

Pleasant Bay Resource Management Plan & Update Implementation Summary

The following tables summarize implementation accomplishments and recommended actions associated with the *Pleasant Bay Resource Management Plan* and *2003 Plan Update*. Numbered recommendations (e.g. 9.4.3) represent recommendations from the original resource management plan. A new recommendation found in the update is represented by the symbol “⊛”. Accomplishments are noted with the symbol “✓” if they are completed or “➤” if they are ongoing.

WATER QUALITY MONITORING

RECOMMENDATION	STATUS
9.4.3 Implement a Bay-wide monitoring program	<ul style="list-style-type: none"> ✓ A comprehensive Bay-wide monitoring program was designed. State approval of the quality assurance project plan was obtained. Funding comes from a combination of grants and annual appropriations. ✓ More than 150 volunteers have been recruited and trained by the Alliance and affiliated local groups. ✓ Three consecutive years of monitoring have been completed. ✓ Interim water quality reports were issued for the 2000 and 2001 seasons. ➤ Five new monitoring stations were added in 2002 to prepare for modeling through the <i>Southeastern Massachusetts Embayment Restoration Program</i>. ➤ Freshwater inflows monitored in 2002.
9.4.4 Study water quality issues	<ul style="list-style-type: none"> ➤ A comprehensive water quality analysis and report will be conducted after a minimum of three to five years of data has been collected. ➤ Additional analysis of water quality issues may be pursued pending the outcome of the comprehensive analysis.

ECOLOGICAL INVENTORY AND HABITAT PROTECTION

RECOMMENDATION	STATUS
9.2.1 Ecological Inventory & Monitoring Program	<ul style="list-style-type: none"> ✓ Intertidal Habitat and Sediment Assessment Study is underway ✓ An assessment of rare and endangered species and animal habitats around freshwater ponds in the ACEC is completed ➤ Undertake monitoring programs for intertidal and freshwater habitats.
9.2.2 Areas of Critical Marine Habitat (ACMH)	<ul style="list-style-type: none"> ✓ Ten ACMH identified in the plan were kept free of moorings, structures and aquaculture cultivation. ➤ The ACMH will be evaluated based on the results of the intertidal habitat and sediment assessment study. Changes in the designation of ACMH, or management policies for those areas may be recommended.
9.2.3 Species/habitat protection program	<ul style="list-style-type: none"> ➤ Continue monitoring of species such as eelgrass and horseshoe crabs. ➤ Evaluate use of wildlife corridor overlay districts. ⊛ Inventory undeveloped parcels and prioritize for habitat value.

PROTECTION OF WETLANDS

RECOMMENDATION	STATUS
9.6.1 Strengthen wetlands regulations and review procedures	<ul style="list-style-type: none"> ✓ Developed guidelines for docks and piers, and walkways and stairways that have been implemented through changes in local regulations. ➤ Evaluate additional changes to strengthen regulations, encompassing definitions, performance standards, and enlarging the area of jurisdiction within the ACEC.
9.6.3 Study barrier beach and marsh system	<ul style="list-style-type: none"> ➤ Study of barrier beach and marsh systems as outlined in the resource management plan.
9.6.4 Relieve restricted wetlands	<ul style="list-style-type: none"> ✓ Chatham conducted flushing analyses of Muddy & Frost Fish Creeks. ➤ Evaluate options for increasing tidal flow in Muddy Creek
⊛ Public education	<ul style="list-style-type: none"> ➤ Develop a public education campaign aimed at homeowners and contractors working in wetland resource areas.

WATERSHED PLANNING

RECOMMENDATION	STATUS
9.4.1 Watershed management program 9.4.2 Evaluate changes in land use regulations	<ul style="list-style-type: none"> ✓ Completed a build out analysis for the Pleasant Bay watershed showing a potential for a 28% increase in the number of single-family homes. ➤ Evaluate re-development potential within the watershed. ➤ Evaluate possible changes in land use, health or conservation regulations that could be recommended to the towns for sub-watersheds that have the greatest development potential ➤ Develop a comprehensive list of direct discharges into the Bay, and locate them using GIS mapping ➤ Develop a comprehensive review of applicable zoning regulations ➤ Prioritize vacant land parcels for acquisition or protection
9.4.1 cont.'d Promote public awareness of the impacts of nitrogen on the Bay	<ul style="list-style-type: none"> ✓ Developed the <i>Citizen's Guide to Estuarine Protection</i>, a proto-type for public education on the impacts of nitrogen in the Bay. ✓ Published a <i>Citizen's Guide</i> for the Arey's Pond watershed ➤ Develop <i>Citizen's Guides</i> for The River Complex in Orleans and Muddy Creek in Chatham and Harwich. ➤ Publish <i>Citizen's Guides</i> for all sub-watersheds.
✪ Promote modeling of the entire Bay through the Southeastern Massachusetts Embayment Restoration Program	<ul style="list-style-type: none"> ✓ Promote the importance of modeling of the entire Bay system to DEP/SMASST ✓ Identified and addressed data needs for modeling ➤ Continue data collection and secure local matching funds for modeling ➤ Continue to work toward completion of modeling by 2006

FISHERIES MANAGEMENT

RECOMMENDATION	STATUS
10.2.1 Refine/coordinate shellfish regulations	➤ On-going locally.
10.2.2 Fisheries assessment	<ul style="list-style-type: none"> ➤ Focus is on monitoring the health of shellfish habitat. Intertidal study is the first step. ➤ Conduct fisheries assessment as proposed in the plan.
10.2.3 Enhance Bay-wide propagation	➤ On-going locally
10.3.1 Aquaculture assessment and guidelines	➤ Town of Orleans, in cooperation with Barnstable County and the MA Division of Marine Fisheries, is developing best management practices. Site assessment will be developed pending completion of intertidal study.
✦ Monitor trends in disease and invasive species	➤ The Alliance should support the towns in their efforts to control QPX, and the negative impacts of invasive species on the vitality of the wild shellfisheries

PUBLIC ACCESS AND HISTORIC RESOURCES

RECOMMENDATION	STATUS
13.4.1 Preserve endangered public access points 13.4.2 Establish new access points 13.4.2 Improve public access support facilities	✓ Conducted Shoreline Access Inventory Project, which catalogued access points and shoreline accessibility. This provides a basis for future access planning.
13.4.4 Public access information campaign	<ul style="list-style-type: none"> ✓ Obtained funds for interpretive displays. ➤ Pursuing coordinated sign program
13.6.1 Town landing management guidelines	<ul style="list-style-type: none"> ✓ Underway locally ➤ Continue to support management regulations and policies that are consistent with the plan
13.6.2 Town landing improvements plan	<ul style="list-style-type: none"> ✓ Underway locally ➤ Continue to support improvements that are consistent with the plan
13.8.1 Protect public views	✓ Addressed through Local Comp. Plans
13.8.2 Moderate noise levels on the Bay	✓ Prohibition of Personal Watercraft removed a major source of noise complaints
✦ Inventory archeological resources and develop a plan to protect them	➤ Work with local historians and historical commissions to protect historical resources.

SHORELINE CHANGE & REGULATION OF STRUCTURES

RECOMMENDATION	STATUS
11.2.1 Revise the moratorium on docks and piers 11.2.2 Develop performance standards for permitting new docks and piers 11.2.3 Develop design criteria for permitting new docks and piers	<ul style="list-style-type: none"> ✓ Developed <i>Guidelines and Performance Standards for Docks and Piers in Pleasant Bay</i> that were then used by the Towns to change local bylaws and regulations. ✓ The State approved the guidelines and will rely on them in the evaluation of Chapter 91 licenses within the ACEC. ➤ The Alliance is evaluating the need for separate guidelines for the Muddy Creek shoreline.
11.2.4 Develop performance standards and design criteria for marsh walkways and related structures	<ul style="list-style-type: none"> ✓ Developed <i>Guidelines for Private Walkways and Stairways in Fresh and Marine Resource Areas of Pleasant Bay</i> that are being used by Towns in revising local regulations
11.2.1 Conduct a resource assessment of the shoreline of freshwater ponds in the ACEC and develop guidelines for permitting structures in those areas.	<ul style="list-style-type: none"> ✓ A freshwater resource assessment was completed (see Ch. 4). ➤ Use assessment to develop guidelines for permitting structures around freshwater bodies within the ACEC.
11.2.5 Monitor cumulative impacts of shoreline Structures 11.4.1 Develop resource-based framework for erosion control structures 11.4.2 Monitor shoreline erosion rates 11.4.3 Encourage alternatives to use of hard erosion control structures 11.4.4 Develop performance standards and design criteria for erosion control structures 9.6.3 Increase protections for barrier beach and marsh system	<ul style="list-style-type: none"> ➤ Conducted an aerial fly-over in 2000; to be repeated in 2005 ➤ Develop best management practices for shoreline protection in high, moderate and low energy areas. ➤ Conduct a shoreline change study to establish a baseline shoreline measurement and assess loss of sediments due to natural and man made features. ➤ Identify and prioritize areas for accepting dredge material for shoreline stabilization, habitat restoration and protection of public access.

WATERWAYS SAFETY & NAVIGATION

RECOMMENDATION	STATUS
12.2.1 Enhance waterways regulations	<ul style="list-style-type: none"> ➤ Evaluate public education measures and changes in regulations to promote safety regarding recreational activities including but not limited to: kayaking, canoeing, para-sailing, kite-boarding, tubing, water skiing, and swimming.
12.2.2 No Discharge Area designation	<ul style="list-style-type: none"> ✓ Application to EPA has been developed to designate the Bay a NDA. ✓ Options for enhancing pump out capacity in the Bay are being evaluated. ➤ Submit the application pending development of additional pump out capacity in the Bay.
12.2.3 Assess boating impacts on environment 12.2.4 Boat operation and maintenance	<ul style="list-style-type: none"> ✓ Support application of best management practices for boat operation & maintenance outlined in the Massachusetts Clean Marina Guide. ➤ Quantify the number and size of boats using the Bay.
12.4.1 Bay-wide patrol 12.4.2 Enhance navigational aids 12.4.3 Boater education campaign	<ul style="list-style-type: none"> ✓ Coordinated bay-wide patrol established in 1997. ✓ Navigational aids have increased in number in many areas. ➤ Address the need for speed controls at the entrance to Bassing Harbor and the inappropriate placement of lobster pots in or near navigational channels.
12.6.1 Prohibit Personal Watercraft (PWC) rentals 12.6.2 PWC management program	<ul style="list-style-type: none"> ✓ Alliance communities approved bylaws to prohibit the operation of PWC in waters adjacent to the Cape Cod National Seashore, including the Bay.
12.8.1 Mooring free areas 12.8.2 Mooring program	<ul style="list-style-type: none"> ✓ The number of permits is limited at all existing mooring fields. ➤ Encourage Harbormasters to promote mooring practices & equipment to reduce resource impacts. Evaluate a potential demonstration project using alternate mooring technologies & techniques.
12.10.2 Maintenance dredging 12.10.3 Dredged materials disposal 12.10.1 Improvement dredging	<ul style="list-style-type: none"> ➤ Allow maintenance dredging provided it meets local, state and federal permitting requirements. ➤ Evaluate the need for, impacts from, & feasibility of improvement dredging in areas where shoaling is limiting access through important public waterways.

IMPLEMENTATION ISSUES

RECOMMENDATION	STATUS
Seek approval of the plan by Town Meetings and the EOEA Secretary.	<ul style="list-style-type: none"> ✓ Plan approved by Town Meetings in Orleans, Chatham, and Harwich in 1998, and by EOEA in 1999. ➤ Seek Town Meeting approval of the plan update, followed by submission to the EOEA Secretary for approval.
Form an implementing structure for the plan.	<ul style="list-style-type: none"> ✓ Memorandum of Agreement forming the Alliance is executed in 1998.
✱ Budgeting and grantwriting	<ul style="list-style-type: none"> ✓ Alliance has obtained \$106,500 in non-town funds since 1998. ➤ Continue to seek non-town grant funds for programs and studies.
✱ Project management and work groups	<ul style="list-style-type: none"> ➤ Continue formation of work groups that combine Steering Committee and Technical Resource Committee participation with representatives of relevant agencies and organizations.
✱ Public outreach and education	<ul style="list-style-type: none"> ➤ Developed Alliance website. ➤ Provide presentations to local and regional organizations. ➤ Seek media coverage of issues, reports and projects. ➤ Develop speaker's bureau. ➤ Sponsor issue forums on selected topics.