Community-based Adaptation Planning for New Hampshire

Project Location

Great Bay National Estuarine Research Reserve, New Hampshire

Project Lead

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Targeted End Users and Products

- *Project overview*
- *Climate adaptation plan for the Town of Exeter*
- *Project final report*
- *Exeter community conversations interim report*
- *Aytur, S., J. Hecht, and P. Kirshen. (2015). Aligning Climate Change Adaptation Planning with Adaptive Governance: Lessons from Exeter, NH. Journal of Contemporary Water Research and Education 155: 83-98.*

Project Partners

- *Great Bay Reserve*
- *Carsey School of Public Policy*
- *Jackson Estuarine Laboratory*
- *New Hampshire Listens*
- *Town of Exeter*
- *University of New Hampshire*

About the Science Collaborative
The National Estuarine Research Reserve System's Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. Learn more at *www.nerrs.noaa.gov.*

Overview

New Hampshire's changing climate is evident not only to scientists, but also to communities attempting to respond to its impacts. As the climate continues to shift, the wellbeing of these communities will depend on their ability to anticipate and adapt to current and future changes. To do that, stakeholders need accurate information about local climate impacts and risks and the ability to have tough conversations as they decide how best to protect infrastructure, businesses, and human safety. In response, the Great Bay reserve worked with the University of New Hampshire and other partners to develop a model climate adaptation plan for the town of Exeter to help local decision makers address the intensifying stormwater runoff, flooding, sea level rise, nonpoint source pollution, and habitat change associated with a shifting climate.

Project Benefits

- The vulnerability assessment and adaptation plan generated by the project will guide future municipal decisions and provide a model of climate adaptation for neighboring towns.
- The approaches to stakeholder engagement, communication, and evaluation used in this project are serving as models for other adaptation efforts in New Hampshire and beyond.
- Rhode Island and Delaware reserves are using this project as a catalyst for multi-state exchanges on engaging specific stakeholders and the general public in climate change discussions.
- The team delivered presentations on their work in Massachusetts, Oregon, California, and Washington, D.C

Project Approach

The Great Bay reserve worked with the University of New Hampshire to engage diverse partners and stakeholders in this project—from town planning board members and residents to climate scientists, hydrologists, and professional facilitators.

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Project Approach (continued)

- Stakeholder Engagement: The team worked to develop partnerships between scientists and a range of stakeholders throughout the project in many ways.
- Through a series of "community conversations," Exeter residents were able to voice concerns and priorities related to managing risk and vulnerability to climate change.
- The team invested significant resources in translating technical information to facilitate communication between researchers and community members.
- Local students were involved through presentations and a workshop with scientists, helping to build awareness of climate change impacts and adaptation options among the younger generation.
- Monitoring and Mapping: The team integrated the technical modeling work with citizen-based knowledge and experiences.
- During the first community conversation, participants identified locations in the town they felt were most vulnerable and should be emphasized.
- The project team hosted an opportunity for members of the Citizen Working Group, other residents, and local high school students to work with University of New Hampshire scientists to map what future tides and storms would look like.