

## **Section IV. Resource Management Issues and Recommendations**

### **Section Overview**

Broadly stated, the goal of the Pleasant Bay Resource Management Plan is to sustain the health and productivity of the Bay's eco-system, and to encourage a level of human uses that supports that outcome. The previous two sections of the plan describe trends in the condition of the Bay's natural resources, and in the human uses of the Bay, and land surrounding it, that influence resource conditions. This section discusses the management issues that emanate from current conditions and trends, and recommends strategies and actions for achieving the plan's goal.

Overall the Bay's resources are healthy and productive despite decades of land development and growth in use of the Bay. However, indications of stress on resource conditions, and of on-going resource degradation, are emerging:

- The extent of current bacteriological testing indicates that water quality in the Bay is high, with isolated areas of concern. However, there is insufficient baseline data on the full range of water quality indicators, and no system is in place for monitoring long-term trends in water quality. Moreover, water quality is threatened by intensifying land uses within the watershed, and boating activity in the Bay.
- Wetland resources within the ACEC have been lost over the past three decades, with associated losses in the critical environmental functions they serve. Existing wetland resources are further threatened by inadequately-sized culverts, encroaching land uses, and a potential proliferation of docks and erosion control structures.
- The Bay's primary shellfish and finfish species are experiencing sustained declines in reported harvests. Pollution from land run-off, leachate, fertilizers and pesticides pose threats to the food supplies needed for species productivity. In addition, several terrestrial species of animals and plants are threatened to the point of displacement from the eco-system. There is no program in place to inventory or monitor trends in these resources, or the impacts of sustained human activity on their vitality and productivity.

These resource trends are compounded by intensifying human uses and activities which contribute to resource conditions in many ways:

- Land development in the Bay's watershed continues at a fast pace. Under current zoning, half of the land in the Bay's watershed could be developed for residential use. Yet septic systems, fertilizers, and storm run-off generated from land uses in the watershed contribute nutrients into the Bay. Only four percent of land in the watershed is protected as open space, and there is little regulatory provision for increasing the amount of protected land.

- Along the shoreline of the Bay, there is potential for growth in the development of docks and erosion control structures. These structures pose threats to shellfish resources, beach vitality, wetlands, vegetation, and water quality.
- Boating activity in the Bay is on the rise, resulting in more frequent conflicts among vessels, and between boaters and other users of the Bay. Impacts on natural resources caused by boating or boating facilities include discharge of sewage, petroleum emissions and discharges from motors, and bottom scouring from propellers and moorings, among others.
- Recreational and commercial shellfishing activity continues to be high despite declines in reported harvests, and encompasses a broader number of species. Resources devoted to research, management and propagation of wild shellfish stocks are perceived to be inadequate. Also, there is a lack of scientific data for towns to rely on in making decisions concerning private shellfish aquaculture grants in the Bay.
- Demand for access to the Bay's shoreline by residents and visitors is increasing. The limited number of existing public access points are facing considerable stresses from overuse during the peak season. Additional conflicts are arising between shoreline property owners and the public over lateral shoreline access and the use of shoreline structures.

The awareness of these conflicts confirms the need for strategies and actions to manage the Bay's resources, and the uses and activities that influence resource conditions. In developing the plan, it was necessary to focus on the conflicts which pose the greatest threats to resources, and which involve the most intensive uses of the Bay and surrounding land. The process of identifying management issues was based on technical research and analysis, as well as extensive community input. Through this process a series of management questions arose, each of which is addressed in the following five chapters:

*Chapter 9:* What steps are necessary to sustaining the Bay's biodiversity?

*Chapter 10:* How should the Bay's fisheries resources be managed?

*Chapter 11:* What is an appropriate framework for regulating shoreline structures in the Bay?

*Chapter 12:* How should the environmental and safety impacts from boating be addressed?

*Chapter 13:* How can opportunities for the public's use and enjoyment of the Bay's resources be enhanced?

The following chapters explore these questions, and offer management solutions to address them. Many of the recommendations in these chapters call for immediate actions to increase enforcement of existing regulations, or to make changes in regulations. Others specify needs for further scientific research, monitoring, and evaluation of conditions. Still others focus on the need to increase public awareness of issues, and of how changes in personal actions can help achieve the goals of the plan. Taken together, these recommendations provide a comprehensive blueprint for action to sustain the natural resources, and our enjoyment, of Pleasant Bay. A framework for implementing this blueprint is described in Section V.