002. The MBP continues to work with the working group to begin implementing a number of tasks that are described in the plan particularly those that are related to marine invasive species pathways and outreach (SG 6c).
-  Expanded outreach efforts to aquatic pet industry on invasive species. In conjunction with Sea Grant, developed educational website for aquatic pet owners (companion piece to EPA funded flyer, developed in Spring 2003). Developed Power Point presentation for aquatic pet owners on invasive species, piloted presentation and led a discussion on issue at meeting of the Boston Aquarium Society. Strengthened partnerships with regional pet stores on issue. (SG6c).
-  Distributed a guide for aquatic pet owners on invasive species and organized a workshop for aquatic pet stores and regional aquarium societies aimed at developing best management practices for the prevention of aquatic invasions. (SG 6c).
-  Received funding from National Sea Grant to create educational materials on aquatic invasive species for non-English speaking communities that will be distributed throughout the Northeast region (SG 6c).
-  Worked with US Fish and Wildlife Service to coordinate and deliver a workshop for saltwater and freshwater aquaculturists on developing best management practices for the prevention of aquatic invasive species (SG 6c).
-  Co-chaired the Policy Committee of the Northeast Regional Panel of the Aquatic Nuisance Species Task Force (NEANS panel). Compiled a database of invasive species legislation and activities for the panel.
- Submitted comments on NAISA reauthorization through the NEANS panel.

- Worked with MIT-Sea Grant, the Massachusetts Office of Coastal Zone Management, and the NEANS panel on the development of a regional ballast water management plan, following an October 2003 workshop. (SG 6d)





### 3) Monitoring the Marine Environment (17)

-  Held a Regional Coastal Indicators Summit in an effort to assist and coordinate northeast National Estuary Programs and New England states with the development of indicators as a part of marine monitoring programs. Workgroups continued their efforts to follow through with summit goals and actions. (SG 7a).
-  Coordinated and co-chaired regional efforts to develop a multi-state approach to the National Coastal Assessment. Assisted with regional planning meetings, as well as the development of a proposal for two regional workshops on monitoring (SG 7d)
-  Sampled blue mussels at several sites on the Massachusetts Bays coast to contribute to the long term study on contaminants in mussel tissue sponsored by the Gulf of Maine Council.
-  Held a State of Bays Conference to review a decade of progress and to examine new challenges. Coincided with the release of a State of the Bays Report. (SG-OS 1a)

### 4) Building Organizational Sustainability

-  Finalized CCMP revisions. The *2003 Revisions to the CCMP* document includes seventeen new action items and two new action plans (Preventing Marine Invasive Species and Monitoring the Marine Environment) as well as a summary of CCMP progress and electronic copies of the *1996 CCMP* and the *1998 Biennial Report*. Printed and distributed Spring 2004 (SG-OS 1g).
-  Provided technical assistance, institutional guidance and support to a task group taking initial steps towards development of a "Friends of Massachusetts Bays" organization (the Massachusetts Bays Estuary Association or MBEA) to provide support to MBP (SG-OS 2b, 4).
-  Developed a Memorandum of Understanding between MBP and MBEA to help clarify roles and responsibilities. (SG-02 4c).



-  Participated in ANEP Legislative Subcommittee and as the Northeast Regional representative for ANEP's Executive Committee.
-   Led sessions at NEP Meeting in Seattle, WA in September 2003, in Washington DC in March 2004 regarding advantages, disadvantages, the start-up and operation of non-profit partners that support NEPs. (SG-OS 4).
- Developed an Outreach and Communications Plan for the program, and created a program tagline through a workshop attended by over 25 individual partners (SG-OS II.1.b.).
-  Redesigned the program website and revamped regional and overall program fact sheets (SG-OS II.1.d.).
- Participated in steering committee to develop a conference to share case studies of successful community based coastal management. The Quebec Labrador Foundation recruited a committee representing diverse interests from throughout the geographic extent of the Gulf of Maine to help shape the conference. The event is scheduled to occur in the fall of 2004.



## **B. Regional Program (Local Governance Committees)**






The MBP serves its communities through a decentralized regional staffing program in the five sub-regions of the MBP. Key action efforts of the Local Governance Committees (LGC) (staffed by the Regional Technical Staff) are discussed by region, then action plan:

### **1. Eight Towns and the Bay (8T&B):**



#### **A. Priority Action Plans**

##### **1) Protecting and Enhancing Coastal Habitat (3)**

-   Worked with the Corporate Wetlands Restoration Partnership program, coastal restoration stakeholders, and city of Gloucester officials to prioritize Gloucester restoration projects for Anderson Foundation grant funds (SG 2d).
- Performed Lake Assessment of Lake Gardner in Amesbury with state Lake and Pond Program and City officials. Enlisted Tufts University UEP program to perform a watershed assessment for the lake based on lake assessment.




-  Performed anadromous fisheries reconnaissance for potential fishway projects in the 8T&B region with DMF and Massachusetts Audubon Society (SG 2f).
-  Worked with Manchester/Essex Conservation Trust (MECT), Essex Conservation Commission, and Trustees of Reservation on development proposed on C.R. property adjacent to the Essex salt marsh (SG 2a).
-   Initiated Coastal Habitat and Restoration Plan for 8T&B communities in collaboration with MWRP for future funding (SG 2a, 2d, 2f).
- Developed and submitted a grant proposal to the Fish and Wildlife Foundation for anadromous fish habitat restoration for Sleepy Hollow Pond in Gloucester (SG 2f).
- Developed and submitted a grant proposal to the Essex National Heritage Commission for an interactive web-based map and hardcopy map for kayakers and canoeists in the Eight Towns and the Bay coastal waters.
-  Received 604b grant from DEP for CSO water quality tracing in the recently opened shellfish beds in the Merrimack River Basin (downstream of the Rt1 bridge) (SG 1b).
- Coordinated volunteers for 2004 Alewife Brook Herring Run count (SG 2f).

**(2) Reducing & Preventing Stormwater Pollution (4)/  
Managing Municipal Wastewater (7)**

-  Coordinated with Town of Ipswich and Natural Resources Conservation Service (NRCS) on Farley Brook stormwater modeling and Green Street stormwater and pavement improvements (SG 3a).
- Participated in Merrimack River CSO study review with the ACOE and USGS (SG 3f).
-  Chaired two 8T&B region DPW Network meetings to discuss issues, concerns, and ideas related to the implementation of DEP/EPA approved Phase II plans as well as stormwater priority problem sites in the 8T&B region and Low Impact Development stormwater mitigation practices (SG 3b).


- Assisted the Town of Rockport in the project design for stormwater assessment for CZM Coastal Non-point Source Remediation grant (SG 3a).
- Completed and printed Stormwater Site Prioritization for Eight Towns and the Bay communities funded (SG 3a).
- Developed and submitted a grant proposal to the Fish and Wildlife Foundation for stormwater mitigation for Atlantic Street in Gloucester (SG 3a).

### **(3) Managing Local Land Use and Growth/ Green Neighborhoods (14)**

-  Coordinated with Wenham town officials on developing an environmental landscape design for the to-be-renovated town under the Green Landscape Alliance (SG 5a).
- Coordinated vegetation maintenance activities for the eco-landscaping at the Ipswich Group Home (SG 5a).
- Participated in the EOEA Low Impact Development (LID) working group and as a member of the "local implementation" task force (SG 5a).
- Participated in EIS Smart growth steering committee for Essex County land protection and preservation (SG 5a).
-  Coordinated and developed an Eco-landscape demonstration site grant proposal in conjunction with the Parker River National Wildlife Refuge (SG 5a).
-  Coordinated with MA Coastal Zone Management on developing workshop materials for CRWA Urban Restoration Workshop on Eco-landscaping and LID practices (SG 5a).
- Participated in DCR/ENHC national Landscape Heritage Program Reconnaissance Survey Workshop.

### **(4) Enhancing Public Education and Participation**



- Presented a power-point talk on to the Salisbury Board of Health on the results of the Small Pox Brook stormwater assessment completed with CPR funds (SG 3a).

- Edited Merrimack Better Boating Brochure with harbormasters in Salisbury, Amesbury, and Newburyport and published brochure.
-  Worked with committee members on new text and images for updating the 8T&B website.
- Coordinated with EPA and MVPC on designing a workshop on “illicit connections” for community officials (SG 3a)
- Presented Stormwater Priority Site results to DPW Directors (SG 3a).



## **2. Salem Sound Coastwatch:**

### **A. Priority Action Plans**




#### **1) Protecting and Enhancing Coastal Habitat (3)**

-  Developed and implemented volunteer salt marsh monitoring at all sites within *Wetland Health Assessment Toolbox (WHAT) Program*, entered data, conducted data analysis, and produced report on findings. Shared information with appropriate resource managers to facilitate better management decisions with respect to enhancing and protecting salt marshes. One of the study sites, Eastern Point Salt Marsh in Gloucester, MA, celebrated successful completion of a restoration project, during which the MBP’s role was recognized. At other sites, several years of data will be needed before effectiveness of the restoration can be determined (SG 2c).
- Conducted volunteer clean-ups along banks of the North River (Salem/Peabody, MA) and remove trash within the river.
- Conducted site clean-ups at Beverly beaches in association with Coastal Zone Management’s Annual Coastsweep event.
-  Coordinated the Adopt-a-Tidepool project, a volunteer-based, long-term monitoring program that collects monthly data on the flora and fauna found within tidepools. Shared data with regional agencies to further scientific understanding of the characteristics and ecological health of rocky intertidal habitats. Conducted trainings for volunteers and the general public to present results from past monitoring, provide training in species identification, and recruit new volunteers.



#### **2) Reducing & Preventing Stormwater Pollution (4)**

-  Assisted the cities of Salem and Beverly with completing their Phase II permit application and associated requirements (SG 3a).
-  Continued to work with region's health agents to identify public education / awareness issues associated with beach water quality and developed outreach materials to effectively address these needs (SG 7c).




### 3) Managing Local Land Use and Growth/Green Neighborhoods (14)

-  Participated in various meetings related to local land use and growth (North Shore Conservation Commission (ConComm) Network, North Coastal Watershed Coalition, regional smart growth meetings, etc.) (SG 5c).
-  Served as a member of the City of Salem's North River Canal Corridor Master Plan Working Group, a group formed to shape/guide this development plan and advise the City's planning department of key concerns and issues (SG 5a).
-  Provided technical assistance to neighborhood groups in Beverly and Salem concerned about local conservation issues and development proposals (SG 5a).

### 4) Preventing Marine Invasive Species (16)

-  Developed and began conducting the *Coastal Habitat Invasive Species Monitoring Program* (CHIMP), a pilot, volunteer-based monitoring program that collects data on marine invasives in a variety of habitats throughout the region (docks/pilings, rocky intertidal, salt marshes). Conducted volunteer training workshops, identified study sites, and coordinated initial data collection. The information from this program is shared with state, regional resource managers to further local understanding of marines invasives (SG 6c, 6d).
-  In cooperation with MA Office of Coastal Zone Management, began developing MIS Field Cards, standardized data sheets, and monitoring protocol for training and coordination of volunteer-based monitoring of MIS. This project uses Salem Sound as the pilot region, with the goal of creating materials that will serve training/monitoring efforts in other parts of the state (SG 6c, 6d).

### 5) Monitoring the Marine Environment (17)



-   Continued *Clean Beaches & Streams Program* -- sample collection and laboratory testing (for *Enterococci* and fecal coliform bacteria) at prioritized outfall sites along the watershed's coastline that flow directly to Salem Sound. The results from this testing are shared with regional partners and managers to facilitate remediation (and public notification), and with the public to provide timely information related to potential health risks associated with recreation at those sites (SG 7c).
-  Continued to work with the Manchester Coastal Stream Team on several ongoing projects (e.g., acquiring low-salt zone designation along selected roadways, public outreach regarding NPS pollution, etc.) and researched a no-salt zone in the water supply watershed for Manchester. With partnership from EPA, Manchester municipal government (DPW, Conservation Administrator) and Manchester Coastal Stream Team, and Massachusetts Highway Department, we developed a proposed sampling regimen to document the salt contamination and better identifying contributing factors. Wrote a grant proposal requesting support for this monitoring and have submitted to potential funders (SG 3a).



## **B. Other Action Plans**

### **1) Managing Boat Wastes and Marina Pollution (8)**

- Distributed approximately 25 bilge socks to local boat owners/operators with "clean boating" educational materials.

### **2) Enhancing Public Education and Participation (15)**

- Held 2<sup>nd</sup> Annual North River Awareness Week – a series of presentations and demonstration programs designed to highlight the ecological, biological, and historical, and recreational values of the North River, and the role of neighborhood residents in shaping the River's future. This event(s) focused positive attention on the river's many values, including its value as a habitat for spawning smelt and other wildlife.
-  Coordinated training workshops for WHAT program volunteers – training sessions addressed the seven parameters monitored within this program: Vegetation, Fish, Avifuna, Macroinvertebrates, Tidal Influence, Water Chemistry, and Land Use. These parameters are combined to create an index of ecological health by which the sites are assessed (SG 2c).
-  Conducted Natural History Outings for residents of the region, a continuing series of field trips designed to increase awareness and understanding of the watershed's natural resources.

- Conducted Annual Volunteer Appreciation Night for SSCW's volunteers – a celebration of the organization's accomplishments throughout the region, made possible by the skills and efforts of volunteers.
-  Published and distributed quarterly newsletter, *Salem Sound Monitor*, utilizing a theme-based approach, in which each issue was designed to increase public awareness and understanding of an ecological topic or issue with local relevance (biodiversity, stormwater, 'clean boating', etc.).
-  Assisted Northeast Environmental Education Partnership (NEEP), Hands-on Boat-based Education & Science (HOBBS, Inc.), Massachusetts Audubon Society, and other groups with environmental education initiatives. Provided instructional services for a Teachers Workshop on Coastal Ecology coordinated by the Massachusetts Audubon Society.
- Provided technical assistance to area teachers and students studying non-point source pollution. Provided classroom instruction to approximately 100 sixth graders in Beverly on NPS and local stormwater management/issues.

### **3. Metro Boston LGC:**


The metro Boston technical assistance position has been vacant since July 2003. No organization satisfactorily fulfilled the requirements of MBP's Request for Responses (RFR) for regional services.

Fulfilling the community needs of this region has always been challenging because of its diversity and large geographic breadth, and the difficulty of meaningfully addressing substantial and complex issues such as stormwater. The Management and Executive Committees are considering a variety of options for addressing the community needs of this very diverse region, including creating a stormwater outreach and policy coordination function in the MBP central office that would work in the metro region as well as provide circuit rider assistance to the other four regions. The MBP plans to resolve our approach to meeting the metro Boston technical assistance needs by July 1, 2004.


### **4. South Shore LGC:**

#### ***A. Priority Action Plans***





##### **1) Protecting Coastal Habitat (3)**

-  Continued implementing the Third Herring Brook Restoration project in conjunction with NSRWA, the Massachusetts Riverways Program, MA Department


of Marine Fisheries and National Marine Fisheries. Continued with Phase I (Mill Pond Dam) and began implementing Phase II (Tack Factory Pond Dam) (SG 2f).

-  Continued implementing the Veteran's Park fish ladder restoration project in Marshfield, partially funded by the MBP (SG 2f).



## 2) Reducing Stormwater Impacts (4)

-  Continued significant participation in "Stormwater Working Groups" in the towns of Plymouth, Pembroke, Hanover, Kingston, Cohasset, Duxbury, and Marshfield. Helped develop multiple successful grant proposals to analyze stormwater runoff and install Best Management Practices (SG 3a,b).
-  Implemented the first year of the GreenScapes program to teach property owners about watershed-friendly landscaping practices. Program partners include NSRWA and the water departments from the towns of Duxbury, Marshfield, Pembroke, Plymouth, Scituate, West Bridgewater, and Weymouth. This first year of the program included a series of free presentations and fact sheets, an extensive website, water bill stuffers, newspaper ads, email newsletters, and a video for local cable TV.
- Secured funding and began implementing a Low Impact Development outreach program for the towns of Plymouth, Kingston, Hanover, and Pembroke. Program includes a series of educational workshops and field trips, as well as a review of existing ordinances and recommendations for revisions to local bylaws.
-  Implemented a multifaceted stormwater outreach program for the towns of Pembroke, Hanson and Hanover, as part of the Tri-town Streetsweeper project. Outreach projects include a stormwater education booth for display at town meetings and other public events, stormwater outreach publications and promotional items, and a stormdrain marking program with local schools and scouts (SG 3a,b).
-  Organized a Stormwater Utilities presentation for municipal officials in the region, as part of the Green Communities Speaker Series. Guest speakers included officials from the City of Chicopee. As a follow-up to the interest generated by the presentation, worked with MBP Central Staff to develop a Stormwater Utilities Circuit Rider proposal for the towns of Hanover, Plymouth, and potentially Duxbury (SG 3b).




-  Worked with the South Shore Natural Science Center in Norwell to develop a proposal to install a porous pavement parking lot and develop an affiliated outreach project.

### 3) Managing Local Land Use and Growth (14)



-  Developed the Green Communities Speaker Series in the fall of 2003, which included four presentations to assist regional decision makers in balancing growth and coastal watershed protection. In total, 170 people from 35 communities in the state attended the fall series, including municipal officials, environmentalists, and developers. Topics included public participation in the planning process, conservation subdivision design, stormwater utilities, and regional open space planning. Due to the success of the series, a Spring 2004 series is being implemented and includes presentations on stormwater permitting for construction sites, prioritizing open space acquisition, GreenScaping, and the tri-town street-sweeping and stormwater outreach project (SG 5a).
- Organized an Open Space Residential Design presentation for municipal officials in the region, as part of the Green Communities Speaker Series. Organized a follow-up workshop for the towns of Duxbury and Marshfield to help them refine their existing conservation subdivision bylaws (SG 5a).
-  Facilitated networking among Community Preservation Committee members by hosting an e-mail list-serve that allows CPC members to share ideas and challenges about how to implement the CPA to meet the community's open space, affordable housing, and historic preservation goals (SG 5d).
- Organized a presentation focusing on public participation in the planning process for municipal officials in the region, as part of the Green Communities Speaker Series. Organized a follow-up workshop for the towns of Plymouth and Kingston as part of a joint Planning Board meeting.
- Organized a presentation about the South Shore Regional Open Space Plan (funded by MA EOEA Watershed Initiative) for municipal officials in the region, as part of the Green Communities Speaker Series.
- Organized a workshop in conjunction with the Community Preservation Committees in the region and various land trusts, for landowners interested in putting their land in conservation.
- Assisted with the planning and advertising for a Smart Growth collaborative planning workshop on May 29 for communities around the Weymouth Naval Air

Station, which is slated for redevelopment. Major partners include EPA Region 1 and MA Department of Housing and Community Development.

#### **4) Invasive Species**



-  Initiated a Phragmites Working Group in response to public concerns over this invasive species at the Plimouth Plantation (SG 6c).

#### **5) Monitoring the Marine Environment (17)**

-  Participated in ongoing monthly water quality testing lead by the NSRWA, including River Watch Monitoring, Stream Teams, and monthly testing with the Division of Marine Fisheries to maintain shellfish bed openings at the mouth of the North and South Rivers in Marshfield/Scituate.
-  Participated in monthly water quality testing of Plymouth Bay, lead by the Jones River Watershed Association and the Massachusetts Estuaries Project (MA DEP).

### **B. Other Action Plans**


#### **1) Managing Boat Waste (8)**

- Worked in cooperation with NSRWA and the Urban Harbors Institute to study pump out facilities on the South Shore, survey facility users, and help marina owners apply to the Clean Vessel Act program to fund new facilities.
-   Helped facilitate (in conjunction with NSRWA and MA CZM) a Pump Out Working Group for the North and South Rivers by working with local marina owners, Scituate, and Marshfield to create a Memorandum of Understanding to share pump out responsibilities and equipment.

#### **2) Coastal Hazard Mitigation**

- Worked with MA CZM and the Town of Plymouth to host a Coastal Hazards Workshop for property owners along the eroding bluffs in the southern part of town.

#### **3) Enhancing Public Education and Participation (15)**

-  Conducted monthly meetings of the South Coastal Watershed Network, which serves as an ad-hoc Local Governance Committee for the South Shore. Maintained and contributed to the interactive list serve for the South Coastal Watershed Network members.

- Helped organize and implement annual NSRWA outreach events, such as the Great River Race, Kayak Expo, and River Camp.
- Wrote multiple press releases about Mass Bays Program projects in the South Shore region.


## **5. Cape Cod Coastal Resources Committee (CRC):**

### ***II. Priority Action Plans***



#### **1) Protecting and Enhancing Coastal Habitat (3)**


- Reviewed and provided technical assistance on development of several Municipal Local Comprehensive Plans and plan updates. Assisted local officials with data needs, outreach and networking to support plan development. Provided technical assistance to the Cape Cod Commission during its review of municipal plans submitted for certification or re-certification for consistency with the Regional Policy Plan (SG 2a).
- Continued to facilitate and participate in multi-agency charettes to discuss the status and management of the Sandy Neck/Barnstable Harbor Area of Critical Environmental Concern, Massachusetts' first designated coastal Area of Critical Environmental Concern. Meetings focused on innovative management approaches, partnerships and the identification of funding strategies to support habitat protection and public access (SG 2e).

#### **2) Managing Municipal Wastewater (7)**

-  Coordinated contractors working on resource assessment projects and scientists assisting with the review of MWRA experimental protocol and documentation.

#### **3) Managing Land Use and Growth (14)**

-  Provided assistance to the Cape Cod Commission and local communities during the review of development proposals and Local Comprehensive Plans (SG 5a).
-  Pursued a partnership between Barnstable County, a modeling team from NASA, academics from the University of Rhode Island, local stakeholders and representatives of the Environmental Protection Agency's "CARA" climate change project. This effort entails further evaluation of the spatial growth model developed last year in terms of its potential to assist local decision makers confronted with difficult decisions resulting from the effects of climate change. Additional partners in the next fiscal year may include the Woods Hole Research Center, USGS, the National Park Service, Waquoit Bay National Estuarine Research Reserve, the National Association of Counties, ICMA and others.

-  Provided technical assistance to the Cape Cod Commission in its review of legislative initiatives including draft oil spill legislation and working documents for the Commonwealth's Ocean Management Task Force.

#### **4) Preventing Marine Invasive Species (16)**


- Pursued developing tools for local officials to apply to development projects to control the spread of invasive species, and began work adapting the Cape Cod Commission's *Technical Bulletin on Invasive Species for Coastal Developers* for use as a model for local initiatives. Spoke with members of the Commonwealth's Invasive Species Task Force to discuss use of technical bulletin as a model for local efforts and other tools to provide better control of existing infestations and help prevent future introductions (SG 6c).

#### **5) Monitoring the Marine Environment (17)**

- Facilitated discussions of prior marine monitoring efforts for Cape Cod Bay and pervasive challenges to the inception of a cohesive monitoring network. Staff continues to support the efforts of The Center for Coastal Studies to develop a framework for a monitoring network in Cape Cod Bay (SG 7a).

### **Other Action Plans**

#### **1) Planning for a Shifting Shoreline (13)**

-  Participated in meetings of local officials working to develop Pre-disaster Mitigation Plans for their communities and conferred with Commission staff developing a regional plan addressing similar issues on a larger scale.
- Communicated with state officials and stakeholders regarding possible changes to insurance coverage for properties on Cape Cod, both near the shore and in inland locations.

#### **2) Enhancing Public Education and Participation (15)**

- Collaborated with Cape Cod Commission media relations staff to update the Coastal element of the Cape Cod Commission's web page.
- Participated in steering committee to develop a conference to share case studies of successful community based coastal management. The Quebec Labrador Foundation recruited a committee representing diverse interests from throughout the geographic extent of the Gulf of Maine to help shape the conference. The event is scheduled to occur in the fall of 2004.

# **Program Goals and Focus for 2004-2005**

## **I. Overview**

In the coming year, MBP staff will continue to focus on the goals and actions outlined in the three-year Strategic Plan. MBP staff will also continue to work on opportunities to protect the Bays that are beyond the scope of the Strategic Plan but are in line with the goals of the CCMP. Some of the new projects that have been initiated or planned for the coming year are described in the next section. It is important to note that this is not an exhaustive list of the projects that are planned for 2004-2005. Other ongoing activities related to CCMP implementation will continue and we expect that currently unknown project opportunities will emerge during this time.

Most of the funds that are received from EPA are used to provide technical assistance throughout the region by supporting MBP staff salaries. The staff then raises funds or works with partners to identify additional funding sources that may be needed for project implementation. In 2004-2005, a small percentage of the annual grant from EPA will also be used to develop new outreach materials for the program.

Where possible, throughout the next section, we have attempted to estimate the dollar amount for the projects with which the MBP is involved in. We intend to include more specific cost estimates in future work plans.

## **II. New Initiatives**

### **A. Central Staff**

#### **1) Protecting and Enhancing Coastal Habitat (3)**

*Regional Wetland (Salt Marsh) Monitoring Protocol.* Mass. Bays, along with Office of Coastal Zone Management and EPA's Research Laboratory in Narragansett, Rhode Island, have developed a research proposal for the development and application of standard protocols for assessing the response of salt marsh wetlands to stressors. Work will continue for the development of the tools to more accurately report on the condition of salt marshes. Preliminary work began in the summer of 2003 and expanded efforts will continue in the summer of 2004.

#### **2) Reducing and Preventing Stormwater Pollution (4)**

*Stormwater Outreach and Policy Coordination.* Stormwater pollution is one of the major challenges to achieving improved water quality in Massachusetts and Cape Cod Bays. However, needed changes are not being made at the state and local level due to limited resources and expertise. The MBP will be developing a staff position to help bridge the gap and provided crucial knowledge and assistance to communities and MBP regional staff regarding stormwater.

### **3) Managing Municipal Wastewater (7)**

Continue to extend technical assistance to the Combined Sewer Overflow (CSO) Task Force on wastewater issues for Metro Boston. While scientists and nonprofits have participated in discussions on CSOs, progress has been slow due to the lack of participation by state policy and management staff. Mass Bays plans to work with the non-profit advocacy organization, Save the Harbor, to provide advice and technical assistance to improve efforts and actions by the group (SG 4a).

### **4) Preventing Marine Invasive Species (16)**

- Will work with the State Working Group to implement priority actions from the State Management Plan (SG 6a).
- *Non-shipping Transport Vector Research and Outreach.* The Mass. Bays Program will continue its pioneering work on non-shipping transport vectors for marine invasive species. In the coming year, the transport vector survey (developed by Weigle) will be made available to other NEPs and interested parties via an interactive website, additional vectors that were not addressed in the initial survey will be investigated, and the program will continue to develop ANS outreach materials for aquatic pet owners, multi-lingual populations, and other non-shipping vectors. In 2002, the MBP received \$8500 for pet industry outreach materials from EPA's Aquatic Nuisance Species Grant program and \$25,000 for multi-lingual outreach materials from Sea Grant's Aquatic Nuisance Species Grant program. (SG 6c & d).
- *Rapid Response Protocol.* The Mass. Bays Program is working with the Office of Coastal Zone Management and the Northeast Regional Panel of the ANS Task Force to develop and implement a rapid response protocol in the Northeast. The protocol will include a model rapid response plan for state agencies that will include fundamental pre and post invasion rapid response steps, and recommendations to NEANS Panel members for translating these actions to appropriate state representatives. CZM has received funding for this protocol through Sea Grant's Aquatic Nuisance Species Grant Program and initial drafts and working group meetings have been held (SG 6d).

### **4) Monitoring the Marine Environment (17)**

- *Regional Monitoring Network and Plan for Massachusetts Bays.* Following on the successful 2002 Marine Monitoring Summit and 2004 Coastal Indicators Summit to establish a regional monitoring network and a suite of indicators in the northeast, Mass. Bays will work with EPA and the Gulf of Maine Council for a regional approach. Mass. Bays will work with the regional monitoring network to develop a marine monitoring plan with a focus on coastal indicators. Outreach materials will be developed to translate the scientific findings from these efforts to the general public (SG 7a).

- *State of the Coast Conference.* In cooperation with the Office of Coastal Zone Management and the Gulf of Maine Council, the Mass. Bays Program will begin to prepare for the 2004 State of the Gulf conference for the Gulf of Maine. Mass Bays will work with CZM to synthesize the regional volunteer monitoring efforts into a bay-wide synthesis on coastal condition during 2004. A synthesis of reports from the State of the Coast conference will be presented at the State of the Gulf Summit in October 2004. (SG-O 1a).

#### **5) Enhancing Public Education (15)**

- The Mass. Bays Program will build upon its initial Outreach and Communications Plan by continuing to update and distribute its suite of outreach materials. The Mass. Bays Program will also work closely with the Massachusetts Bays Estuary Association to coordinate new large-scale outreach initiatives.

#### **6) Developing a Funding Strategy (O)**

- Over the past year, the Management Committee of the Mass. Bays Program has been working to implement the funding strategy developed as part of the Strategic Plan for the program. Where possible, the MBP staff will continue to support the Management Committee with this effort (SG-O 2b & c).

#### **7) Exploring a non-profit partnership (O)**

- A group of interested Management Committee members incorporated the Massachusetts Bays Estuary Association (MBEA) on January 7, 2004. The MBP and MBEA have signed a Memorandum of Understanding to generally state our mutual commitment to the CCMP and clarify our general roles and responsibilities. Over the next year, the MBP will continue to work with the leadership of MBEA to ensure the smooth growth of both organizations (SG-O 4).

#### **8) Developing a new Strategic Plan (O)**

- The MBP's Strategy Plan was written in 2002 for tasks through December 2005. The Executive Director and Deputy Director will lead the effort, together with MBP staff and Management Committee, to hold a Visioning Session with Management Conference members and develop an updated Strategic Plan in February 2005.

#### **9) Improving delivery of metro Boston technical services (O)**

- The metro Boston regional technical assistance position has been vacant since July 2003 (see page 21). The MBP will explore a variety of options to provide services to the communities in this region, including linking the stormwater outreach and policy coordination function with the metro Boston position since stormwater is the most significant issue affecting metro Boston communities and waterways.

#### **10) Finalize Tracking System and Project Database (O)**

- Massachusetts Bays Program will implement a tracking system for program projects and the CCMP. The foundation of the tracking system will be a project database

that will include progress indicators required and requested by EPA in the MBP's annual reports and implementation review. In the coming year, the MBP will also research the feasibility of an online educational component, where the general public could search the database by different categories (town, CCMP action plan, etc.) to learn about activities in the bays region. The MBP is also looking into providing remote access to the database for the regional staff to aid in their monthly reporting.

## **B. Regional/Local Governance Committees**

### **1) Eight Towns and the Bay** (*Planned Total Budget for Regional Technical Assistance \$62,418*)

#### **Protecting and Enhancing Coastal Habitats (3)**

- Assist with funding process, fieldwork, and permitting for several salt marsh restoration projects including, Newman Road, North Pool, Sleepy Hollow Pond, Plumbush Creek and Island Road (SG 2d).
- Administer DEP grant to determine circulation patterns in the Merrimack River Basin as part of the ACOE Merrimack River CSO study to determine potential problems for newly opened shellfish beds (SG 1b).
- Manage 2004 anadromous fish count on the Alewife Brook as part of the north shore fish assessment (SG 2f).
- Assist with funding process, fieldwork, and permitting for fish passage projects on the Essex, Ipswich, Mill, and Parker Rivers (SG 2f).
- Initiate a comprehensive coastal river and stream habitat restoration assessment and plan for the 8T&B communities in conjunction with the MWRP

#### **Reducing Stormwater Impacts (4)**

- Chair meetings of the newly assembled DPW Directors Network for the Eight Towns and the Bay communities on stormwater issues (SG 3b).
- Assist with funding and field work on several stormwater problem sites in the region including Castlevue in Gloucester, Green Street and Farley Brook in Ipswich, Mill Brook in Rockport, urban drainage sites in Newburyport, and several other sites in the region (SG 3a, b).
- Assist Newburyport in investigating possibility of developing a stormwater utility for the city (SG 3a,b).



### **Managing Land Use and Growth (14)**

- Develop and present workshops on Green landscaping and Low Impact Development (SG 5a).
- Work with Parker River National Refuge, Green Neighborhoods, Green Landscape Alliance, and IRWA on environmental landscape demonstration sites (SG 5a).
- Assist LGC in new 8T&B initiative of Smart Growth and Land Preservation as member of the ECCF EIS for Ipswich/Rowley, Salisbury and other communities (SG 5a).

### **Other Action Plans (15)**

- Develop and publish a hard-copy and web-based, interactive kayakers guide to the Great Marsh and Merrimack River Estuary which will include information on access, scenic trails, safety, environmental and cultural attributes, etc.
- Sponsor and participate in Summit for the Lower Merrimack River

## **2) Salem Sound** (*Planned Total Budget for Regional Technical Assistance \$62,418*)

### **Protecting and Enhancing Coastal Habitat (3)**

- Create and coordinate a North River Stream Team to serve as a consistent, sustainable stewardship force for the river.
- Coordinate with MA DMF on North River smelt population assessment. Review data from sampling effort and if appropriate, conduct additional habitat restoration efforts on the North River, further enhancing potential spawning habitat for Rainbow Smelt (SG 2f).
- Implement salt marsh monitoring at Eastern Point Salt Marsh in Gloucester, using the *Wetlands Health Assessment Toolbox Program* to evaluate success of recent habitat restoration efforts at the site (SG 2c).

### **Reducing Stormwater Impacts (4)**

- Continue water sampling and data dissemination efforts associated with *Clean Beaches & Streams Program* (SG 3a, 7c).
- Work with the watershed's municipalities to collect/analyze current stormdrain maps. Develop possibilities sub-watershed based partnerships and projects using this data to reduce NPS and enhance stormwater management efforts within the region (SG 3a).

- Develop effective, new outreach materials for conveying local NPS message and connection between stormwater systems/runoff and coastal water quality (SG 3a).

#### **Preventing Marine Invasive Species (16)**

- Continue implementing the Coastal Habitat Invasives Monitoring Program to collect long-term data on MIS in coastal habitats of Salem Sound. Develop volunteer-training materials that can be used by other monitoring groups throughout the state (SG 6c, d).

#### **Marine Monitoring (17)**

- Continue *Wetlands Health Assessment Toolbox (WHAT) Program* for another year of data collection at salt marsh sites linked with restoration projects (recent, current, or upcoming projects) (SG 2c).
- Continue monitoring / data collection in region's rocky, intertidal habitats through Adopt-a-Tidepool program.

#### **Other Action Plans**

##### **Managing Boat Wastes and Marina Pollution (8)**

- Develop a "*Quick Reference Guide to Clean Boating in Salem Sound*" and distribute to boating community throughout the region.
- Conduct outreach for Clean Boating Program, incorporating a 'dockwalking' component with distribution of materials and resources.

#### **3) Metro Boston** (*Planned Total Budget for Regional Technical Assistance \$67,623*)

At this time, the MBP is developing a job description for a full-time position that would provide regional technical services and stormwater expertise and focus to the metro Boston area. We envision the person in this position also serving as a circuit rider to the other four regions. We anticipate having this job description developed by July 1, 2004.

#### **4) South Shore** (*Planned Total Budget for Regional Technical Assistance \$62,418*)

##### **Coastal Habitat (3), Stormwater (4)**

- Develop and host a stormwater education booth with brochures and promotional items at multiple public events (such as Town Meeting and Hazardous Waste Day) in the towns of Pembroke, Hanover, and Hanson.

- Organize a stormdrain marking program with scouts and students in the towns of Pembroke, Hanover, and Hanson.
- Developing a grant proposal to fund a demonstration porous parking lot and rain garden at the South Shore Natural Science Center in Norwell, with an extensive outreach component to share lessons learned with local community leaders.

#### **Managing Local Land Use/Green Landscaping (14)**

- Work with local nurseries and landscapers to strengthen the GreenScapes program with additional training and outreach opportunities for landowners and professionals, including workshops, lawn signs, leaflets at retail establishments, and GreenScapes tags for environmentally-friendly landscape products.
- Organize a regional workshop for landowners interested in donating/selling their land for conservation purposes, as an outreach effort with the Community Preservation Committees in the region.
- Build upon the regional GreenScapes initiative to: (1) expand the outreach efforts to local landscaping contractors and nurseries, (2) develop a multifaceted GreenScapes outreach program for the Town of Plymouth, as part of a larger stormwater project funded by the 319 program, and (3) work with the First Herring Brook Watershed Initiative to develop GreenScapes demonstration sites in Scituate as part of a Riverways grant-funded project (SG 2a, 3a).

#### **Other Action Plans**

##### **Managing Boat Wastes and Marina Pollution (8)**

- Develop a North and South River boating brochure (in conjunction with local harbormasters and regional marine businesses) that summarizes current regulations, pump out facility information, and the how appropriate boating practices can protect the river ecosystem. Develop additional education and outreach materials including key chains, signage, buoys, and boat flags. (Estimated budget excluding staff time: \$5000)

##### **Planning for a Shifting Shoreline (13)**

- In conjunction with MAPC, assist South Coastal communities with efforts to develop and/or revamp their local hazard mitigation plans, and to formulate strategies to reduce risks to private and public property through zoning changes and other measures.

##### **Enhancing Public Education and Participation (15)**

- In partnership with the Herring River Stream Team and the North River Commission, create adequate signage that will notify boaters of the North River 6

mph speed limit and the importance of "no wake" zones in this tidal estuary.  
(Estimated budget excluding staff time: \$2000)

- Create a North River Recreation Guide based on the popular pocket-sized South River Recreation Guide for boaters and hikers along the South River. (Estimated budget excluding staff time: \$4000)

**5) Cape Cod** (*Planned Total Budget for Regional Technical Assistance \$62,418*)

**Managing Land Use and Growth (14)**

- Continue to assist municipalities with the review of technically complex development projects, the development of Local Comprehensive Plans, Special Area Management Plans for Areas of Critical Environmental Concern, revision of local bylaws and ordinances, and the development and inception of regional Districts of Critical Planning Concern (SG 5a).
- Assess the utility of using computerized Spatial Growth Models as a tool to aid local decision makers grappling with the costs and benefits of creating Local Comprehensive Plans and policies shaping future development and redevelopment (SG 5a).
- Coordinate a project involving Cape Cod Commission staff and municipal personnel focusing on both regional and local Pre-Disaster Mitigation Planning. Due to the general characteristics of Cape Cod, the project will emphasize coastal storm effects and development patterns, and their interplay with emergency response. This project has been funded by the Massachusetts Emergency Management Agency (\$50,000), the Cape Cod Commission (~\$80,000), and the local communities (15 towns @ \$20,000/town).
- Provide technical assistance and leadership to the Cape Cod Commission in the review of the recommendations of the Commonwealth's Ocean Management Task Force and, if necessary, the findings of the federal Commission on Ocean Policy.
- Continue to provide technical support to the Cape Cod Commission during its analysis of private and public development projects affecting coastal resources, and stress the need for post-project monitoring and the design of sustainable projects. Upcoming projects include proposals to construct new municipal beach sites, redevelopment of a co-managed (federal and local) municipal marina site and development of a new municipal marina (SG 2a, 3a).

- Provide technical expertise to the Cape Cod Commission to ensure that marine resources and infrastructure are adequately addressed in the next revision of the Regional Policy Plan.

#### **Other Action Plans**

- Work with an interdisciplinary group from the University of Rhode Island and others to study the effects of local and regional decision making as it relates to the effects of climate change on the human environment.
- Continue to participate in and promote special events that focus on grass-roots efforts to enhance marine conservation and maritime history and culture.

## **Administrative and Financial**

### **I. Massachusetts Bays Staff and Responsibilities**

#### **A. Central Staff**

**Jan P. Smith** is the Executive Director. Jan manages the program and serves as the lead administrator for the program's grant and contracts. He serves as the primary contact for interagency coordination with state and federal agencies, and in particular with the host agency CZM. Jan also serves as the science and technical manager for program efforts, particularly for shellfish bed restoration, stormwater, habitat protection and restoration, and marine monitoring, and is the liaison for the Salem Sound and (together with Paula Jewell) the Cape Cod regional staff members.

**Paula Jewell** is the part-time Deputy Director and assists the Director with program administration, as well as directs the program planning and policy development. Paula is responsible for strategic and financial planning. Paula also coordinates outreach efforts, with input from the Director and other staff, assists in the development of a partnership with the MBEA and is the liaison for the South Shore and (together with Jan Smith) the Cape Cod regional staff members.

**Shannon Weigle** is the Program Manager. Shannon assists with grant writing and general program management for the central and the regional staff and also serves as the lead for program efforts on invasive species. Shannon also assists with program planning and policy development and with a variety of tasks for the Director and Deputy Director, and is the liaison for the metro Boston regional staff member.

**Christian Krahforst** is the Marine Monitoring Scientist for the Mass Bays Program. Christian has been working for the CZM Program managing the Coastal Assessment efforts for EPA with close coordination with the Mass Bays Program. Beginning with the next fiscal year, Christian will work directly for the Mass Bays

Program on the development of a Mass Bays monitoring strategy, indicator development (including an indicator development workshop), and on a variety of other regional and bay-wide forums aimed at analyzing the water quality condition of the Bays. He will continue to manage the Coastal Assessment efforts and the costs for his position will be shared with EPA.

**Peter Hanlon** began as the outreach and policy staff person with the MBP in June 2003. Peter leads the program's outreach efforts and the development of its web page. He assists the Director with program and policy issues and coordinates meetings and administrative tasks for the program, and is the liaison for the 8T&B regional staff member.

#### **B. Regional Staff**

**Peter Phippen** serves as the regional coordinator for Eight Towns and the Bay, the Upper North Shore Local Governance Committee. Peter is based at the Merrimack Valley Regional Planning Council and works with the eight towns in his region to implement the CCMP through various projects and other efforts. Peter serves as the local liaison for the MBP to his towns and to local nonprofit groups and state agencies. Peter provides grant writing and technical assistance to his region.

**Rob Gough** serves as the regional coordinator and program manager at Salem Sound Coast Watch (SSCW). Previously called Salem Sound 2000, SSCW is a regional nonprofit organization based in Salem, Massachusetts. SSCW serves as the coordinator for the Local Governance Committee consisting of the six Lower North Shore communities. Rob works with his communities to implement local projects and other efforts related to the CCMP. Rob serves as the local liaison for the MBP to his towns and to other local nonprofits and state agencies working in his region. Rob also provides grant writing and technical assistance to his region.

**Wendy Garpow** is the regional coordinator for the South Shore sub-region and is based at the North and South Rivers Watershed Association, a regional nonprofit organization. Wendy performs functions similar to the other regional staff but also works particularly on smart growth initiatives within her region.

**Steve Tucker** is the regional coordinator for Cape Cod and is based at the Cape Cod Commission, the regional planning agency for Cape Cod. Steve performs functions similar to the other regional staff and has a particular interest in monitoring wastewater discharged from the eastern Massachusetts outfall pipe (maintained by the Massachusetts Water Resources Authority) and its impact on water quality in Cape Cod Bay.

The Metro Boston regional coordinator position has been vacant since July 2003. Its status is currently under program discussion and review with the Management Committee.

## II. Leveraged Funds (See Attachment A)

## III. Budget and Match

### A. Budget Overview for State Fiscal Year July 1, 2003 – June 30, 2004

<i>2004 Projected Program Income</i>	
EPA Grant	
Base Grant	\$300,000
Congressional Earmark	\$200,000
NEP Travel	\$10,000
<b>Subtotal</b>	<b>\$510,000</b>
EOEA Budget (state FY2004 funds)	\$75,000
Carryover from unexpended funds (FY 03), less continued contract obligations	\$109,150
<b>TOTAL</b>	<b>\$694,150</b>

Note that carryover funds result from an unexpected staffing vacancy (six months) and staff maternity leaves.

<i>2004 Projected Expenses</i>	
Task 1 Program Coordination	
Central Staff	\$286,855
Office Operating Expense	\$45,000
NEP Travel	\$10,000
Task 2 Regional Technical Assistance	\$327,295
Task 3 Support for Mass. Bays Estuary Association	\$25,000
<b>TOTAL</b>	<b>\$694,150</b>

### III. Budget Justification

Work Plan Tasks are designed to demonstrate implementation of the CCMP's Action Plan in five ways:

- Coordination and transfer of technical assistance;
- Development and implementation of innovative management approaches;
- Creative technologies and techniques that prevent, reduce, or eliminate pollution;
- Outreach to and education of the public regarding the protection of the Massachusetts and Cape Cod Bays; and
- Demonstration of grant funding leveraged from other sources for CCMP implementation efforts, as described in attached matrix.

## Task 1. Program Coordination

Objectives: MBP Central Staff will continue to provide technical assistance and administrative oversight and guidance to the MBP Committees, agencies, and communities according to CCMP Action Plan priorities. Staff will conduct outreach activities to develop community and legislative support for implementing the CCMP. Provide grants administration support, as well as meeting planning and support services for the Management (and its Executive Committee) and Technical Advisory Committees. Seek and apply for grant funding to support projects that carry out CCMP Action Plans, in coordination with the Regional Technical Assistance program, as well as for Program-wide projects. Work with the Association of National Estuary Programs (ANEP) to further overall national estuary program goals and objectives.

### Activities:

#### *a. Support program staff*

- Executive Director (full-time, state position):  
\$106,378 = \$71,500 (base) + \$19,720 (fringe @27.58%) + \$15,158 (indirect @21.2%)
- Deputy Director (full-time, state position):  
\$73,549 = \$49,435 (base) + \$13,634 (fringe@27.58%) + \$10,480 (indirect @ 21.2%)
- Outreach and Policy Coordinator (full-time, state position):  
\$67,623 = \$45,451 (base) + \$ 12,536 (fringe @27.58%) + \$9,936 (indirect @21.2%)
- Marine Monitoring Scientist (part-time, contract position)  
\$39,305 = \$32,430 (base, including health stipend) + \$ 6,875 (indirect @ 23.8%)

**Total: \$286,855**

#### *b. Office operating expenses, printing, supplies, support for workshops*

The program anticipates publishing new outreach materials from the efforts of the new Outreach and Policy staff person and to support additional regional workshops to provide technical assistance to assist local officials and citizens with CCMP implementation efforts.

Publications, Printing \$15,000, Workshops \$10,000, and Office Operating Expenses \$ 20,000

**Total: \$45,000**

#### *c. NEP travel budget*

For the coming FFY04, staff will again attend all ANEP/EPA-sponsored meetings for the NEPs, currently planned for Corpus Christie, Texas in October and for Washington, DC in February/March 2005. Staff will also attend and present at the Gulf of Maine Summit on Coastal Condition in October 2005. Staff will also participate in the regional Northeast



panel meetings for Aquatic Nuisance Species in fall 2004 and spring 2005. It is also anticipated that there will be regional NEP meetings, as well as spring and fall meetings of the New England Estuarine Research Society, and regional meetings of the Gulf of Maine Council Habitat Restoration Committee. The Executive Director may also attend the Restore America's Estuaries meetings in Seattle in September 2004.

**Total: \$10,000**

## Task 2: Provide Regional Technical Assistance

Objective 1: Through the Regional Planning Agencies, the MBP Technical Assistants (TAs) support the MBP's five regional networks or Local Governance Committees (LGCs) with trained, professional, technical services, a key element of successful CCMP Action Plan implementation at the local level. Further, the MBP staff has helped leverage over \$700,000 in grants in the year 2000 for water quality improvement projects which also directly support and demonstrate CCMP implementation. Please see the attached matrix that outlines grants received with MBP assistance.

Activities: The MBP Regional TAs will provide ongoing specialized local technical assistance through the five regional organizations to support Action Plan prioritization, implementation, and monitoring. Regional activities will include involving local officials in the demonstration of CCMP implementation; assisting in the development and implementation of local source identification and remediation projects (including serving as regional liaisons to the Interagency Shellfish Clean Water Initiative); assisting in the identification of and application for funding sources; assisting in planning workshops; coordinating regional and local CCMP monitoring activities; and providing technical support for and assistance to the five regional LGCs.

**Total portion of EPA budget to fund Regional TA Activities: \$239,295.**

*Total cost is \$317,295 and is reduced by \$75,000 from match from state FY04 budget.*

Contract for each Regional Technical Assistant = \$ 51,500 x 4 = \$ 206,000 + \$ 43,672 (indirect @ 21.2%) = \$ 249,672 plus \$67,623 for a Metro Boston regional staff (including fringe), location to be determined for a total of \$317,295.

Additional administrative support for the regional programs at \$2,000 each x 5 = \$10,000

**Total regional program costs = \$327,295 (\$75,000 to be funded by state matching funds)**

Task 3: Support the start-up and initial operations of a non-profit partner to the Massachusetts Bays Program, as part of the MBP's funding and outreach strategy.

The MBP will provide \$25,000 to the Massachusetts Bays Estuary Association (MBEA) to assist this new non-profit partner of the MBP in its start up and initial operations. The MBP and MBEA together make up the Massachusetts Bays National Estuary Program. The mission of the MBEA is to support the protection and restoration of Massachusetts and Cape Cod Bays through the public education, research and coastal habitat initiatives of the Massachusetts Bays Program. These initiatives are guided by, and directed at implementing, the actions of the CCMP. Specifically, the MBEA will help achieve the goals of an expanded outreach program and diversified funding base.

**Total cost is \$ 25,000**

**C. Match for EPA grant to Mass Bays Program  
State Fiscal Year July 1, 2003 – June 30, 2004**

Source of Match	Match Amount
Merrimack Valley Planning Council*	\$60,000
Cape Cod Commission*	\$75,000
North and South Rivers Watershed Association*	\$5,416
Salem Sound Coastwatch*	\$6,000
State cash match	\$75,000
State grants to Mass. Bays communities for land acquisition <sup>†</sup>	\$288,584
<b>TOTAL MATCH</b>	<b>\$510,000</b>

\* Regional match includes salary plus in-kind support (office, telephone, etc).

<sup>†</sup> Land acquisition program run by EOEA, funds represent those allocated to Mass Bays communities.

**IV. Travel Expenses for State Fiscal Year July 1, 2003 – June 30, 2004**

Executive Director	Dates	Cost
Combined ERF and ANEP/EPA meetings in Seattle, WA	September 13-19, 2003	\$1718.00
Stormwater in Cold Climates Conference in Portland, ME sponsored by the Casco Bay NEP	November 4-5, 2003	\$184.00
Northeast Aquatic Nuisance Species Panel meeting in Derby, CT	December 11-12, 2003	\$132.00
Regional Coastal Indicators Summit (sponsored by EPA and Northeast NEPs) in Durham, NH	January 6-8, 2004	\$429.00

ANEP/EPA meetings in Washington, D.C.	March 7-11, 2004	\$1,146.00
Miscellaneous local travel within Mass Bays region for various meetings and wetlands research	Throughout the year	\$737.00
<b>Coastal Monitoring Scientist</b>		
ERF/ANEP meetings in Seattle, WA	September 13-19, 2003	\$1955
Regional Coastal Indicators Summit in Durham, NH sponsored by EPA and the northeast NEPs	January 6-8, 2004	\$248
<b>Deputy Director</b>		
ANEP/EPA meetings in Seattle, WA	September 16-18, 2003	\$1413.00
ANEP/EPA meetings in Washington DC	March 7-10, 2004	\$1405.00
<b>Program Manager</b>		
Northeast Regional Panel meeting on Aquatic Nuisance Species in Derby, CT	December 11-12, 2003	\$225
<b>Outreach and Policy Coordinator</b>		
Gulf of Maine Council meeting to plan the October 2004 coastal condition summit	August 11-12, 2003	\$145
ANEP/EPA meetings in Washington DC	March 7-11, 2004	\$1365
Local Travel, including the NH NEP State of the Bay Conference		\$131
<b>TOTAL TRAVEL</b>		<b>\$11,233.00</b>

\* Planned meeting and anticipated travel costs.

Anticipated costs include:

Executive Director and Program Manager to the Northeast Regional Panel on Invasive Species in Newport, RI in May	\$400
Local travel	\$400
<b>TOTAL</b>	<b>\$800</b>

**Appendix A: Leveraged Resources  
Committed to Mass. Bays Program  
Operations and Projects from July  
1, 2003 - June 30, 2004.**

Project Description	CCMP Action Item	Date of Award	NEP Role	Total Leveraged	Federal		State		Other		Funder Description	Program Contact
					Cash	Inkind	Cash	Inkind	Cash	Inkind		
Central Staff												
Mass. Bays Program Message Workshop	Public Education (15)	Sep-03	Primary	\$6,000	\$6,000						EPA	Paula Jewell
Logo for Massachusetts Bays Estuary Association	Public Education (15)	Mar-04	Primary	\$1,500						\$1,500	Gough Drops	Paula Jewell
Web design for Massachusetts Bays Estuary Association	Public Education (15)	Apr-04	Primary	\$1,500						\$1,500	Peter Hanlon	Paula Jewell
State Matching Funds		Jul-04	Primary	\$75,000			\$75,000					Jan Smith
Regional Partner Matching Funds		Jul-03	Primary	\$134,500			\$134,500					Jan Smith
State Grants to Mass. Bays communities for land acquisition	Land Use (14)	Jan-04	Primary	\$248,169			\$248,169				MA EOEa	Jan Smith
MET - Printing of State of the Bays report	Public Education (15)	Oct-03	Primary	\$9,800			\$9,800				Massachusetts Environmental Trust	Peter Hanlon
National Coastal Assessment	Marine Monitoring (17)	Sep-03	Primary	\$200,000	\$200,000						EPA	Christian Krahforst
CICEET Pilot Projects (Eutrophication and Contaminants)	Marine Monitoring (17)	Jul-03	Primary	\$40,000	\$40,000						CICEET	Christian Krahforst
Nahant- infiltration stormwater treatment systems	Stormwater (4)	Dec-03	Support	\$58,700			\$58,700				CPR	Jan Smith
Multi-lingual Invasive Species Outreach Campaign	Invasive Species (16)	Mar-04	Primary	\$33,320	\$25,000			\$4,000		\$4,320	Sea Grant, DCR, Boston Harbor	Shannon Weigle
Salem Sound												
Wetlands Health Assessment Toolbox Program 2004 (Gloucester, Ipswich)	Habitat (3)	7/30/03	Primary	\$8,000			\$8,000				Mass. Environmental Trust	Rob Gough
Clean Beaches & Streams Program: Stormwater outfall monitoring (regional)	Stormwater (4)	7/30/03	Primary	\$5,000			\$5,000				Mass. Environmental Trust	Rob Gough
Coastal Habitat Invasives Monitoring Program: vol-based data collection (regional)	Marine invasives (16)	7/31/03	Primary	\$14,200	\$9,700					\$4,500	Gulf of Maine Council / NOAA	Rob Gough
Post-restoration / evaluative salt marsh monitoring (Eastern Pt., Gloucester)	Habitat (3)	3/23/04	Primary	\$7,000	\$7,000						Gulf of Maine Council / NOAA	Rob Gough
Development of MiS Monitoring Protocol & ID Materials (regional)	Marine invasives (16)	4/2/04	Primary	\$13,160			\$9,890			\$3,270	MA Coastal Zone Management	Rob Gough
Expanded Clean Beaches & Streams Program: Stormwater outfall monitoring (regional)	Stormwater (4)	4/16/04	Primary	\$21,850			\$16,250			\$5,600	MA CZM Coastal NPS	Rob Gough
Bacterial Source Identification at Juniper Beach, Salem	Stormwater (4)	4/16/04	Support	\$23,100			\$23,100				MA CZM Coastal NPS	Rob Gough
Land use / NPS issues Survey for Willows Park, Salem	Stormwater (4)	4/16/04	Support	\$16,050			\$16,050				MA CZM Coastal NPS	Rob Gough

**Appendix A: Leveraged Resources  
Committed to Mass. Bays Program  
Operations and Projects from July  
1, 2003 - June 30, 2004.**

Technical support for Manchester Coastal Stream Team	Habitat (3)	10/29/03	Primary	\$5,000						\$5,000	Entrust Fund	Rob Gough
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## Upper North Shore (8T&amp;B)

Simulation of Soluable waste Transport in the Estuarine Reach of the Merrimack River, Newburyport MA, Part of a larger Merrimack River CSO study	Stormwater (4)	3/4/04	primary	\$1,156,000	\$565,000		\$101,00		\$500,000		DEP 604b, ACOE, USGS, Ma and NH communities	Peter Phippen
Parker River National Wildlife Refuge Native Plant Demonstration Site	Habitat (3)/ Stormwater(4)	3/4/04	Significant	\$71,000	\$60,000 (PRNWR)		\$11,000 (CZM)				CZM/MET Demo Grant	Peter Phippen
Merrimack Valley Brownfields Assessment	Land Use (14)	1/4/04	Significant	\$400,000	400000 (EPA)						EPA Brownfields Grant	Peter Phippen
Anadromous fisheries outreach in the Parker, Essex, Little, Ipswich, and saugus Rivers	Education/Outreach (15)	12/3/04	primary	\$12,600			\$6,000		\$1,800	\$6,600	ACEC Stewardship Grant	Peter Phippen
Coastal restriction restoration projects; Gloucester, Rockport, Rowley, Newbury, Essex	Habitat (3)	04 and 03	Support	\$180,000							NOAA, GOM, TTOR, MWRP	Peter Phippen
Rockport Dept. of Public Works	Marine Monitoring (17)	May-04	Support	\$22,845	\$22,845						MA CZM Coastal NPS	Peter Phippen

## South Shore

Feasibility Study for fish passage alternatives at Third Herring Brook (Tack Factory Pond Dam)	Habitat (3)	1/4/04	Primary	\$25,000	\$25,000						Gulf of Maine Council on the Environment	Wendy Garpow
Feasibility Study for fish passage alternatives at Third Herring Brook (Tack Factory Pond Dam)	Habitat (3)	7/1/03	Primary	\$25,000	\$25,000						American Rivers – NOAA CBR Partnership	Wendy Garpow
LID Training (Plymouth, Kingston, Pembroke, Hanover)	Land Use (14)	9/3/03	Primary	\$126,600	\$84,550						EPA (319)	Wendy Garpow
Billington Sea - Stormwater BMPs	Stormwater (4)	9/3/03	Support	\$280,292	\$167,773						EPA (319)	Wendy Garpow
Nutrient Monitoring in Plymouth Bay (Towns of Plymouth, Kingston, Duxbury with Umass Dartmouth)	Nitrogen Sensitive Embayments (11)	4/?/2003	Support	\$76,410	\$42,700						EPA 604(b)	Wendy Garpow
Stormwater BMP for Main St. Parking Lot in Downtown Plymouth (drains to Town Brook)	Stormwater (4)	6/1/03	Significant	\$69,000	\$51,750						CPR+	Wendy Garpow
Conduct an assessment to prioritize stormwater mitigation needs for the downtown area (Town of Marshfield)	Stormwater (4)	12/1/03	Significant	\$23,500	\$23,500						CPR	Wendy Garpow

**Appendix A: Leveraged Resources**  
**Committed to Mass. Bays Program**  
**Operations and Projects from July**  
**1, 2003 - June 30, 2004.**

Town Brook Restoration Project (Plymouth): The Town was awarded \$25,000 from the Gulf of Maine Restoration Grant Program to repair the fish ladder at the Jenney Grist Mill and build an observation deck.	Habitat (3)	1/1/04	Support	\$25,000	\$25,000						GOMC	Wendy Garpow
Duxbury, Marshfield, Plymouth smart growth bylaw development	Land Use (14)	5/4/04	Significant	\$34,920	\$34,920						MA CZM Coastal NPS	Wendy Garpow
Community Preservation Act - open space projects	Land Use (14)	numerous throughout FY03	Significant	\$1,784,679			\$1,784,679				Community Preservation Act	Wendy Garpow

<b>Cape Cod</b>												
CAPE COD WATERSHED CONFERENCE	Land Use & Growth (14)/Education & Participation (15)	Sep-04	Primary	\$14,000		\$4,000		\$4,000		\$4,000	MA CZM, Coastal Training Program, Woods Hole Sea Grant	Steve Tucker
WEST BARNSTABLE/SANDWICH LAND ACQUISITION	Coastal Habitat (3)	Nov-03	Support	\$2,017,803	\$1,000,000		\$208,741		\$809,062		US Fish and Wildlife, MA DEM, MA Corporate Wetlands Restoration Partnership	Steve Tucker
QUIVET NECK LAND ACQUISITION	Coastal Habitat (3), Public Access (12)	Nov-03	Support	\$7,767,750	\$1,000,000		\$500,000		\$6,267,750		US Fish and Wildlife, Association for the Preservation of Cape Cod, MA DEM, numerous CC land trusts, municipalities, and land owners	Steve Tucker
QUEBEC LABRADOR FOUNDATION "SOUNDINGS INSTITUTE"	Education and Participation (15)	Spring 2003	Support	\$1,500						\$1,500	Staff time	Steve Tucker
CONSORTIUM FOR ATLANTIC REGIONAL ASSESSMENT	Coastal Habitat (3)/Shifting Shoreline (13)	Ongoing	Significant	\$6,200						\$6,200	Staff time	Steve Tucker
Sandy Neck Invasive Vegetation Control	Invasive Species (16)	Nov-03	Support	\$10,000		\$10,000					MET	Steve Tucker
PRE DISASTER MITIGATION PLANNING	Land Use (14)	Ongoing	Support	\$20,000			\$20,000				MA Emergency Management Agency	Steve Tucker
Wellfleet - infiltration stormwater treatment system	Stormwater (4)	May-04	Support	\$56,000			\$56,000				CPR	Steve Tucker

**Appendix A: Leveraged Resources  
Committed to Mass. Bays Program  
Operations and Projects from July  
1, 2003 - June 30, 2004.**

<b>TOTAL</b>				<b>\$15,127,948</b>	<b>\$3,355,738</b>	<b>\$14,000</b>	<b>\$3,179,879</b>	<b>\$8,000</b>	<b>\$7,578,612</b>	<b>\$43,990</b>		
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**Primary Role** = NEP played the  
central role

**Total Primary - \$2,183,199**

**Significant Role** = NEP actively  
participated in but did not lead the  
effort

**Total Significant - \$2,389,299**

**Support Role** = NEP played a minor  
role

**Total Support - \$10,555,450**

## Massachusetts Bays Program Tracking System and Project Database

In 2004, the Massachusetts Bays Program (MBP) continued work on a tracking system for program projects and CCMP implementation. The foundation of the tracking system is a project database in Microsoft Access that includes progress indicators provided by EPA. Since the CCMP includes seventeen action plans and more than eighty action items, gathering information on the progress of all these action items can be time consuming. In order to expedite the functionality of the database, we have established a tiered list of priorities for information gathering and data entry which includes:

- 1) Current work overseen by MBP
- 2) Previous work overseen by MBP
- 3) Previous work relevant to the CCMP, not overseen by MBP
- 4) Ongoing work relevant to the CCMP, not overseen by MBP

For each of the projects overseen by the MBP, the following information will be provided:

- A) List of CCMP Action Plans and priority Action Plans
- B) Project description of work being done
- C) Project names and lead entities/responsible parties conducting the work
- D) Cost of project (total, NEP contribution, source of funds, type of funds - cash or in kind)
- E) Location of project in the study area (geo-referencing)
- F) Project initiation and completion or delivery dates
- G) Project status
- H) Habitat acres protected or restored
- I) Total funds leveraged with Section 320 funds

The information on these projects will be obtained from the MBP staff's monthly reports, MBP's Annual Work Plan and Implementation Review to EPA, and final reports to the MBP from other contracted workers (early scientific studies and mini-grant program).

The *1998 Biennial Report to the Environmental Protection Agency* includes information on work relevant to CCMP implementation though some of it was not overseen by the MBP. This information will also be included in the project database. In 2001, the MBP held a Visioning Workshop and established five priority action plans for the program. Since then, the MBP has focused on these five action plans in addition to two new action plans (described in the 2003 Revisions to the CCMP). Information on non-priority action plans will ultimately be included in the tracking system, yet it is expected to take a longer amount of time to collect this data and enter it into the database.

Upon completion, the tracking system will be used to monitor the total number of priority actions initiated and completed and the overall degree of implementation progress, as required by EPA. The system may also be used to monitor the number of acres of habitat protected and restored in the program area. The MBP will also use this data to inform its Visioning and Strategic Plan update planned for 2005.

In the coming year, the MBP will also research the feasibility of developing an online educational component, where the general public could search the database by different categories (town, CCMP action plan, etc.) to learn about activities in the bays region. The MBP is also looking into providing remote access to the database for the regional staff to aid in their monthly reporting.

The following is an abbreviated timeline for the tracking system:

- 1) Project database (Feb – June 2004, for template and projects overseen by the MBP)
- 2) Online public education piece (June – Sept 2004)
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## NEP Indicators Development; Mass. Bays Program.

The Massachusetts Bays Program (MBP), along with partners from the Massachusetts Office of Coastal Zone Management, EPA and neighboring state agencies, including the Maine and New Hampshire NEPs and the Gulf of Maine Council, and universities began a coordinated effort to develop regional environmental indicators for assessing the ecological condition of coastal embayments and estuaries. A regional approach is necessary for meaningful indicator development since the Massachusetts Bays are strongly influenced by larger scale ecosystems (e.g. the Gulf of Maine), large watersheds (i.e., Merrimack), and by broad scale impacts such as atmospheric deposition that extend beyond traditional jurisdictional boundaries. These efforts to date have culminated in two workshops and several small pilot projects.

The results from these workshops were a design of the form and function of a monitoring network for the region, (see <http://www.gulfofmaine.org/nciw/ANCMSPProceedings1.pdf> and <http://www.gulfofmaine.org/nciw/>); these included participants from the Canadian Atlantic Provinces to Long Island Sound) and a consensus on indicators for measuring environmental quality that would be applicable to the broad region as well as for the MBP. The purpose of these efforts is to enable coastal managers to determine if conditions are getting better or worse for their system in a true regional context. Currently, the MBP participates as a lead agency in the Massachusetts Cooperative of the National Coastal Assessment using indicators developed for that program. This effort has been supplemented by the NEP to ensure significant spatial coverage for future ecological assessment. The first two years of data have been used to generate a chapter on the Northeast U.S.. This report (Draft National Coastal Conditions Report II) can be found at: <http://www.epa.gov/owow/oceans/nccr2/downloads.html>. This data is also available to the NCA partners from EPA's National Coastal Assessment website (<http://www.epa.gov/emap/nca/>). Currently, Massachusetts is beginning the 5<sup>th</sup> year of sampling and analysis under the NCA cooperative.

The MBP also participates in the Gulfwatch Program (<http://www.gulfofmaine.org/council/committees/eqmc/gulfwatch/default.asp>), coordinating the collection and processing mussel (*Mytilus edulis*) tissue samples from selected MA sites and using these as indicators of contamination to the region, including Massachusetts Bays. This program, which monitors contamination of selected trace metals and organics in the mussel tissue from fixed stations along the Gulf of Maine – from Nova Scotia to Cape Cod Bay, began in 1992 and continues to date. In general most of the contaminants monitored show a trend of increasing concentration from north to south. For some contaminants, the levels increase abruptly just below the mouth of the Merrimack, suggesting the significance of the historic legacy of industrialization in the Merrimack watershed and its importance to present day contamination in Massachusetts coastal waters. Others, like mercury, are fairly ubiquitous across the Gulf of Maine region.

The MBP will continue to be a leading partner in these regional efforts, particularly in the further development of the Northeast Atlantic Monitoring Network and implementing a long term monitoring program for Massachusetts Bays.

## NEP ACHIEVEMENTS

Major accomplishments by the Massachusetts Bays NEP since the last Implementation Review in 2001 include:

1. Completion of a Three-Year Strategic and Funding Plan for 2002-2005
2. Completing a Messaging Workshop for the program to assist with program visibility and identity in 2003. Results provided MBP with the tag line: *Helping Communities Care for the Coast*.
3. Held a regional workshop on marine invasive species, "Eyes on the Estuaries", in November 2002, attended by 150 scientists, managers, policy-makers, non-profit representatives, and members of the general public.
4. Organized and coordinated a regional Rapid Assessment for invasive species for the eight NEPs in the Northeast in 2003. The survey focused on fixed docks and piers at 20 different sites located between Casco Bay, Maine and New York Harbor. A report of the findings will be available in 2004.
5. Co-organized two regional workshops to increase regional cooperation and coordination on marine monitoring and coastal indicators in December 2002 and January 2004.
6. Developed new partnership with the North & South Rivers Watershed Association as the South Shore Regional Partner.
7. Produced a State of the Bay Report and held a State of the Bay Symposium in May 2004.
8. Finalized revisions to the CCMP, developed a presentation template for use by regional staff to roll-out revised CCMP.
9. Worked with the Management Committee to create the Massachusetts Bay Estuary Association, a non-profit organization that will support implementation efforts of the program through outreach, education, and fund raising

## PROGRESS ON ADDRESSING PREVIOUS CHALLENGES

The last implementation review in 2001 identified a number of challenges for the MBP.

**Funding.** The first challenge related to the issue of finding additional funding to support CCMP implementation. The program held a series of special meetings with the Management Committee and the Executive Committee, as well as the staff, to produce a Strategic and Funding Plan that was finally completed in May 2002. It is included in its entirety as a part of this submission. Briefly, the plan presents a mission, vision, and core priorities, identifies critical issues, sets goals, focus actions, and measures of success, and concludes with a funding strategy. The Plan was completed with the assistance of a consultant's services provided for by EPA. Subsequent reporting on progress in MBP Annual Work Plans uses the framework developed in the Strategic Plan.

One of the funding strategies calls for the development of a nonprofit organization to support program activities. This effort required careful thought and planning. After extensive discussions within the Executive and Management Committees, with an eye towards lessons learned and experiences of other NEPs around the country, the Massachusetts Bays Estuary Association (MBEA) was finally incorporated in January 2004. The MBEA and MBP have worked together to ensure close and clear links between the two entities using five specific tools:

1. The MBP and MBEA entered into a Memorandum of Understanding (see attached) that identifies MBP and MBEA as two equal parts of the Massachusetts Bays National Estuary Program, spells out their unique roles and identifies MBP's and MBEA's commitment to regular and frequent communication to ensure careful and constant growth of both elements.
2. The MBEA's mission specifically calls out CCMP implementation as a unifying element.

*The Massachusetts Bays Estuary Association is a not-for-profit organization that supports the protection and restoration of Massachusetts and Cape Cod Bays through the public education, research and coastal habitat initiatives of the Massachusetts Bays National Estuary Program (MBP). These initiatives are guided by, and directed at implementing, the actions of the Comprehensive Conservation and Management Plan (CCMP), the blueprint for protecting and restoring the coastal health and heritage of the Bays. The MBEA gives a voice to the Bays through education, outreach and advocacy programs that raise awareness of the resources and its threats.*

3. The MBEA's bylaws call for 51% of MBEA Board members to be MBP Management Committee members.
4. Six of the nine founding Board members are sitting MBP Management Committee members, and four of the nine are MBP Executive Committee members.
5. The first Executive Director of the MBEA is the current Deputy Director of the MBP.

MBEA will receive initial seed money from the MBP but will strive to quickly become financially independent through developing partnerships and seeking sources of funds that MBP cannot, due to its location within a state agency. MBP will continue to raise funds on a project-for-project basis but believes that our efforts to develop and implement a funding plan, along with the non-profit support group will greatly help in meeting some of our financial needs.

**Program Visibility.** MBP has made steady progress on a number of items:

1. New Approach: The program has a new Outreach and Policy Coordinator who has revamped the program web page and created a new overall outreach strategy (also attached to this submittal).
2. Biennial Conference: The program organized and hosted a very successful regional conference, "Eyes on the Estuary", in 2002 to highlight marine invasive species in the Northeast.
3. Rapid Assessment Survey: Following the conference, the MBP coordinated a Northeast region-wide Rapid Assessment in 2003 to survey for marine invasive species in each of the eight NEPs from Casco Bay to New York Harbor. Collectively, the NEPs received a high level of press coverage for this effort and was accompanied by a National Geographic film team for a television special.
4. State of the Bays: MBP is currently organizing a State of the Bay Symposium in early May 2004 to highlight a decade of change, accompanied by a State of the Bay Report being prepared by the Outreach Coordinator and an evening legislators' Reception hosted by the MBEA.
5. MBP is a significant contributor to the planning for a Gulf of Maine-wide "State of the Gulf" Conference being planned for October 2004.
6. The Program also created the Stephan Gersh Award -- a special award to recognize local citizen contributions to CCMP implementation projects. This award has been given twice, with considerable local press interest.
7. CCMP Revision: MBP has also undergone an extensive public process involving the Management Committee and other agency partners, along with the general public to update and revise the CCMP. Highlights include:
  - A. Two new action plans for Invasive Species and Marine Monitoring
  - B. Successful effort to involve all agency partners and reach consensus.
  - C. A Final Revised CCMP printed in March 2004 (see attached).
  - D. Upcoming regional staff (with central staff materials and support) outreach effort to community governments and local citizens, especially in those communities where turn-over may result in limited exposure to the CCMP.
8. MCZM Support. As host, the Massachusetts Coastal Zone Management has continued to support program efforts to highlight the program as a unique endeavor.
9. Filling Watershed Initiative need. Due in part to budgetary constraints, the Massachusetts Watershed Initiative was discontinued in early 2003 in its previous form of 28 watershed teams. While some of the MWI goals are being continued, there is now no staff associated with the program. MBP regional staff have

assumed and absorbed some of the watershed team functions for the coastal watersheds where a significant network of local citizens and municipal officials had been developed.

**Environmental Indicators.** The final challenge identified in 2001 relates to the need for the development of environmental goals and indicators. As part of the effort to update the CCMP, which was begun in 2001, MBP developed measurable goals for each of the priority actions contained in the revisions. This effort required considerable debate and discussions among staff, agency partners, and citizens. The Strategic Plan developed in 2002 also provides environmental goals. These program efforts have been used to guide the development of a tracking system, which is nearly complete (see attached update).

Developing indicators has been challenging. Some efforts appear in the State of the Bay report attached to this submission. MBP has also worked extensively with EPA HQ staff and the Gulf of Maine Council to develop a regional approach to monitoring and indicator development. MBP staff has been leading coordination of this regional scale effort since MBP waters are closely shared with both the NH and Casco Bay NEPs, as well as the larger Gulf of Maine waters. See the report on Indicators as part of this submission for more details.

MBP staff believes that we have made diligent and substantial progress on meeting all of the challenges that were identified in the previous program review.



## NEW AND EMERGING CHALLENGES

With the increased funding provided to the Mass Bays Program (MBP) over the past two years, MBP has been able to make exciting strides in several areas that were previously limited by inadequate staffing and funds.

- A. Marine Invasives. MBP was able to sustain a full time Program Manager beginning in late fall 2001 to focus on marine invasive species issues. Specifically, our efforts have focused on outreach, education, and risk assessments for various vectors, as well as to bring active participation and expertise in the North East Aquatic Nuisance Species (NEANS) Panel, and develop and host a major regional conference regarding Marine Invasives. These efforts established a high profile for the program for this emerging issue.
- B. Marine Monitoring. In addition, MBP was able to hire, through a shared arrangement with the National Coastal Assessment effort, a Marine Monitoring Scientist to help lead efforts to develop a regional approach to marine monitoring and indicator development. This staff position has allowed MBP to finally begin to address the need for a marine monitoring framework and environmental indicators. The Marine Monitoring Scientist has provided leadership in developing a cooperative effort for a regionally coordinated marine monitoring plan and coastal indicators, since program waters are closely shared not only with two additional NEPs (Great Bay in NH and Casco Bay in Maine), but two other states and two Canadian provinces. A considerable level of coordination and expertise will be needed to maintain this program, as well additional sources of funding. Maintaining the Marine Monitoring Scientists position is key for this initiative.
- C. State of the Bays. Additional funding has also allowed the program to move forward, with the assistance of a new Outreach and Policy Coordinator, with a State of the Bay Report and Symposium.
- D. Massachusetts Bays Estuary Association. After considerable discussions, the Management Committee of the MBP has also moved forward to establish a non-profit organization, the Massachusetts Bays Estuary Association (MBEA), to support the implementation efforts of the Program. MBEA will work on outreach programs and raise funds for CCMP implementation.

The Management Committee has worked carefully to craft a program design for MBEA that will ensure close cooperation with MBP. While the important steps to finally create the MBEA have been taken, the emerging challenge will be to make it work in a way that allows both elements to grow and benefit the Bays. The MBP is providing seed money to MBEA that will provide the non-profit organization that footing it needs to work toward sustainability. The MBP Director will work closely with the MBEA Director to ensure continued success and ongoing communication.

- E. Stormwater and Land Use. Stormwater management and land use planning are emerging as key issues for MBP communities. The Regional Technical

Assistants for MBP have been responding with increasing frequency to requests from communities for assistance with these issues. These topics are also the focus of considerable state agency attention in a time when available state funding is decreasing. MBP desires to increase its expertise in these areas in order to better serve the community needs. The Program is currently evaluating the possibility of filling the metro Boston position with a stormwater expert, who could also provide stormwater technical assistance to the other regional assistance staff. Several regional staff are currently working closely with a cooperative effort involving many organizations to provide assistance on "smart growth" and low-impact development efforts. The MBP will evaluate whether we need to provide additional expertise on these issues.

Overall, continued and increased program funding is the key to meeting these challenges, especially given the State's fiscal condition. The MBP has worked diligently to explore additional funding sources and generally found that general operating support is very difficult to secure, although there are funds to support specific project efforts. Thus, we respectfully request that EPA continue, to the best of its ability, to provide sufficient funds for base program support, as well as technical and financial assistance to the NEPs through its contractors for specific tasks such as the financing and strategic plan development, messaging workshops, and assistance that contributed to the two regional marine monitoring/indicator summits. We also appreciate, and encourage EPA to continue, efforts to streamline reporting requirements as it allows our staff time to be devoted to implementation efforts.

## ROLE OF KEY STAKEHOLDERS IN CCMP IMPLEMENTATION

Since 2001, the MBP has continued its strong reliance on diverse partnerships for CCMP implementation in three ways:

- A. Continuing existing partnerships: The Management Committee (MC), which meets quarterly, continues to be the key support and policy review committee for the MBP, along with the Executive Committee which meets on an as-needed basis. The Management Committee is comprised of representatives from various agency partners, as well as other partnering organizations such as the Regional Planning Agencies and various non-profit organizations, several of whom act as hosts for regional technical assistants, and individual citizens. The MC is the important decision making body for the program. The Executive Committee is comprised of eight key members of the MC.
- B. Creating new partnerships: Local government representatives and other citizens are most active in the regional governance committees, which is where most of the specific implementation efforts are discussed and implemented. Since 2001, the North & South Rivers Watershed Association (NSRWA), has been serving as the new host for the South Shore technical assistance position. The NSRWA is a non-profit organization whose mission is to preserve, restore, maintain and conserve in their natural state, the waters and related natural resources within the watershed. The MBP's partnership with NSRWA has been fruitful, resulting, for example, in passage of the Community Preservation Act in seven South Shore communities, development of the Green Communities Speaker Series, and restoration of Third Herring Brook.
- C. Renewing previous partnerships: The efforts of the program to update the CCMP began with a visioning session held in February 2001 where all members of the original and current Management Conference were invited to participate. Approximately fifty people gathered for a day to brainstorm about progress made on the original action items and, in particular, the priority action items, as defined by the June 1998 visioning session. Recommendations for several new action plans were proposed at the 2001 session and eight subcommittees were formed to further work on refining the ideas that were proposed. These committees worked over the course of a year and a half to finalize an update set of action plans, which was then reviewed and refined with input from the MC, and both the central and regional staff. The update was a truly collaborative effort in similar ways to the original CCMP. One program goal is to now use the CCMP revisions as the vehicle to re-introduce MBP to the cities and towns where turnover in local official positions has caused some loss of institutional memory about the MBP.
- D. Establishing new venues. The Massachusetts Bays Estuary Association (MBEA), the recently formed non-profit partner of the MBP, is a significant new stakeholder of the MBP. The President of the MBEA, Charles Max Schenk, is the

current Chair of the Eight Towns and the Bay LGC, and has played a substantial role in launching this new endeavor. Additional new Board members include representatives of The Trust for Public Land, The Nature Conservancy, Horsely and Whitten consulting firm, and six sitting Management Committee members representing regional planning agencies, MIT-Sea Grant, North & South Rivers Watershed Association, Salem Sound Coastwatch, and small business. Through its outreach efforts, the MBEA intends to reach new constituencies and to reach existing constituencies in new ways, to increase individual stewardship of Bays resources. See the Fact Sheet at the end of the packet for additional information on the MBEA/MBP partnership.

## BARRIERS TO CCMP IMPLEMENTATION

The MBP continues to work toward creative and dynamic solutions to the four major barriers to CCMP implementation:

- A. Maintaining Profile Despite Changing Leadership. One of the challenges of being housed in the MA Executive Office of Environmental Affairs is that when the Governor's office changes, EOEA leadership changes, necessitating that MBP spend time reintroducing itself and ensuring that it is recognized as a valuable program that makes significant contributions. To meet this challenge, the MBP is working actively to insert itself in high level EOEA efforts. For example, working with MCZM and other coastal agency partners, an Estuaries Initiative is being developed for the new Environmental Affairs Secretary as a cornerstone new initiative. An Ocean Management Task Force has worked over the past nine months to develop recommendations for better managing open ocean resources. MBP has actively participated in both of these efforts in order to raise our profile.
- B. Streamlining. With the recent significant decline in state revenues over the past two years, the state budget picture has been constrained. This has led to the elimination of many programs and services and caused a strain on nearly every agency. With reduced resources, it has been more difficult than usual to maintain agency commitments and participation in CCMP implementation efforts. As some programs such as the state Watershed Initiative are cut back, the MBP has assumed a few key tasks.
- C. Tight Resources. Funding is always a challenge, since it represents a direct correlation to the amount and types of projects that MBP can do. The general downturn in the economy has affected the availability of various outside sources of project money, making it more difficult than in the past to secure project money. Thus, level funding from EPA-HQ is critical to maintaining an adequate level of services to provide technical assistance to agencies and communities. We have been extremely fortunate to have been able to maintain level funding for the state cash match for the MBP regional technical assistance program, largely due to our participation in the Estuaries Initiative. In addition, we are hopeful that the MBEA, once successful should provide considerable assistance to the program in several ways, particularly funding.
- D. Regional challenges. Our unique approach (for NEPs) to CCMP implementation that uses regional staff hosted by regional partners continues to require steady maintenance, as regional staff positions turn over and as NEP/regional host relationships evolve. We currently have a vacancy for our Metro Boston regional position and are debating host options, since our previous host, Metropolitan Area Planning Council decided to discontinue this role, although they do remain an active program partner.

## NEP STRUCTURE AND HOW IT FACILITATES COMMUNITY-BASED DECISION MAKING

**Unique Structure.** The Massachusetts Bays Program (MBP) is unique among NEPs with our approach to using both core central staff and decentralized regional technical assistant staff as the delivery mechanism for community assistance. The NEP structure was designed when the CCMP was developed and included the use of Regional Planning Agencies (RPAs) as host agencies for regional staff, who were intended to provide technical assistance to local communities for CCMP implementation efforts. This design was created in part to address concern over the large size of the MBP (fifty communities, two million people, and 800 miles of coastline), as well as to engage RPAs as regional partners. Regional staff are able to work more locally and more effectively by concentrating their efforts in a smaller area and working with a smaller number of people. MBP has found this to be an effective model, although there have been challenges in maintaining a strong team framework, since regional staff often serve many masters. Overall, the framework has worked well, with some region-specific adjustments being made.

**Central Staff.** Currently there are two full time and three part time central staffmembers:

- Executive Director (full time): Overall program coordination, science and technical manager
- Deputy Director (part time): Policy, strategic planning, development.
- Program Manager (part-time): Tracking system, invasive species.
- Outreach and Policy Coordinator (full-time): outreach efforts, program and policy needs
- Marine Monitoring Scientist (shared with EPA's National Coastal Assessment Program): development of marine monitoring efforts and coastal indicator development.

Central staff work closely with host agency staff (at Massachusetts Coastal Zone Management) as well as other state agencies on a number of state program policy and technical program efforts. The position within state government has allowed significant program leverage to influence state coastal programs. Central staff also provide a resource of technical and policy assistance to regional staff.

**Regional Staff.** Regional staff are currently hosted by two RPAs and two non-profit organizations, with one position currently vacant. Over time, programmatic and financial restrictions have caused MBP to explore hosts other than RPAs for regional technical services and effective relationships have been developed with two local non-profit organizations. The regional technical assistants work with local community officials and other organizations within their region on CCMP implementation projects, with technical assistance from MBP central staff and other agencies and groups as needed. The independence that arises from being located outside of state government has allowed the regional staff additional flexibility in providing technical assistance and solutions, as well

as searches for funding sources, while connections to the larger MBP program adds technical strength and broader foundation to their efforts. The regional staff have formed local governance committees with representatives of local governments and with interested citizens to encourage discussions and regional solutions among local communities. The form that these committees take is determined by community need.

The Metro Boston position is currently vacant. This position has always been challenging to implement since the needs of Boston dominate the regional needs. MBP is currently evaluating alternatives to provide better technical services to this region (see discussion in the New and Emerging Challenges section).

## POST-CCMP FUNDING SUMMARY SINCE 2001

Over the past three years the total funding from EPA to the Massachusetts Bays NEP has added up to \$1,356,685.

The funds were used entirely for base program support, primarily for staff salaries. The large geographic area of the NEP and the decentralized post-CCMP structure of the program which uses regionally-situated staff for the delivery of community-based implementation assistance has resulted in almost 89% of the available funding being used to support staff salaries.

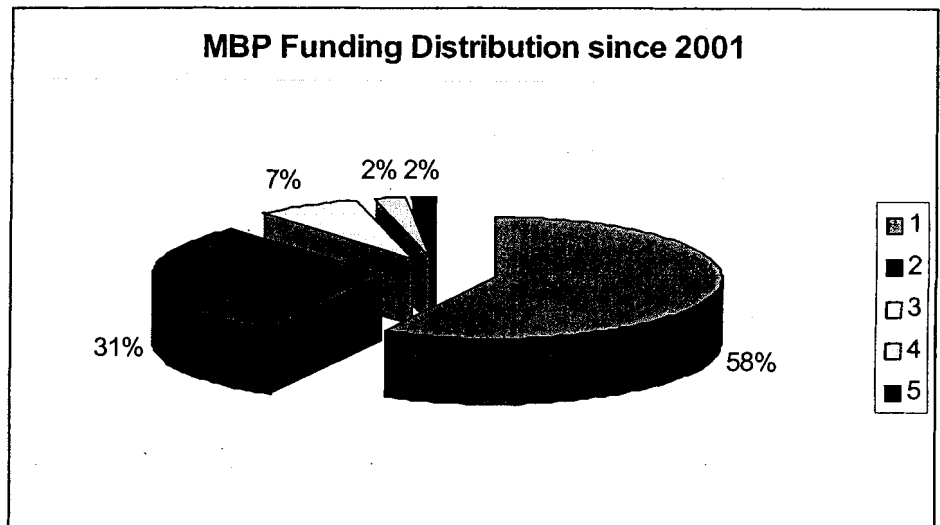
1 - 58% of the total has been used to support central program staff, which has varied from three to five positions, while  
2 - 30.7% has been used to support regional staff (for between four and five positions, with an additional amount of state cash match, \$75,000/year or \$225,000 over three

years, also being used in its entirety to support these regional staff salaries).

3 - 7.3% has been devoted to the cost of office operations and activities (printing, postage, etc), while

4 - 2.2% has been spent on program travel.

5 - Finally, in the most recent budget, 1.8% of the three year total was set aside at the decision of the Management Committee to support the start up of a non-profit association to support program implementation activities.



The state assesses an indirect charge on central staff salaries and for all regional staff contracts, which has varied from 21 to 25% approximately. The indirect costs have been included here in the calculation of salary costs, although in reality these charges contribute to covering some state costs for hosting the NEP program (office space, computers, grant management, etc). The true cost of hosting the program is nearly impossible to be able to calculate separately. A pie chart is included to show the relative breakdown in federal fund use.

Roughly the same proportional use of funding is expected for the foreseeable future. Additional program funds for implementation come from leveraged money, primarily from grants.



# Massachusetts Bays Estuary Association

## *"The Voice of the Bays"*

### **Mission**

The Massachusetts Bays Estuary Association supports the protection and restoration of Massachusetts and Cape Cod Bays through the public education, research and coastal habitat initiatives of the Massachusetts Bays' National Estuary Program. These initiatives are guided by, and directed at implementing, the actions of the Comprehensive Conservation and Management Plan (CCMP), the blueprint for protecting and restoring the coastal health and heritage of the Bays.

### **Who We Are**

The Massachusetts Bays Association (MBEA) is a coalition of regional conservation leaders, educators, scientists and advocates, who all believe that the best way to protect our coastal resources is by fostering stewardship at all levels of government and business, then transforming that support into effective habitat protection for the Massachusetts and Cape Cod Bays.

### **What We Do**

The MBEA gives a voice to the Bays through education, outreach, and advocacy programs that raise awareness of the resource and its threats.

The MBEA works in support of the community efforts of the Massachusetts Bays Estuary Program (Mass Bays), its partners and the public. We promote individual stewardship and ensure the effective use of science, research and management innovations to protect and restore Massachusetts and Cape Cod Bays. In cooperation with our legislative representatives, we advocate for greater statewide and national support for the region.

The MBEA creates creative partnerships in the public and private sectors to accomplish projects and programs that enhance and sustain grassroots environmental initiatives. The value of this work translates directly into local economies that rely on the natural resources of the Bays.

### **Our Partners**

MBEA works with the United States Environmental Protection Agency through its National Estuaries Program (NEP). Mass Bays is the NEP partner for Massachusetts and its constituent organizations include:

- The Eight Towns and the Bay Committee
- Salem Sound Coastwatch
- The Metro Boston Local Governance Committee (LGC)
- The North & South Rivers Watershed Association
- The Cape Cod Coastal Resources Committee

Together, these groups provide for the conservation, restoration and preservation of over [ENTER NUMBER HERE] acres of open space and the natural resources of the [ENTER NUMBER HERE] communities that depend on the Massachusetts Bay -- from Salisbury to Provincetown.