

CLIMATE ADAPTATION SCIENCE CENTERS

NORTH CAROLINA

North Carolina falls within the domain of the Southeast Climate Adaptation Science Center (SE CASC)



Southeast CASC Consortium Institutions

Host: North Carolina State University

Consortium:

Auburn University Duke University

University of Florida

University of South Carolina

University of Tennessee

OUR WORK IN NORTH CAROLINA

Projects

since **2010**

Key Science Topics



Wildlife & Plants



Forests



Freshwater



Wetlands



Sea-Level Rise & Coasts



PROTECTING CAPE LOOKOUT'S HISTORIC STRUCTURES

Upwards of \$20 billion of cultural resources and infrastructure in coastal national parks are estimated to be at high risk from climate impacts. At Cape Lookout National Seashore, historic relics of the region's maritime past are threatened by stronger storms and hurricanes, rising seas, and erosion.

WHAT:

The Southeast CASC worked with the National Park Service, State Historic Preservation Office, and other local stakeholders to develop a method for identifying which cultural resources are most in need of management action.

RESULTS:

Identified the vulnerability and significance of 17 historic structures, then determined the best adaptation actions to minimize cultural loss over the next 30 years – such as updating building materials or relocating structures.

IMPACT:

Helps guide annual NPS budget allocation decisions to maximize the effectiveness of management actions while considering fiscal constraints.



EDUCATING THE NEXT GENERATION

Global change brings an increasing set of complex and interrelated problems. A well-trained workforce that uses multidisciplinary approaches is needed to tackle these challenges. An important focus of this effort is building the capacity of scientists to communicate with stakeholders before, during, and after the research process.

WHAT:

The Southeast CASC, in collaboration with NC State University, provides scientific, professional development, and financial support to NC State graduate students pursuing research that addresses global change issues.

RESULTS:

Since 2011, 75 diverse fellows from across disciplines have come together to discover, collaborate, and share knowledge with varied stakeholders.

IMPACT:

Prepares students to better meet global change challenges by providing close interaction with state, federal, tribal, and NGO partners and exposing them to the realities experienced by resource managers.

Contact the Southeast CASC: secasc.ncsu.edu