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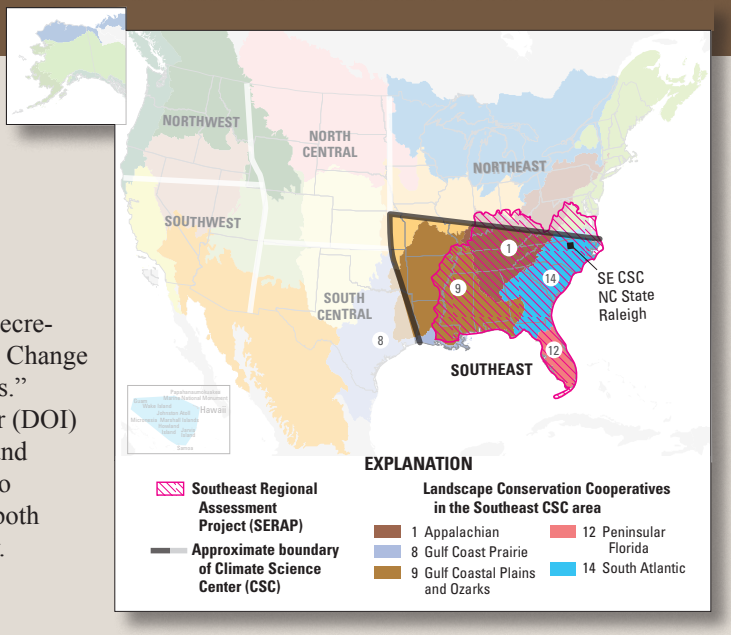
U.S. Department of the Interior Climate Science Centers



What is a Climate Science Center?

On September 14, 2009, the Secretary of the Interior signed a Secretarial Order (No. 3289) entitled, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources." The Order effectively established the U.S. Department of the Interior (DOI) Climate Science Centers (CSCs), which will integrate DOI science and management expertise with similar contributions from our partners to provide information to support adaptation and mitigation efforts on both public and private lands, across the United States and internationally.

Planning for Climate Change Research

CSCs are research collaborations that will be guided by a U.S. Geological Survey (USGS) Center Director and hosted by a university or consortium of universities. Each CSC will bring together expertise from university and federal scientists to support climate change research and collaborations in a specific geographic area.

Priority science activities of the CSCs include the following:

- Use and creation of high resolution climate modeling information and derivative products in order to produce key information that is needed to forecast ecological and population responses at national, regional, and local levels;
- Integration of physical climate models with ecological-, habitat-, and population-response models;
- Development of models to forecast fish- and wildlife-population and habitat changes;
- Development of methods to assess vulnerability of species and habitats; and
- Development of standardized approaches to modeling, monitoring, data management, and decision support.

Boundaries of the CSCs are intended to be flexible depending on the science needs of a particular region. Because environmental science needs related to climate do not stop at political borders, science programs focused on these natural resources also should not be held to fixed borders. Likewise, the scientific capabilities of the CSCs will be directed toward meeting research needs, exclusive of geographic delineations.

About the Southeast Climate Science Center

The Southeast CSC, hosted by NC State University (NCSU), will collaborate with a number of other universities, State and Federal agencies, and nongovernmental organizations (NGOs) with interest and expertise in climate science. The primary partner for the Southeast CSC will be the Landscape Conservation Cooperatives (LCCs) in the Southeast, including the Appalachian, Gulf Coastal Plains and Ozarks, Gulf Coast Prairie, Peninsular Florida, and the South Atlantic. CSC collaborations are focused on common science priorities, addressing priority partner needs, minimizing redundancies in science, sharing scientific findings, and expanding understanding of climate change impacts in the Southeast.

One example of current research, funded in part by the Southeast CSC, includes the Southeast Regional Assessment Project (SERAP). Specific information about SERAP can be obtained at *http://serap.er.usgs.gov/*.

North Carolina State University and Partners

NCSU will focus on recruiting and training graduate students, conducting climate change and impacts research, developing climate science and climate change educational programs, and providing infrastructure for the Southeast CSC. The NCSU faculty, staff, and graduate students will focus their work on climate-impacts science and addressing priority science needs of resource managers in the Southeast while striving to make fundamental advances that have important implications globally.

NCSU and its partners have capabilities in climate science, ecology, impacts assessment, cultural resources, and modeling. This expertise will be needed to identify and prioritize climate change vulnerabilities and to prepare for and respond to climate change issues in the Southeast, where changes in temperature, rain, and sea level could have significant impacts on aquatic and terrestrial systems and the diversity of species supported by these systems.

NCSU will reach out across the Southeast and beyond for partners to help fulfill its mission and responsibilities as the host institution.

Science and Stakeholder Processes

The science direction will be guided by the Southeast CSC Science Plan, which will establish high-level climate science priorities while ensuring that the science addresses priority management needs. This plan will be reviewed and updated in a transparent process at least once a year. In developing the science plan, the Southeast CSC will seek advice and guidance from scientists and stakeholders. The science plan will be used to make determinations about research funding through the Southeast CSC and graduate programs or projects that will be developed by the university.

A Stakeholder Advisory Council (SAC) and a Science Implementation Panel (SIP), for the Southeast CSC, will be formed in 2011. The SAC will be composed of executives from Federal and State agencies and will help guide the science planning process and set priority science needs. The SIP will identify specific projects and research teams that will address the research priorities identified in the science plan. The SAC and SIP will include governmental representatives, to comply with the Federal Advisory Committee Act (FACA); however, the interests of NGOs and other private sector entities will be actively solicited. The Southeast CSC will explore a range of opportunities to gather input from public and private partners.

Representatives from the associated LCCs will be viewed as key stakeholders and principal conduits for communication about management and scientific needs. It will be important for the Southeast CSC and associated LCCs to collaborate on science needs to ensure that the highest priorities are met, redundancies are minimized, and that significant opportunities are available for sharing resources and communicating climate science information and needs.

Contact Information

Sonya A. Jones
Acting Center Director
DOI Southeast Climate Science Center
Telephone: 770-409-7705
e-mail: sajones@usgs.gov

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Front page:
Strix varia (barred owl)
Pseudotriton ruber schencki (black-chinned red salamander)
Hibiscus coccineus (scarlet rosemallow)
Elliptio complanata (eastern elliptio, freshwater mussel)
Cyprinella callistia (Alabama shiner)

Back page:
Fort Jefferson, Dry Tortugas National Park, Florida
Cahaba River, Cahaba National Wildlife Refuge, Alabama
Mathews Brake National Wildlife Refuge, Mississippi
Great Smoky Mountains National Park, Tennessee
Thunderstorm, Meramec River Valley, Missouri