



Effects of Sea Level Rise on New England Salt Marshes: A Workshop Led by the New England NERRs

Overview

Project Location

New England

Project Duration

June 2017 to May 2018

Project Lead

Jennifer West
Narragansett Bay National Estuarine
Research Reserve, Rhode Island
jennifer.west@dem.ri.gov

Project Type

Science Transfer – Promoting
the use of science

Products

- A workshop [proceedings document](#) that summarizes the workshop presentations, question-and-answer sessions, and group discussions, including next steps for advancing marsh resilience
- A [website](#) containing additional resources and presentations associated with the workshop

Project Partners

- Great Bay National Estuarine Research Reserve, New Hampshire
- Narragansett Bay National Estuarine Research Reserve, Rhode Island
- New England Estuarine Research Society
- Waquoit Bay National Estuarine Research Reserve, Massachusetts
- Wells National Estuarine Research Reserve, Maine

Project Webpage

nerssciencecollaborative.org/project/West17

There is growing evidence that the New England coast faces mounting challenges due to sea level rise. One of the ways sea level rise threatens the coast is through degradation and loss of salt marshes. Salt marshes play an important role for society in maintaining healthy fisheries, mitigating shoreline erosion, reducing flooding, and protecting water quality. Research has identified southern New England salt marshes as among the most vulnerable in the country, prompting researchers and practitioners to evaluate mechanisms of resilience and opportunities for conservation and management of these important ecosystems.

To build capacity for addressing salt marsh resilience, the Narragansett Bay National Estuarine Research Reserve, in collaboration with the three other New England reserves and the New England Estuarine Research Society, hosted a regional workshop for researchers, practitioners, and policy makers to discuss the growing body of literature on salt marshes and sea level rise. Building upon the success of a similar workshop held in Rhode Island in 2014, the goal of the project was to further strengthen the connections among the New England reserves through cross-reserve exchange, while providing an important information-sharing opportunity for the larger salt marsh restoration and adaptation community.

Project Approach

Mirroring the structure used in the 2014 workshop, the project team planned a one-day workshop in tandem with the New England Estuarine Research Society's 2018 spring meeting. The team incorporated a plenary session, followed by a series of brief presentations and break-out group discussions, to address issues and needs related to salt marsh resilience. In all, the workshop featured 17 presentations from 16 speakers representing all five New England states. Break-out sessions were staffed with facilitators and note-takers to ensure that group discussions were focused and documented, and an electronic post-workshop survey was administered to collect immediate feedback on the overall effectiveness of the event. Following the workshop, the project team compiled all proceedings and workshop materials to share with workshop attendees and other interested parties.

Benefits

The one-day regional salt marsh workshop, which focused on the status and trends, as well as lessons learned from adaptation and restoration projects, involved an array of researchers, natural resource managers, restoration practitioners, and policy makers. Bringing together this community of salt marsh experts resulted in the following benefits:

- Enhanced knowledge of the status and trends of salt marsh condition throughout the region. One-hundred percent of post-workshop survey respondents said their knowledge of salt marsh resilience increased as a result of attending the workshop.
- Stronger connections among the research, management, and restoration sectors and the creation of a more robust information-sharing network. This event served as an opportunity for practitioners and researchers to find new opportunities for future partnership and collaboration.
- Increased awareness of National Estuarine Research Reserves as unique sites suitable for the long-term research of salt marshes, and as “test beds” for management strategies.

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. The Science Collaborative is managed by the University of Michigan's Water Center through a cooperative agreement with the National Oceanic and Atmospheric Administration (NOAA). Funding for the research reserves and this program comes from NOAA. Learn more at nerrsciencecollaborative.org or coast.noaa.gov/nerrs.