

WHAT IS THE NEW HAMPSHIRE ESTUARIES PROJECT (NHEP)?

The NHEP is part of the U.S. Environmental Protection Agency's (EPA's) National Estuary Program, which is a collaborative local/state/federal program established under the Clean Water Act with the goal of promoting the protection and enhancement of nationally significant estuarine resources. The NHEP receives its funding from the EPA and is administered by the University of New Hampshire. The mission of the NHEP is to protect, enhance, and monitor the environmental quality of the state's estuaries.

WHAT IS THE NHEP COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN?

Approved in 2001 and updated in 2005, the NHEP Comprehensive Conservation and Management Plan is an approach to protect and enhance the state's estuaries. Spanning three years, the collaborative process to develop the watershed plan involved the work of researchers, planners, resource managers, concerned citizens and other coastal stakeholders. The resulting plan describes actions to be undertaken throughout New Hampshire's coastal watershed to achieve and sustain healthy estuarine systems. The Management Plan identifies priority actions in five areas: **1) Water Quality, 2) Land Use, Development, and Habitat Protection, 3) Shellfish Resources, 4) Habitat Restoration, and 5) Public Outreach and Education**

WHAT IS THE NHEP STUDY AREA?

The NHEP study area covers the entire coastal watershed of New Hampshire, including all the freshwater tributaries that flow into the estuaries in the state. Forty-two communities are within the NHEP's area of focus. About 10 percent of the state's land area is in the coastal watershed, and approximately one-third of the state's population and businesses are located here. Although a portion of the watershed lies in Maine, currently the NHEP conducts its activities in the New Hampshire portion only.

HOW IS THE MANAGEMENT PLAN IMPLEMENTED?

The NHEP collaborates with partner organizations to identify Management Plan priorities each year. The NHEP either addresses these activities directly or awards grants to communities, conservation organizations, researchers, and government agencies to complete priority projects. From 2001 to 2006, the NHEP awarded approximately \$3.5 million to fund projects to improve, protect, or monitor the health of New Hampshire's estuaries. Projects have included:

- Wetlands inventories, habitat characterization studies, and land protection planning conducted by land trusts, communities, and conservation organizations
- Grants and training for municipal staff to map stormwater drainage systems and eliminate bacteria and other pollutants from stormwater discharges to rivers and estuaries
- Support to the state Shellfish Program to conduct pollution surveys and water quality testing to improve water quality and open additional areas for recreational shellfish harvest
- Soft-shell clam research in Hampton-Seabrook Harbor and oyster restoration projects in Great Bay
- Funding to municipalities and land trusts for transaction costs (surveys, deed research, etc.) necessary to complete land protection projects

In 2007, the NHEP is awarding approximately \$300,000 to support over a dozen different implementation projects.





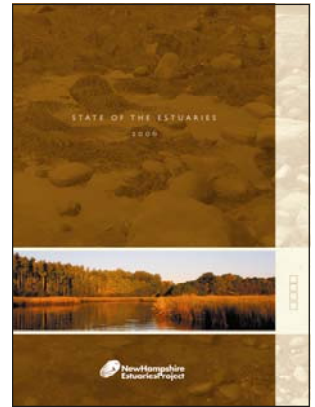
WHAT IS THE NHEP DOING TO MONITOR THE ENVIRONMENT?

To measure the effectiveness of Management Plan implementation and guide management decisions, the NHEP developed a Monitoring Plan that establishes environmental indicators of estuarine quality and outlines a strategy for communicating the status of those indicators to stakeholders. The NHEP tracks over 30 different environmental indicators of water quality, shellfish resources, land use, and critical species and habitats.

The NHEP's annual monitoring programs include monthly water quality sampling at the major tributaries to Great Bay and Little Harbor; testing shellfish tissue for toxic contaminants; operation and maintenance of six datasondes located throughout the estuaries; nutrient monitoring in Great Bay; surveys of eelgrass cover; and assessments of oyster diseases. Every three to five years, the NHEP collects new data on impervious surfaces and conservation lands. In addition to managing these data collection efforts, the NHEP compiles and analyzes data from other agencies and organizations to create comprehensive reports on estuarine health. The NHEP spends about \$120,000 per year on its data collection, analysis, and reporting activities.

STATE OF THE ESTUARIES REPORTS

Every three years, the NHEP produces a State of the Estuaries Report that examines environmental indicators of estuarine health, such as bacteria levels, nitrogen concentrations, toxic contaminant levels, abundance of shellfish, and land use in the coastal watershed. By examining long-term data sets compiled from a variety of organizations, the report describes the current status of New Hampshire's estuaries and suggests trends for the future. The report is designed to provide readers with an accurate understanding of environmental trends for New Hampshire's estuarine resources so that they may make informed land use and resource management decisions. The 2006 report revealed that estuaries in the state are in generally good condition, but are under threat largely due to increased development and increasing nitrogen loads.



HOW IS THE NHEP ASSISTING NEW HAMPSHIRE COMMUNITIES?

The NHEP provides information and technical assistance to 42 New Hampshire communities. Data and town-scale maps of impervious surfaces, stream buffers, and conservation areas are provided to communities to assist their natural resource protection efforts. The NHEP provides customized presentations and assistance to municipal boards on buffer protection options that improve water quality.

The NHEP is part of the Natural Resources Outreach Coalition (NROC) that works intensively with two or three new communities each year to identify natural resource protection priorities and implement community-based plans to address those priorities. To date, 20 communities have benefited from NROC assistance.

The latest service provided to communities by the NHEP is the Community Technical Assistance Program. Established in 2005, this program provides town boards with access to professional consultants that help develop specific, localized regulatory and non-regulatory approaches to natural resources protection. Communities receive customized technical assistance with topics including stormwater management, land conservation planning, and buffer protections. To date, 15 communities have benefited from the program. Additional projects in 2008 are underway.

FOR MORE INFORMATION

New Hampshire Estuaries Project publications, grant-funded project reports, and other resources and information are available on the NHEP website: www.nhep.unh.edu

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