

# NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2014 PROGRESS REPORT

Quarter: (circle one)      2014 1<sup>st</sup>      2014 2<sup>nd</sup>      2014 3<sup>rd</sup>      2014 4<sup>th</sup>

Grant Program, Number and Title: NALCC 2012-03 Integrating Science into Policy: Local Adaptation for Marsh Migration

Organization: Maine Department of Inland Fisheries and Wildlife

Project Leader: Robert Stratton / Bethany Atkins

Abstract: Please provide a short (1-2 paragraphs) abstract that addresses EACH of the following: the objectives of your project, accomplishments to date, future plans and timelines with an estimate for when the project will be completed.

The goals of this project are to engage communities in integrating science into local policy and to facilitate the development of adaptation strategies that will protect the ability of tidal marshes to migrate and adapt to sea level rise and increased storm surge anticipated under changing climatic conditions. The primary objectives, accomplishments, and future plans for this project are as follows:

- *Objective 1: Complete spatial datasets that show areas likely to support future marsh habitat under various sea level rise scenarios.* This objective is complete. Project partners are now identifying an approach to widely distribute the spatial datasets.
- *Objective 2: Develop outreach messages, materials, programs, and tools that increase visibility of the potential impacts of sea level rise on marsh systems and advance progress towards resiliency and adaptation in a larger number of Maine coastal towns.* The project team has presented information at more than 20 public meetings, community forums and statewide meetings. Additionally, a day-long workshop to build awareness among the conservation community was held in April. Project partners are now working to develop outreach materials and to complete case studies that highlight the locally grown adaptation approaches developed in each of the 6 partner towns described in Objective 3.

Over the past two quarters project partners have focused on the development of MAST (Marsh Adaptation to Sea Level Rise Tool), a decision support tool that is intended to inform the prioritization of local land protection activities in the face of rising sea levels. Most land use, conservation, and management decisions are made based on today's coastline and don't take into account future locations and conditions of coastal marsh. MAST is designed to help assess the relative ecosystem values of coastal marshes in the future and to help towns, land trusts, landowners, and developers in making more forward thinking, proactive decisions about land use and conservation. The tool was developed and beta tested over the last two quarters and will undergo additional testing and refinement this coming quarter.

- *Objective 3: Engage three to five partner communities to facilitate the identification of adaptation needs and local action necessary to accommodate future marsh migration through strategic conservation planning, land use policy, and local conservation investment.* The project team continues to work

directly with Bath, Bowdoinham, Georgetown, Phippsburg, Scarborough, and Topsham. Each community is at a different stage in the local planning process and each is pursuing a different approach to determining an adaptive planning strategy that best meshes with identified public concerns. Work with each town will be ongoing until the end of the project period and will likely extend well into the future as towns continue to address coastal planning issues.

Were planned goals/objectives achieved last quarter?

Yes, with some activities ongoing and extending into the fourth quarter.

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

The planned and actual accomplishments for each project objective include:

- *Objective 1:* Spatial datasets were completed in past quarters. Project partners are now establishing approaches to widely distribute this data, including development of an online map viewer and incorporation into the state's Beginning with Habitat program.
- *Objective 2:* Much of the work over the past two quarters focused on development and testing of MAST. During the second quarter, a contractor was hired to develop the MAST software and Delphi survey and to complete a beta test of the tool using parcels identified in the town of Scarborough. During the third quarter we had planned to run a second test of MAST in a more applied scenario working with the Scarborough Land Trust and Town of Scarborough, but have decided to instead work with the Kennebec Estuary Land Trust (KELT) to complete this task. KELT recently completed a strategic conservation plan focused on coastal land conservation priorities and four of the six pilot communities for this project are located with the KELT service area.

Preparation for the second test run is currently underway. Feedback collected during the beta test has been incorporated and the survey mechanism aspect of the tool improved. Project partners are now working with KELT to identify priority parcels to evaluate through MAST. The second run of MAST should be completed by mid-November.

Additionally, over the past quarter a 1-page description of MAST was completed (see draft attached). This document is intended to be an easy to understand introduction to the tool. It will be used for general outreach purposes as we bring MAST to wider audiences. Significant effort was also made on a more detailed document that outlines opportunities for improvement and future directions. Project partners learned a significant amount from the beta test of MAST and we expect to learn more from the second run with KELT. This document outlines future opportunities for further improving MAST and making it an even more effective and useful decision support tool that is widely used. Feedback collected from the second run of MAST will be incorporated into this document before finalizing.

- *Objective 3:* Work with the six pilot towns continues:
  - Georgetown continues to work on the development of a town-wide vulnerability assessment. Over the past quarter, they met with town committees, boards and community groups to capture input. A draft of the assessment is scheduled for the end of 2014.
  - Phippsburg's Conservation Commission pursued training and purchased GIS software during the last quarter. They continue to develop GIS skills and become more familiar with using the marsh migration data in conjunction with municipal data (assessor's data, parcels, etc.) and Beginning with Habitat datasets. These skills are allowing them to complete a more strategic assessment of

their community. They will be working closely with the Phippsburg Land Trust as they move forward in identifying land protection and management opportunities and vulnerabilities.

- Bath used the sea level rise and storm surge modeling created through this project to support an application for an American Institute of Architects (AIA) Design and Resiliency Team grant. Bath was awarded the grant of technical assistance and will continue its resilience planning through this process. They will be looking at creating more resilience to sea level rise in their downtown area through ordinance changes. The AIA team visited Bath this past quarter and met with local planning staff and project partners in preparation for the AIA process to take place in early November.
- Project partners successfully built awareness of marsh migration issues within the community and Scarborough worked closely with project partners to develop and test the MAST tool in past quarters. The current level of capacity within the town planning department has, however, made it difficult to move the project beyond assistance with MAST and outreach and education. We will continue to stay connected with the town and help them to address marsh migration and adaptation issues and opportunities as they arise.
- Bowdoinham developed a climate change chapter for their new comprehensive plan during the last quarter with the help of project partners. The Dept. of Agriculture, Conservation and Forestry, Municipal Planning Assistance Team has now found the plan consistent with the State Growth Management Act. Local agriculture is a high priority with this agrarian community and the town is now working with Bowdoin College to look more closely at potential impacts of sea level rise to its agricultural lands.
- Topsham has made less progress than expected throughout this project due to a change in personnel and significant reduction in capacity in the planning office that occurred part way through the project period. Project partners will continue to engage the town and support their adaptation planning activities as the town is able resume efforts.

#### Difficulties Encountered:

No significant difficulties encountered. We are disappointed that more progress was not made in the towns of Scarborough and Topsham, but will continue to work with these towns as their capacity for planning resumes.

#### Activities Anticipated Next Quarter:

Over the next quarter we plan to:

- Work with KELT to complete a second test run of MAST and to capture and incorporate feedback collected from that effort.
- Continue technical assistance work with the six pilot towns.
- Continue to work with project partners and pilot towns to complete outreach materials and case studies.

#### Expected End Date:

We expect this project will be complete by December 2014.

#### Costs:

Total life to date expenses (include this quarter): \$15,000

Total Approved Budgeted Funds: \$20,000

Are you within the approved budget plan and categories? Yes. Other funds received by project partners are contributing to completion of this project. To date, we have been spending down these funding sources. The \$15,000 requested this quarter will reimburse project partners for work completed during

quarter 2 and 3 of this year, specifically for development of MAST.

Signature: 

Date: October 14, 2014