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Photo: Robin Mackie, USDA FS



Photo: USDA FS



SOUTH ATLANTIC  
LANDSCAPE CONSERVATION COOPERATIVE



Photo: Ed Pivorum

## Setting a course for a sustainable landscape

2012 Annual Report



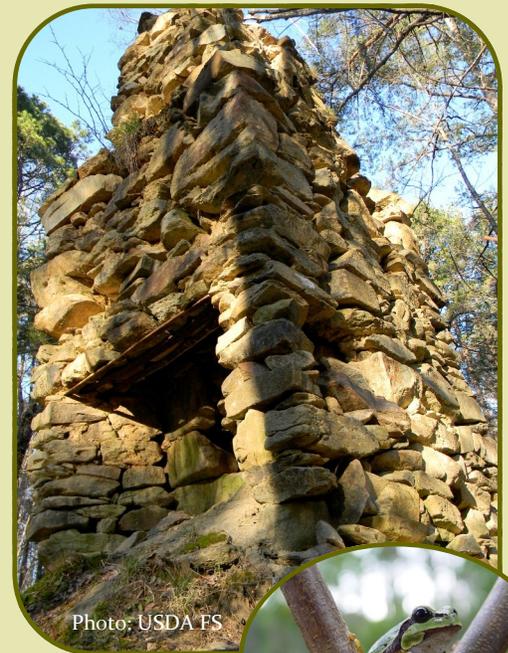
LANDSCAPE CONSERVATION  
COOPERATIVES

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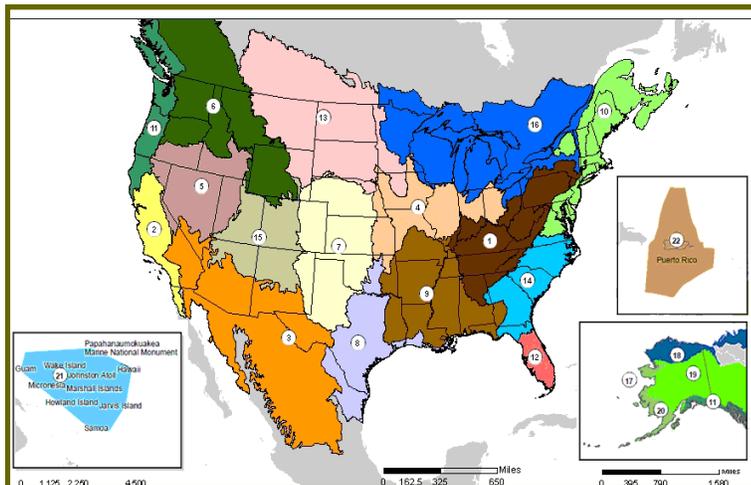


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# What is the SALCC?

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The South Atlantic Landscape Conservation Cooperative (SALCC) is one of 22 LCCs that form a seamless network across North America. This network was established to inform resource management decisions in an integrated fashion across landscapes at a scale broader than any individual partner’s responsibility. This means providing the right science and technical expertise needed to support conservation planning at landscape scales and then promoting connections among conservation efforts across geographic and political boundaries. By building bridges and working collaboratively between conservation agencies and organizations, LCCs are able to look beyond any singular area of expertise to help create a shared vision for a landscape capable of sustaining healthy populations of fish, wildlife, plants and cultural resources for current and future generations.



## Background

Established in 2010, the SALCC is focused on facilitating and coordinating efforts among a conservation community that supports a wide range of cultural and natural resources. The geography of the SALCC encompasses an ecologically diverse 89 million acres in the southeastern US that contains portions of six states from Southern Virginia to Northern Florida. Five eco-regions are included in the SALCC: the Middle Atlantic Coastal Plain, Southern Coastal Plain, Southeastern Plains, Piedmont and Marine. These unique eco-regions exist not only within national forests or parks but across broad landscapes of varying ownerships and jurisdictions. The SALCC seeks to provide a forum in which this diverse group of stakeholders can work together to face the increasingly complex and interacting management challenges of the 21st century.



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# About the SALCC

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Photo: Mark Danaher



Photo: US FWS



Photo: US NPS



Photo: USDA FS

## Vision

A landscape that sustains the nation's natural and cultural resources for current and future generations.

## Mission

Create a shared blueprint for landscape conservation actions that sustain natural and cultural resources by:

- Facilitating an **inclusive and cross-jurisdictional collaborative** for landscape conservation planning and action
- Linking broad-based efforts to **create a shared conservation blueprint** for South Atlantic partners
- Identifying and **filling the research gaps** of the partners that enable creation of the blueprint
- **Working across jurisdictional boundaries** at new and larger temporal and spatial scales
- Using an **interdisciplinary approach** that addresses the interconnectedness of systems and society
- Focusing on **protection, maintenance and restoration of healthy ecosystems** on a landscape basis
- **Building resilience** into ecological systems for long-term sustainability by anticipating future change

## Goals

- Provide a blueprint for enhancing SALCC conservation planning and investments
- Provide support for conservation investment decisions.
- Facilitate collaboration to maximize conservation investments
- Promote data integration and sharing
- Evaluate and report progress
- Support National Network efforts
- Promote communication and education

# The Geography

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## Middle Atlantic Coastal Plain

Spanning approximately 14 million acres, this eco-region is characterized by low elevation flat plains, which contain swamps, marshes, and estuaries. Once dominated by longleaf pine, this area has largely been converted to loblolly and shortleaf pine.



Photo: USFWS

## Southern Coastal Plain

This heterogeneous region spans nearly 13 million acres and includes barrier islands, lagoons, marshes, swampy lowlands, wetlands and numerous lakes. The historic land cover has largely been converted to slash and loblolly pine, oak-gum-cypress forest in low lying areas, pastures, and urban centers.



Photo: Mark Danaher

## Southeastern Plains

The Southeastern Plains spans approximately 26 million acres and includes portions of Virginia, North Carolina, South Carolina, Georgia, and Florida. Once dominated by longleaf pine, this ecoregion is now dominated by irregular plains, cropland, pasture, and woodlands.



Photo: John Morrison

## Piedmont

This transitional area between the Appalachian Mountains and coastal plains spans approximately 35 million acres. Once dominated by oak-hickory-pine and Southern mixed forests, the historic land cover has been largely cleared for agriculture and is now rapidly converting to urban and suburban communities.



Photo: US FWS

## Marine

The exclusive economic zone (EEZ) boundaries stretches 200 nautical miles from the adjacent seaward edge of the SALCCs terrestrial boundaries. The SALCC is currently working with other adjacent LCCs to determine the marine boundary for the



Photo: Lori Barrow

# Major Accomplishments

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## Working Across the Landscape

Since its inception in 2010, the SALCC has funded 25 conservation science projects to support landscape-scale conservation planning and design. These projects are intended to fill information gaps that will be required to develop the Cooperative's shared conservation blueprint. This shared blueprint will be an interactive, living plan that describes the places and actions needed to meet the SALCC's natural and cultural resource objectives in the face of future change.

*"I believe the SALCC will help us work together with our partners to protect the animals and habitats that extend beyond our jurisdictional boundaries."*

-Mallory Martin, Deputy Director,  
NC Wildlife Resource Commission  
Chair, SALCC Steering Committee

## A Year in a Glance

- In early 2012, the SALCC Steering Committee **adopted a Strategic & Operational Plan** that establishes a common agenda for moving forward over the next few years
- **Invested \$1.3m** in funding for **6 projects** to fill science gaps required to develop the blueprint
- Developed and launched new **"Projects" Page** on website
- Undertook a **Science Assessment** which identifies limiting gaps to conservation planning cross the entire SALCC region.
- Approval of the **natural resource indicator process** to support the development of the conservation blueprint
- Initiated & hosted **8** monthly web forums
- Collaborated with U.S. Forest Service to host **12** "Climate & Landscape Researchers' Brown Bag"
- **Hosted 2 workshops** on Natural Resource Indicators & Surrogate Species
- Hosted a workshop to learn **Southeastern State Historic Preservation Office** cultural resource priorities
- Initiated **Steering Committee & Stakeholder survey** to evaluate SALCC's progress
- Received **Environmental Conflict Resolution award** for Innovation in Technology-Enhanced Environmental Collaboration and Conflict Resolution
- Elected **Marshall Williams** from DOD to Co-Chair SALCC Steering Committee
- **Lori Barrow** and **Hilary Cole** joined staff.
- **Wilson Laney** & **Catherine Phillips** began serving as liaisons between SALCC staff and aquatic partnerships.
- Hosted dialogue with **private forest landowners**

SALCC FY2012 Investments



Photo: USFWS

# 2012 Project Overview

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## Six New Projects Funded for FY12

In July 2012 the SALCC announced the selection of six collaborative science projects that are supportive in the development of the conservation blueprint.

### 1. Development of Regional Estuarine & Marine Resource Maps

This project will help SALCC planning models by developing consistent spatial datasets depicting seafloor habitats, migratory species distributions, and estuarine and coastal habitats. *Mary Conley, The Nature Conservancy*

### 2. Synthesis of High & Low Marsh Habitat Mapping

This project will provide consistent spatial datasets on high and low marsh depicting historic distributions and dynamics, current distributions, and future vulnerability for the entire South Atlantic region. *Tom Allen, East Carolina University*

### 3. Sensitivity Analysis of Landscape and Ecological Response Models

This project will integrate regional landscape change and ecological response models, identify key drivers of change and uncertainty; and assess how potential monitoring and research could be prioritized to reduce major sources of uncertainty throughout the SALCC. *Ken Reckhow, Cardno ENTRIX*

### 4. Mechanisms of Aquatic Species Invasions Across the SALCC

Changes in human populations and connectivity could potentially have large changes in how, where, and when species invasions occur. This project will provide predictions of current and future distributions of nonindigenous aquatic species (NAS) and estimates of the benefits of potential conservation and management strategies. *Amy Benson, USGS*

### 5. Augmenting Urban Growth Model with Smart Growth Scenarios

Urban growth likely has the largest impact on natural and cultural resources in the SALCC. This project will build off of current urban growth models to develop consistent spatial dataset which will allow the cooperative to visualize and evaluate the potential benefits of smart growth policies on natural and cultural resources. *Ross Meetenmeyer, UNC-Charlotte*

### 6. South Atlantic Aquatic Connectivity Assessment & Tool

Building off a current SALCC collaboration with the Southeastern Aquatic Resources Partnership, this project provides a foundational assessment of aquatic connectivity for target aquatic species and an online tool to help evaluate and prioritize dam modifications/removal for key species. *Colin Apse, The Nature Conservancy*

For additional information about these projects and updates on our research and other activities, please visit: [southatlanticlcc.org](http://southatlanticlcc.org)



Photo: Ginger Deason



Photo: USFWS



Photo: USFWS



Photo: USFS



Photo: Ricky Wrenn, USFS

# Leadership & Integration

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Photo: Kat Mordecai



Photo: Kat Mordecai



Photo: Ginger Deason



Photo: Kat Mordecai

## Steering Committee

The SALCC Steering Committee, which serves as the executive body for decision making, is composed of leaders from fourteen organizations that represent a broad set of interests. The Steering Committee provides the guidance and leadership necessary to prioritize projects and activities throughout the South Atlantic. By working collaboratively, this team is able to work across organizations and demonstrate how the LCC partnership can support sustainable landscape level conservation.

## Partnership Committee

The Partnership Committee facilitates coordination and integration of existing landscape scale conservation partnerships in order to provide input and support for the SALCC. This Committee works with the SALCC staff to provide advice and recommendations to the Steering Committee on conservation issues, strategies, and initiatives of mutual interest to a broad spectrum of the conservation community.

## Southeastern Climate Science Center

In addition to working with a diverse array of partners, the SALCC is actively engaged with the Department of Interior Southeastern Climate Science Center (SE CSC). This relationship provides complementary support in the development of science-based information using physical and biological research, ecological modeling, and multi-scale scenario building and decision analysis that supports natural and cultural resource managers throughout the southeastern landscape.

# Ongoing Projects

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The SALCC is dedicated to supporting the ongoing efforts for major landscape scale projects going on in the South Atlantic.

### Seamless LiDAR Coverage

- Investigator: Newcomb et al. (U.S. FWS)

### Optimal Conservation Strategies to Cope with Climate Change

- Investigator: Grand et al. (SERAP/Auburn University)

### Designing Sustainable Landscapes

- Investigator: Sutherland et al. (Wildlands Network)

### Downscaled Climate Predictions

- Investigator: Terando et al. (NCSU)

### Impact of Sea Level Rise on Marshbirds

- Investigator: Jones et al. (U.S. FWS)

### Effects of Sea Level Rise on Beach Nesting Species

- Investigator: Von Holle et al. (University of Central Florida)

### Determining Priority Amphibian and Reptile Conservation Areas

- Investigator: Apodaca et al. (Florida State University)

### Identifying Key Habitat Connectivity Areas

- Investigator: Sutherland et al. (Wildlands Network)

### Integration Optimal Cultural & Natural Sustainability Strategies

- Investigator: Smith et al. (South Carolina University)

### Genetic “hotspots” in the SALCC

- Investigator: Moyer et al. (U.S. FWS)

### Modeling Assessment of Sea Level Rise Adaptation

- Investigator: Moore et al. (University of Georgia)

### Climate Change Effects on Fish and Mussels in the ACT

- Investigator: Freeman et al. (UGA/SERAP)

### Monitoring Waterbirds for Effective Management

- Investigator: Stanton et al. (U.S. FWS)

### Landscape Models for Endemic Tar River Mussels

- Investigator: Augspurger et al. (U.S. FWS)

### Managing Instream Flows of the SALCC

- Investigator: Robinson et al. (SARP)

For additional information about these projects and updates on our research and other activities, please visit: [southatlanticlcc.org](http://southatlanticlcc.org)



Photo: USDA-FS



Photo: Ricky Wrenn, USFS



Photo: USFWS



Photo: USFWS



Photo: USDA FS

# Spreading the Word

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Photo: USDA FS

South Atlantic LCC staff supported a number of workshops, meetings, and web forums discussing and promoting the SALCC and its initiatives to create a shared blueprint for landscape conservation actions .

## Monthly Webinar Series

- "The SALCC Strategic Plan: What it means for you"
- "Filling the Gaps in the Blueprint: This year and next"
- "Simulating Suburban and Exurban Development Patterns Using the SLEUTH Urban Growth model"
- "Indicators and Targets for the South Atlantic-What are YOUR ideas?"
- "Using SLAMM in Modeling Sea Level Rise for Conservation Planning in the Southeast "
- "Targets and Indicators Update: Where we are so Far "
- "Vegetation Dynamics Projects to Inform Conservation in the Southeast"
- "What is PINEMAP and How Can it Help You?"

## Researchers' Brown Bag

- The Template for Assessing Climate Change Impacts and Management Options (TACCIMO)"
- "Downscaling Global Climate Models: What is it good for?"
- "The Water Supply and Stress Index Model (WaSSI)"
- "Applied Climate Research: Turning Science into Services"
- "A Conceptual Framework for Adaptive Forest Management Under Climate Change"
- "Vegetation dynamics projections to inform conservation in the Southeast"
- "North Carolina Ecosystem Response to Climate Change: Assessment of Effects and Adaptation Measures"
- "On the Ground Climate Change Work with the NC Forest Service"
- "South Atlantic LCC Funded Projects - An Overview and Discussion"
- "Southeast Climate Science Center Funded Projects - An Overview and Discussion"
- EO Wilson's Global Town Hall Presentation
- "The Conservation Planning Atlas-An Introduction"
- "Key Habitat Connectivity Areas"

## Supporting Workshops

- SALCC Indicators Process- Raleigh, NC
- SALCC Indicators Process- Savannah, GA
- Instream Flow Research Plan workshop-Savannah, GA
- South Eastern State Historic Preservation offices meeting
- Gullah Geechee Cultural Heritage Corridor Commission Meeting- Mt. Pleasant, SC
- Francis Marion National Forest Plan Revision meeting- Columbia, SC
- Francis Marion National Forest Public planning workshop- Charleston, SC
- Partnership for Gulf Coast Land Conservation, St. Louis, MS
- SE Climate Science Center meeting- St. Petersburg, FL
- National LCC Workshop-Denver, CO
- National LCC Network coordinator workshop- Washington, DC

# SALCC Partners & Staff

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## Steering Committee Member Organizations

- |   |  |
|---|--|
| Florida Fish and Wildlife Conservation Commission | South Carolina Department of natural Resources   |
| Georgia Department of Natural Resources           | U.S. Department of Defense                       |
| National Oceanic and Atmospheric Administration   | U.S. Environmental Protection Agency             |
| National Park Service                             | U.S. Fish and Wildlife Service                   |
| The Nature Conservancy                            | U.S. Forest Service                              |
| North Carolina Wildlife resource Commission       | U.S. Geological Survey                           |
| South Atlantic Fishery Management Council         | Virginia Department of Game and Inland Fisheries |

## South Atlantic LCC Partnership Committee

- |  |  |
|--|--|
| Albemarle-Pamlico National Estuary Partnership             | Southeast Aquatic Resources Partnership                  |
| Atlantic Coast Joint Venture                               | South Atlantic Alliance                                  |
| Atlantic Coast Fish Habitat Partnership                    | Southeast Partners in Amphibian and Reptile Conservation |
| Eastern NC/SE Virginia Strategic Habitat Conservation team |  |



For more information, visit [www.southatlanticlcc.org](http://www.southatlanticlcc.org) or contact:

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