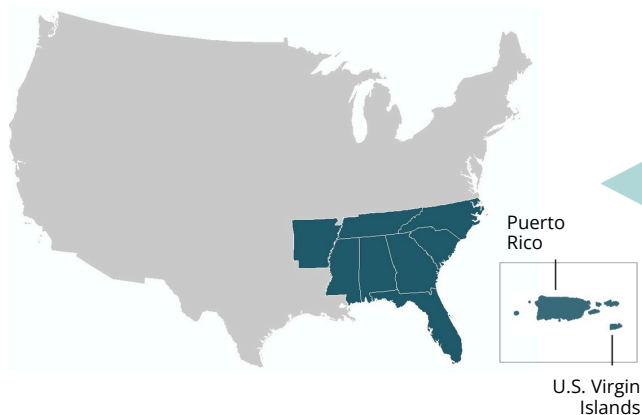




SOUTHEAST
Climate Adaptation Science Center

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Southeast CASC Consortium Institutions

Host: North Carolina State University

Consortium:

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Duke University	University of Puerto Rico
Savannah State University	University of Tennessee
United South & Eastern Tribes	University of Virgin Islands
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Structured Decision Making as a Tool for Coastal Restoration

Barrier islands protect mainland areas from storm surge, but can erode over time and require restoration. Ship Island, a barrier island off the coast of Mississippi, was battered by Hurricane Camille in 1969 and split into two separate islands.

WHAT:

This Southeast CASC pursued this project as a case study to test the usefulness of structured decision-making as a tool for making coastal restoration management decisions.

RESULTS:

This structured decision-making process yielded management recommendations that can be quickly and effectively implemented, while helping participants maximize the island's future resilience. It also led to a general decision framework and process that can be expanded and adapted for other barrier island and coastal restoration projects.

IMPACT:

This research is a prototype for using collaborative structured-decision making in dynamic environments. With numerous barrier island construction projects planned in the northern Gulf of Mexico, this structured decision-making has regional relevance and importance.



Impacts of Climate Change, Urban Expansion, and Invasive Species on Southeastern Grasslands

Much of the biodiversity of the Southeastern U.S. is found in grasslands, but many grassland types have declined by 90% due to fire suppression and urban sprawl.

WHAT:

The Southeast CASC is performing field experiments in tall-grass prairie to examine effects of climate change and invasive species.

RESULTS:

Results will include future projections for climate conditions, invasive species (including species that could arrive in particular grasslands by mid-century), urbanization risks, and constraints on prescribed burning.

IMPACT:

These results will inform Species Status Assessments for multiple grassland species, to help ensure that conservation and management of these species is informed by the best available science.

