



3-2007

NHEP Buffer Outreach 2005 - 2006

Jodi Castallo

New Hampshire Estuaries Project

Follow this and additional works at: <https://scholars.unh.edu/prep>



Part of the [Marine Biology Commons](#)

Recommended Citation

Castallo, Jodi, "NHEP Buffer Outreach 2005 - 2006" (2007). *PREP Reports & Publications*. 274.
<https://scholars.unh.edu/prep/274>

This Report is brought to you for free and open access by the Institute for the Study of Earth, Oceans, and Space (EOS) at University of New Hampshire Scholars' Repository. It has been accepted for inclusion in PREP Reports & Publications by an authorized administrator of University of New Hampshire Scholars' Repository. For more information, please contact Scholarly.Communication@unh.edu.

NHEP Buffer Outreach 2005 - 2006

Final Report

**Submitted by
Jodi Castallo, Project Coordinator
New Hampshire Estuaries Project**

March 2007

The project was funded by the New Hampshire Estuaries Project as authorized by the U.S. Environmental Protection Agency's National Estuary Program.



Table of Contents

Executive Summary	Page 3
Project Goals and Objectives	Page 3
Activities	Page 3
Plan for 2007	Page 5

Executive Summary

The purpose of the buffer outreach project is to provide education, assistance, and tools to the coastal watershed towns so that they will understand the importance of buffers for water quality and quantity, the need to enhance their own town's buffer protections, and how to move forward with enacting new buffer protection measures. These activities helped implement several Action Plans from the Management Plan.

NHEP staff developed a buffer presentation, a marketing brochure for the presentation, and a webpage devoted to buffer information. One presentation was given at a public hearing in New Durham. NHEP funded several buffer related projects including UNH Complex System Research Center's buffer characterization and buffer mapper, Southern New Hampshire Planning Commission's buffer outreach program in Candia and Deerfield, and buffer ordinance development in New Durham through the Community Technical Assistance Program.

Project Goals and Objectives

The purpose of the buffer outreach project is to provide education, assistance, and tools to the coastal watershed towns so that they will understand the importance of buffers for water quality and quantity, the need to enhance their own town's buffer protections, and how to move forward with enacting new buffer protection measures. Action Plans from the Management Plan that address buffer protections include: LND-2, LND-8A, LND-14, LND-15, LND-20, LND-25, LND-25D, and LND-34.

Activities

The NHEP conducted or funding a number of activities related to improving municipal buffer protections.

Buffer Characterization Project

Dr. Fay Rubin of the Complex Systems Research Center (CSRC) at the University of New Hampshire conducted a buffer characterization study for the coastal watershed. The study assessed 2nd order and higher streams within the Great Bay Watershed and Hampton-Seabrook Harbor Watershed of coastal New Hampshire. Existing remote sensing and GIS data was used to map a suite of anthropogenic factors, including land use (1998), land cover, impervious surface data from 1990, 2000, and 2005, conservation lands, and transportation infrastructure, within 150ft and 300ft buffers around each stream segment. These factors were analyzed to produce a categorical indicator representing the status of each buffer. There are four categories ranging from intact to altered. The resulting data is presented on a series of town-based maps that is being distributed to towns. The final report is available at -

http://www.nhep.unh.edu/resources/pdf/stream_buffer_characterization-unh-06.pdf.

Town-by-town maps can be viewed/downloaded from -

<http://www.granit.sr.unh.edu/projects/maprep/index.html>.

Buffer Protection Presentation

A buffer presentation for towns was developed by the NHEP. The presentation is geared for town boards (planning board and conservation commissions, in particular) although

other groups such as watershed organizations would be appropriate audiences. The presentation is customized for each town and includes town data from the buffer characterization study and the impervious surface assessments. The first part of the presentation gives an overview of what buffers are, why they are important, and some information about buffer widths. The second part of the presentation involves the audience in assessing buffer characteristics and buffer protections in their town. This section asks them questions so that they can start to assess what level of protection they currently have for buffers in town, and then using that information what they might want to do to further protect or enhance their buffer protection. The last part of the presentation gives them some examples of what other towns have done to protect their buffers - everything from land protection to ordinance development. The presentation is made to be very flexible according to the town's need at a certain point in time. If they would just like some basic information or education, a shorter presentation can be offered. If they would like more of a workshop type event where they really start to make some progress towards planning for future buffer protection, this can be accommodated also.

To help promote the presentation and assistance that the NHEP can offer, a brochure was developed that gives basic information about buffers and what assistance NHEP can provide. The brochure can be downloaded at-

http://www.nhep.unh.edu/resources/pdf/buffers_protecting_water-1p-nhep-06.pdf.

The brochures were sent out to all of the conservation commission and planning board chairs. One presentation was given at a public hearing in New Durham to help provide educational information during the development of a buffer ordinance. Several presentations are already scheduled for 2007. The presentation is available through the Natural Resources Outreach Coalition and to NHEP partner organizations for their buffer outreach activities.

Buffer Information Web Page

As an additional educational tool, the NHEP developed a separate web page for buffers on the NHEP site. The web page (<http://www.nhep.unh.edu/resources/buffers.htm>) includes information about buffers, NHEP assistance available to towns, and links to other useful information such as the Buffer Handbook, buffer fact sheets produced by the Connecticut River Joint Commission, and recent case studies that demonstrate what towns have done to protect buffers.

GRANIT Buffer Data Layer/Mapper

This project provides additional GIS buffer information to towns. The GIS component is a part of the NH GRANIT Data Mapper. NHEP contracted with UNH Complex Systems Research Center to add a specific buffer mapping tool. The buffer component allows towns to choose different buffer widths ranging from 25ft to 300ft to be mapped on any of the underlying base maps available through GRANIT. The program also calculates the total acreage contained in the buffer. This tool allows a town to visualize what different types of buffer protection may mean for the town and property owners. The tool is available on the GRANIT website- <http://mapper.granit.unh.edu/viewer.jsp>.

Community Buffer Protection Assistance

As a follow up to the development of the GRANIT buffer mapping tool, the NHEP funded both Rockingham Planning Commission and Strafford Regional Planning Commission to assist towns that are ready to move forward with improved buffer protection ordinances, practices, or outreach. The projects will be completed in 2007.

Southern New Hampshire Planning Commission Buffer Project

The towns of Candia and Deerfield worked with the Southern New Hampshire Planning Commission to develop and implement land use regulations to protect the remaining undisturbed natural shoreline buffers along the Lamprey and North Branch Rivers (2nd order or higher streams and tributaries) and other surface waters within these communities. The project was approached in two overall steps. Step one involved preparing an inventory, delineation and map of the remaining undisturbed natural vegetated buffers in both communities. Following completion of the inventory and mapping results, step two of the project consisted of a thorough analysis of both towns' existing land use regulations primarily focusing on setbacks, buffers and wetlands. Three major shoreland protection options were identified and evaluated. The preferred option consisted of improving the towns' existing regulations and educating town officials and town boards about the State's Comprehensive Shoreland Protection Act (CSPA) requirements and how/where these requirements apply within each town. The ordinances developed during this project are slated to be on the town meeting warrant for both Candia and Deerfield in March 2008. The final report can be viewed at- http://www.nhep.unh.edu/resources/pdf/shoreland_buffers_in-snhpc-07.pdf.

NHEP Community Technical Assistance Program: New Durham project

New Durham applied for and received a Community Technical Assistance Program grant for the development of a buffer ordinance. The buffer ordinance will be on the town warrant in March 2007. A copy of the ordinance is available at- http://www.newdurhamnh.us/Land_Use/Zoning_Ordinance/proposedwaterquality070206.pdf

Plans for 2007

The NHEP will deliver buffer presentations to planning boards, conservation commissions, and watershed organizations in 2007 as requested. Rockingham and Strafford Regional Planning Commissions will continue their work with several communities to use the available tools to evaluate and strengthen buffer protection. In addition, the NHEP will host a workshop with several partners including: Coastal Program, Great Bay National Estuarine Research Reserve, NH Department of Environmental Service, UNH Complex System Research Center, Strafford Regional Planning Commission, Rockingham County Planning Commission, and Southern New Hampshire Planning Commission. The focus of the workshop will be to give municipal officials a comprehensive view of the information and issues surrounding buffer protection.