

# **Wells National Estuarine Research Reserve Coastal Training Program Market Analysis and Needs Assessment Executive Summary**

## **Introduction**

The Wells National Estuarine Research Reserve (WNERR) promotes wise stewardship of coastal environments throughout the Gulf of Maine through education and outreach, research, stewardship, and resource management. The Wells Reserve is one of 26 National Estuarine Research Reserves protecting and managing a diversity of habitats representing different biogeographic regions of the United States. The National Estuarine Research Reserve System (NERRS) is a partnership between the federal National Oceanic and Atmospheric Administration (NOAA) and the states. Laudholm Trust, a nonprofit organization that was initially formed to protect historic Laudholm Farm, spearheaded the establishment of the Wells Reserve and is the Reserve's state partner.

In recognition of the important role that local and regional decision-makers play in determining the character of coastal areas, National Estuarine Research Reserves are currently developing Coastal Training Programs (CTP) to provide vital science based information and technology to decision-makers whose work impacts the coastal environment. To be effective, these educational efforts must match the needs of local and regional audiences.

In an effort to design the Coastal Training Program of the Wells Reserve to fit the needs of decision-makers in southern Maine, two important pieces of information were needed: First, an assessment of the type of training and outreach already available, and second, identification of training and information gaps. A Market Analysis and Needs Assessment were the tools used to collect, analyze, and evaluate the current status of decision-maker training in southern Maine.

This Market Analysis and Needs Assessment Report includes a description of currently available training and outreach services for coastal decision-makers in southern Maine, including those offered through Wells Reserve. The report documents the training and information needs identified from interviews and a survey of potential audience groups. Recommendations for training topics, target audiences, delivery methods and partnerships are presented. This report will be used to guide the development of the Coastal Training Program at Wells Reserve in order to meet the training and outreach needs of decision-makers in the southern Maine region.

## **Methods**

The Market Analysis and Needs Assessment for Wells Reserve used an integrated approach combining quantitative and qualitative research strategies. The process was sequential; results from the Market Analysis informed the direction and focus of the Needs Assessment. Qualitative open-ended interviews were used to gather input from training service providers, the Wells Reserve staff, and potential audience members. A quantitative written survey was used to gather additional input from a wider sample of potential audience members.

Representatives of the CTP Advisory Committee, Wells Reserve staff and consultants designed the Market Analysis and Needs Assessment protocols. The Advisory Committee provided regular feedback to evaluate and refine research strategies and to develop the Recommendations section of this report. The CTP Advisory Committee included representatives from the Maine State Planning Office/Maine Coastal Program, Southern Maine Regional Planning Commission, the University of Maine Cooperative Extension / Maine Sea Grant program, Laudholm Trust, the Reserve Manager and Education Coordinator.

**Market Analysis:** The CTP Advisory Committee decided which agencies, organizations, and individuals within these groups should be included in the market analysis. Twenty-four organizations and agencies were identified as providers of coastal decision-maker training and outreach services in the Southern Maine region. Interviews were chosen as the primary data collection strategy for the market analysis because they are open-ended and are a good method for gathering information in the state of Maine where there is a lot of informal training and outreach. Twenty-nine environmental, conservation, planning, and government training service providers, representing the twenty-four organizations and agencies, were interviewed. Interviews of the Wells Reserve staff provided the data for the organizational assessment of current training provided, Reserve mission and training capabilities. Categories and issues identified by the service providers and Wells Reserve staff were used to develop the Needs Assessment.

**Needs Assessment:** Two methods were used to conduct the Needs Assessment. The CTP Advisory Committee identified 16 community decision-makers from 14 towns for in-depth interviews. The interview questions were open-ended and focused on two major categories:

- Coastal issues facing the town and how they were addressed
- Comments on training and outreach gaps and needs

The second Needs Assessment method consisted of a survey mailed to 212 coastal decision-makers in southern Maine. Ninety-one usable surveys were returned for a response rate of 43%. Respondents represented a cross section of potential target audience members including town planners, code enforcement officers, land trust members, public works directors, resource managers, scientists and municipal officials.

## **Results**

**Market Analysis:** Six training categories surfaced during the service provider interviews:

- **Municipal, Planning and Regulatory**
- **Pollution, Runoff and Water Quality**
- **Land and Resource Conservation**
- **Coastal Issues**
- **Public Access**
- **Scientific Information**

Service Provider interviewees identified 58 potential *training topics* within the six categories listed above. Sixty-nine percent of the training topics identified fell into three categories: Pollution, Runoff and Water Quality (24%); Municipal, Planning & Regulatory (24%), and Land and Resource Conservation (21%).

The most highly recommended *target audience* for training and outreach was municipal officials. Nineteen (83%) of the twenty-four organizations/agencies interviewed recommended this audience, which includes Town Managers, Selectmen, Planners, Code Enforcement Officers, Planning Boards and Conservation Commissions.

Workshops, presentations or trainings were the most frequently cited *training delivery methods*. Field based/on-site workshops were considered by the majority of interviewees to be the most effective type of training. Expanding existing programs was the second-ranked delivery method. “Beginning with Habitat” and “Non-point source pollution Education for Municipal Officials” (NEMO) were specifically mentioned.

**Needs Assessment Interviews:** Training audience interviewees identified 52 *training topics*. Seventy-seven percent of the topics fell into the same three categories ranked as priority by the service providers in the Market Analysis: Municipal, Planning & Regulatory (27%); Land and Resource Conservation (27%) and Pollution, Runoff and Water Quality (23%). Examples of the most frequently cited topics under these categories were natural resource planning, development issues, zoning regulations, open space and habitat preservation, non-point source pollution. and watershed/river education and protection.

Interviewees identified municipal officials as the top *target audience*, mentioned by thirteen of the sixteen interviewees (81%). Within this category, planning boards, planners, and conservation commission members were most often cited.

Collaborating with other agencies or organizations was the most frequently recommended *training delivery method*. The two most commonly cited collaborations were with Southern Maine Regional Planning Commission and the Maine State Planning Office.

Of the interviewees who responded to the question of location and time, the most frequently cited comment was that the best way to guarantee attendance by municipal board, committee or council members is to present at their regularly scheduled meetings.

**Needs Assessment Survey:** Forty-eight percent of the survey respondents spend over 50% of their time doing work related to protection, management or monitoring of natural resources and the environment. The top three issues that survey respondents spend the most time dealing with were “land and habitat conservation,” “wetlands protection,” and “compliance with environmental/regulations/code enforcement.”

Survey respondents ranked the following four issues, from a list of 29, as the most important environmental and natural resource issues in southern Maine. These four issues were rated as *very important* by more than seventy-five percent of respondents.

- Conservation of wildlife habitat (83%)
- Balancing growth and economic development with quality of life, recreation agriculture, forestry, and wildlife habitats (80%)
- Conservation of wetlands, salt marshes and vernal pools (79%)
- Water quality in rivers, streams and ponds (76%)

The top ranking *training topics* that survey respondents wanted to learn more about were “Economic and tax implications of land conservation,” “Conservation of wetlands, marshes and vernal pools,” “Assessing cumulative impacts of planning decisions,” and “Use of Best Management Practices (BMP) for water quality protection.”

Five *training delivery methods* were rated “very helpful” by more than fifty percent of survey respondents. These were: GIS mapping of resource information (75%), Website dedicated to local issues (59%), Printed publication or fact sheet (55%), Research summaries for non-scientists (54%), Face-to face: presentation, workshop, conference (53%).

## **Recommendations**

These recommendations were developed by the WNERR staff and the CTP Advisory Committee using the findings from the Needs Assessment and Market Analysis. Recommendations for training topics, target audience and partnerships are summarized here.

### **Priority Training Themes**

During the initial period of CTP implementation the following priority themes will be the focus of training and outreach:

- **Land and Resource Conservation**
- **Pollution, Runoff and Water Quality**

Topics and training needs related to the Scientific Information category can be incorporated into these two categories. Training needs related to the Municipal, Planning and Regulatory category will be addressed through the partnerships described below.

### **Training Topics**

Potential training topics were determined by combining four sources of information:

1. Most frequently mentioned topic recommendations from the audience and service provider interviews.
2. The highest-ranking “coastal issues facing town” identified in the audience interviews.
3. Issues that ranked in the top four “most important issues” on the audience survey.
4. Issues that ranked in the top four “issues to learn more about” on the audience survey.

These combined results represent identified training needs and gaps. Nine potential training topics surfaced as the most important. These are listed below in priority order based on the results of the Market Analysis and Needs Assessment.

**Priority Training Topics for Wells Reserve Coastal Training Program**

- 1 Balancing growth and economic development with quality of life, recreation, agriculture, forestry and wildlife habitats
- 2 Assessing cumulative impacts of planning decisions on natural resources
- 3 Conservation of wildlife habitat
- 4 Conservation of wetlands, marshes and vernal pools
- 5 Economic and tax implications of land conservation
- 6 Water quality in rivers, streams, ponds
- 7 Use of Best Management Practices for water quality protection
- 8 Stormwater runoff, sediment, pesticides, fertilizers, impervious surface
- 9 Ecological concepts, and scientific fundamentals, information and resources

**Target Audiences**

Both the service provider and audience interviewees recommended municipal audiences as the highest priority. The written survey and interviews identified additional important groups as target audiences including land trusts, general public and state and federal employees. These groups will be the focus of CTP training effort during the initial stages of development.

**Partnerships**

Partnering with other agencies and organizations was highly recommended in the Market Analysis and will be an integral part of the Coastal Training Program. The CTP Advisory Committee decided on four primary partnerships for the initial phase of the program. Southern Maine Regional Planning Commission, Maine Coastal Program, and Maine Sea Grant are already represented on the Advisory Committee. An additional partnership is recommended with the Department of Environmental Protection, Non-point source Education for Municipal Officials, NEMO.

**Integration and Evaluation**

The fundamental goal of the Coastal Training Program – **To convey science-based natural resource information to decision-makers** – will be incorporated into research, stewardship and education projects at the Wells Reserve. The CTP Coordinator will work with project scientists to accomplish the outreach goals associated with research projects. CTP staff will collaborate with other Reserve staff to develop ways to incorporate training and outreach strategies into appropriate projects. Evaluation of individual training and outreach activities as well as evaluation of the Program as a whole will be a key component of the Coastal Training Program.