

Healthy communities and sustainable ecosystems: understanding and adapting to coastal environmental change

A participatory workshop to find out what we know and what we need to study to plan for the future



Organizing committee:

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1. Department of Forestry and Environmental Resources, North Carolina State University, Raleigh, NC
2. NC Sea Grant Program, NCSU Centennial Campus, Raleigh, NC
3. Alligator River National Wildlife Refuge, U.S. Fish and Wildlife Service, Manteo, NC

Time and place:

8 AM to 5 PM, Friday December 5, 2014

US Fish and Wildlife Service Visitors Center, 100 Conservation Way, Manteo, NC 27954

Workshop goals and themes:

Evidence of rapid environmental change abounds all along the eastern U.S. seaboard, yet sometimes we don't see it or fail to understand what it is we do see. The Alligator River National Wildlife Refuge in Dare County, NC, provides important ecosystem services such as public recreation and education, rearing grounds for commercially valuable marine species and migratory waterfowl, protecting coastal communities from flooding and tide surges associated with storms, and cycling vast amounts of carbon and freshwater. The Refuge is critically threatened by rapid environmental change, and thanks to the strong support for science the U.S. Fish and Wildlife Service we are beginning to understand the causes of ecosystem transition and the implications for surrounding communities. However, the science is incomplete if it does not incorporate first-hand knowledge and concerns of local residents whose livelihoods and well-being are directly tied to the health of the coastal environment. Our working premises for this workshop are that 1) Coastal ecosystems and communities are in a state of rapid environmental change; 2) More scientific research is needed on terrestrial, riverine, and estuarine systems to understand the mechanisms driving ecosystem transition; 3) Future public planning that incorporates scientific understanding of coastal dynamics will simultaneously protect environment quality and foster sustainable economic development resulting in a high quality of life for generations to come. The objective of this workshop is to bring together scientists, natural resources managers, state and federal agencies, local decision makers, natural resources-based businesses, and the public to share insights on what is known about coastal environmental change and what information is still needed to best protect and manage North Carolina's coastal treasures in a rapidly changing world.

Program:

- 8:00-8:30 Pickup meeting materials
- 8:30-8:40 Welcome and overview of the days' program/safety/workshop objectives
Dr. John King, North Carolina State University
- 8:40-8:50 Welcome to USFWS Alligator River National Wildlife Refuge
Mike Bryant, Refuge Manager, US Fish and Wildlife Service
- 8:50-9:00 Witness to thirty years of rapid environmental change at ARNWR
Dennis Stewart, Refuge Biologist, US Fish and Wildlife Service
- 9:00-10:00 ARNWR Field Trip Stop 1
Mashoes Pond Pine Forest Decline
Charlton Brown, MS Candidate, North Carolina State University
- 10:00-10:30 ARNWR Field Trip Stop 2
Effects of US 64 on Hydrology and Surrounding Forests
Dr. Gary Blank's Environmental Assessment class, NCSU
- 11:00-12:00 ARNWR Field Trip Stop 3
Research on Adaptive Management and Hydrology
Aaron McCall, NE Regional Steward, The Nature Conservancy
- 12:00-1:30 Lunch at ARNWR Refuge Headquarters
Locally caught-prepared seafood festival!
- 1:30-1:45 ARNWR's Role in Global Monitoring of Environmental Change-Flux Tower Project
Drs. John King, Asko Noormets, J-C Domec, North Carolina State University
- 1:45-2:00 Erosion and the changing estuarine coast of North Carolina
Drs. Reide Corbett and J.P. Walsh, UNC Coastal Studies Institute/ECU
- 2:00-2:15 Sixty-five years of a fisherman
Terry Pratt, retired commercial fisherman of the Albemarle Sound
- 2:15-3:00 Public comment period
Open-microphone time for all participants who wish to do so to ask questions, express view points, provide insights. Time will be limited to 3-5 minutes per person.
- 3:00-3:15 Coffee Break
- 3:15-4:15 Breakout groups of facilitated discussions to identify and prioritize future scientific research, natural resources conservation, public planning/policy, and economic development

4:15-5:00

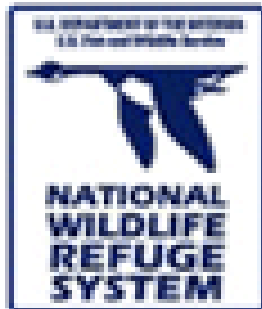
Open Discussion and Synthesis – Next steps

-Summarize results from all breakout groups

-Preparation of a meeting summary article to appear in the popular press

-Web archive of meeting materials and exchange of contact information of participants

Sponsors:



Southeast Climate Hub

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**If you would be interested in becoming a sponsor of the workshop please contact John King at NCSU (john_king@ncsu.edu).