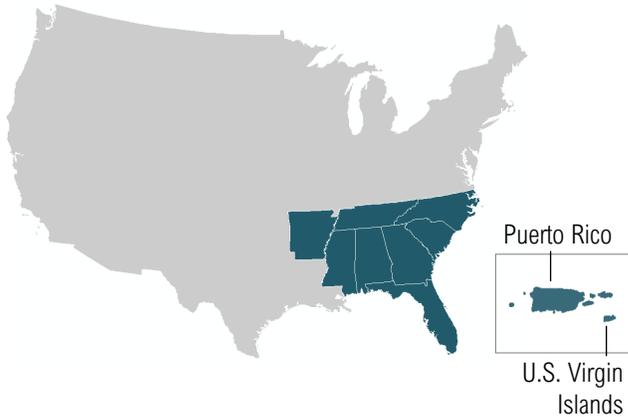


## SOUTH CAROLINA

South 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

University of South Carolina

Duke University

University of Tennessee

University of Florida

## OUR WORK IN SOUTH CAROLINA

**34+**  
Projects

since **2010**

### Key Science Topics



Wildlife & Plants



Forests



Freshwater



Sea-Level Rise & Coasts



Science Tools for Managers

## ADAPTING FOR CHANGE AT CAPE ROMAIN NWR

*Cape Romain NWR is home to 293 bird species and is a critical nesting ground for the threatened loggerhead sea turtle. The refuge also provides storm surge protection, improved water quality, and recreation opportunities. Yet in the last century, coastal ecosystems have been altered by development, sea-level rise, and more frequent extreme storms.*

### WHAT:

The Southeast CASC is working with managers throughout the South Carolina Lowcountry Wildlife Refuge Complex to forecast future coastal change, identify needs, and design management strategies.

### RESULTS:

Focusing on Cape Romain, a land use planning decision making process was developed that considers possible future climate and land use scenarios and analyzes the effects of different management options.

### IMPACT:

Helps South Carolina's coastal refuge managers understand potential future changes in climate and land use, identify what those changes could mean for coastal ecosystems and the services they provide, and incorporate this information into adaptation planning.



## SEA-LEVEL RISE HANDBOOK FOR MANAGERS

*In South Carolina, seas are rising 1-1.5 inches every decade, higher than the global average. Higher water levels are changing the state's coastal habitats, through beach erosion, submerging low lands, and coastal flooding.*

### WHAT:

The Southeast CASC met with federal, state, and NGO coastal managers in the Southeast to evaluate their understanding and use of the resources currently available for projecting sea-level rise and its impacts on coastal habitats and wildlife.

### RESULTS:

Created a user-friendly guide that synthesizes the science and tools currently available for projecting future sea-level rise and its potential consequences.

### IMPACT:

Provides coastal managers with a condensed, comprehensive resource on how sea-level rise and its impacts are currently assessed, enabling managers to incorporate considerations of sea-level rise into long-term coastal planning.