The Southeast Climate Adaptation Science Center (SE CASC) is one of nine regional Climate Adaptation Science Centers managed by the U.S. Geological Survey National Climate Adaptation Science Center.

We work with natural and cultural resource managers and other partners to conduct research providing scientific information and decision-making tools.

The footprint of the Center extends across eight states, six federally recognized Tribal Nations, and two territories in the U.S. Caribbean. In total, the consortium consists of eleven institutions.

**North Carolina State University** is the host institution for the Center, providing organizational support to implement the CASC mission through capacity building, project management, communications, and partnership development.

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**CONSORTIUM INSTUTIONS**

- [Duke University](#)
- [University of Florida](#)
- [University of Georgia](#)
- [University of Kentucky](#)
- [University of Maryland](#)
- [University of Tennessee](#)
- [Virginia Institute of Marine Science](#)
- [University of Puerto Rico at Rio Piedras](#)
- [University of the Virgin Islands](#)

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April 2024
Assessment of Water Availability and Streamflow Characteristics in the Southeastern U.S. for Current and Future Climatic and Landscape Conditions

This project simulates how daily hydrological conditions at CONUS extent may change under climate scenarios and explores potential risks to hydroperiod, flooding, and rapid onset drought in river systems.

Completion: March 2024
secasc.ncsu.edu/science/water-availability/

Assessing Climate-Sensitive Ecosystems in the Southeastern United States

Researchers assessed climate change vulnerability for some ecosystems in the Southeast and Caribbean by synthesizing data and literature related to climate sensitivity, climate change exposure, and adaptive capacity. For the twelve analyzed, five are highly and six are moderately vulnerable.

Completed: December 2013
secasc.ncsu.edu/science/vulnerable-ecosystems

Strategic Habitat Conservation and Adaptive Strategies for the Conservation of Coqui Frogs in Puerto Rico

Researchers helped in the recovery of two endangered “coqui” species of frog and reduced the risk of fourteen other coqui species becoming endangered. This research will inform decision-making on translocation versus in situ management.

Completed: June 2023
secasc.ncsu.edu/science/coqui-conservation

Global Change Research Fellows

We prepare the next generation of scientists by providing financial, scientific, and professional development for Consortium graduate students who are interested in multi-disciplinary global change research.

Learn more: go.ncsu.edu/secasc-fellows

Our Mission

Deliver science to help fish, wildlife, water, land, and people adapt to a changing climate.

- Producing data that supports transparent global change adaptation decisions
- Convening decision makers, scientists, and managers over key adaptation decisions
- Building the capacity of natural and cultural resource professionals, university faculty, and students to frame and make adaptation decisions

Research

Research funded by the Southeast CASC aims to understand exposure and impacts of global change on resources that matter to our partners, and frame decisions about adaptation strategies, emphasizing principles of co-production.

Exposure

Assessment of Water Availability and Streamflow Characteristics in the Southeastern U.S. for Current and Future Climatic and Landscape Conditions

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Completion: March 2024
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Impacts

Assessing Climate-Sensitive Ecosystems in the Southeastern United States

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Adaptation

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