



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

Overview

Project Location

Narragansett Bay

Project Duration

June 2017 to May 2018

Project Lead

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Project Type

Science Transfer – promoting the use of science

Project Partners

- Great Bay NERR
- Narragansett Bay NERR
- New England Estuarine Research Society
- Waquoit Bay NERR
- Wells NERR

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, will host a regional workshop for researchers, practitioners, and policy-makers to discuss the growing body of literature on salt marshes and sea level rise. The workshop will also address the steps that can be taken to minimize loss while adapting to unavoidable change. The one-day event, held in conjunction with the New England Estuarine Research Society's 2018 spring meeting, will provide a timely forum for information sharing, collaboration building, and the coordination of efforts. The workshop will be an important touch-point for attendees as they consider the challenges and solutions for salt marsh resilience in the face of sea level rise.

Anticipated Benefits

- Researchers, natural resource managers, restoration practitioners, and policy makers will share information, build collaborations, and increase coordination to address sea level rise effects on salt marshes in New England.
- Adaptive management of New England salt marshes will improve their resilience to sea level rise.

Project Approach

The sea level rise and salt marsh resiliency workshop builds upon a 2014 workshop held in Rhode Island that was attended by nearly 100 participants from five New England states. The 2018 workshop will expand the geographic range to all of New England, and will further emphasize lessons learned from recent projects and monitoring and assessment strategies. The workshop will create opportunities to share information on sea level rise effects on New England salt marshes; discuss transition, adaptation, management, and restoration strategies; assess monitoring options; characterize and guide adaptive management; and strengthen collaborations between researchers and practitioners.

Targeted End Users and Anticipated Products

- The project team will organize a one-day regional salt marsh workshop for New England researchers, natural resource managers, restoration practitioners, and policy-makers. The event will focus on the status and trends in salt marsh response to sea level rise as well as lessons learned from adaptation and restoration projects.
- The project team will produce a workshop proceedings document to share more broadly with New England stakeholders. It will include a summary of the presentations and breakout session discussions, including the current state of research, practice, and management needs.

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 coast.noaa.gov/nerrs or graham.umich.edu/water/nerrs.