

SOUTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE ANNUAL REPORT



Photo: Congaree National Park, NPS

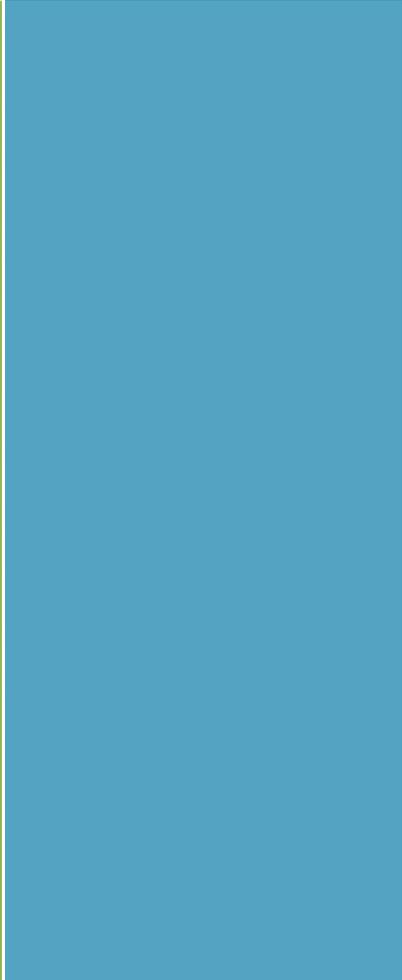


Photo: Fort Pulaski, US National Park Service



Photo: Croatan, USDA Forest Service



Photo: Ernest F Hollings ACE Basin, US FWS



2013



LANDSCAPE CONSERVATION
COOPERATIVES

SETTING A COURSE FOR A SUSTAINABLE LANDSCAPE

A Message from the Chairman



“The Conservation challenges of the 21st century are more complex than ever before. Landscape level projects which require collaborative efforts, driven by science and passion, will be necessary to effect positive and lasting changes. I believe that the South Atlantic LCC provides the forum for addressing many of these challenges.”

Dear South Atlantic LCC Stakeholders,

In March of 2013, the Steering Committee members met in Columbia, SC, to set the strategic direction for the Cooperative for the next 12-18 months. We set a high bar for the coming year, committing our Cooperative to complete version 1.0 of a shared Conservation Blueprint by March 2014. To achieve such an ambitious goal – which will enhance resource planning and maximize conservation investment throughout the region– we needed to think bigger than we ever had before. Always keeping our mission statement in mind, we moved quickly and checked back constantly to strengthen and increase our awareness and understanding of the conservation challenges natural and cultural resource manager’s face.

Our direction is set, and partner feedback and participation shows that our enthusiasm and dedication toward the development of the Blueprint is shared by many individuals and partner groups who are eager to support action on a scale that can truly make a difference. From linking broad-based partner efforts, developing custom decision support tools, and focusing on producing real-world outcomes, we are building on a legacy of success to help shape the future for current and future generations.

As the challenges of sustainable resource management continue to mount, we remain steadfast toward advancing science and building resilience into ecological systems by anticipating future change. The Steering Committee is deeply committed to the mission of the Cooperative and is ready to work across our respective organizations to demonstrate how the LCC partnership can support sustainable landscape level conservation.

In these pages you will see highlights of what we have achieved over the past year with your support. I believe that the accomplishments only hint at what is possible when we think big, and am confident in the direction, leadership, and accomplishments made by our collective efforts. I know you will be pleased with the Cooperative’s accomplishments and will want to be part of our success in 2014.

Sincerely,

Marshall Williams

Chair, South Atlantic LCC Steering Committee

Regional Environmental Coordinator, US Army



SOUTH ATLANTIC
LANDSCAPE CONSERVATION COOPERATIVE

South Atlantic LCC



Photo: Kayaks in Soundside Marsh, Cape Lookout National Seashore, NC

Our vision is a landscape that sustains the nation’s natural and cultural resources for current and future generations.

Our mission is to create a shared blueprint for landscape conservation actions that sustain natural and cultural resources.

The **Conservation Blueprint** will look fifty years into the future and depict the places and actions needed to meet the South Atlantic LCC’s natural and cultural resource objectives in the face of future change.

What is the South Atlantic LCC?

The South Atlantic Landscape Conservation Cooperative is a partnership of federal, state, and private organizations dedicated to conserving a landscape capable of sustaining the nation’s natural and cultural resources for current and future generations.

Established in 2010, the South Atlantic LCC is one of 22 LCCs that collectively form a seamless network across North America, the Pacific Islands and Caribbean. The South Atlantic region is a place where major urban megaregions and extensive private lands intersect with extraordinary hotspots of biodiversity and cultural heritage. Fifteen federal, state, and private organizations are invested at the steering committee level, while more than 700 individuals from federal, state, university, private, and non-governmental organizations participate in the Cooperative.

What Does the South Atlantic LCC Do?

- Provides a blueprint for collective action that promotes collaboration and communication across diverse organizations.
- Provides practical, science based tools to conservation managers to help them effectively address the stresses of climate change, urbanization, sea level rise, invasive species, water scarcity, and other land-use changes.
- Spans organizations and political boundaries to conserve land, water, wildlife, cultural heritage, and our own human health in a way that no single agency or organization could accomplish alone.
- Respects jurisdictional authorities and fosters communication and collaboration rather than prescription.
- Removes barriers to conservation success through information sharing, increased collaboration, and collective action.



The geography of the region encompasses an ecologically diverse 89 million acres across portions of six states in the southeastern U.S., from southern Virginia to northern Florida. The geography also includes the marine environment within the federal Exclusive Economic Zone.



Participants worked in small groups to identify priority conservation areas

South Atlantic LCC: Blueprint Version 1.0

A large-scale collaborative response to change

The South Atlantic region typifies the rapid change happening in the American South. Climate change, urban growth, and increasing human demands on resources are reshaping the landscape and impacting the people, communities and economies that depend on them. While these forces cut across political and jurisdictional boundaries, there is not a consistent cross-boundary, cross-organization plan for how to respond to sustain natural and cultural resources. With these realities, in March 2012, developing a Conservation Blueprint became the 3-5 year mission of the South Atlantic LCC.

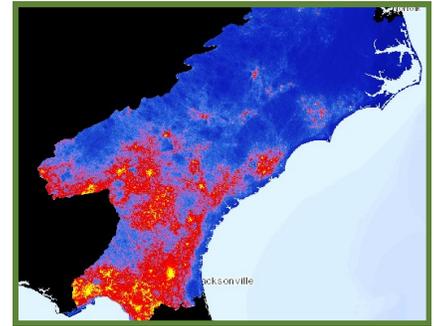
The Conservation Blueprint will be a spatially-explicit, living plan that describes the places and actions needed to meet the Cooperative's conservation objectives in the face of future change. Indicators, and measurable targets for those indicators, are currently being used to help design the Blueprint and evaluate the effectiveness of actions based on it. This work will inform the State of the South Atlantic report and will provide the data needed to test the effectiveness of the Blueprint in meeting our shared objectives.

Blueprint Workshops

In order to ensure local knowledge of ecosystems and socioeconomic factors were incorporated into Blueprint version 1.0, the development process included four regional workshops held in Fall 2013. Around 200 people from 58 different organizations attended one of the four workshops, including scientists and researchers, foresters and city planners. Working with a number of supporting GIS layers (e.g., South Atlantic LCC indicator models, threat layers, etc) participants selected sub-watersheds (hydrologic unit code 12) to focus conservation efforts and then assigned specific conservation actions for each subwatershed.

The results of the workshops were then combined and compared with existing conservation plans. The results of this synthesis constitute version 1.0 of the Blueprint. As our understanding of the future improves and as our modeling of the effects of that future on our conservation objectives is completed, we will be able to assess how well the Blueprint sustains natural and cultural resources into the future. By aligning these shared measures of conservation success at a landscape level, partners can apply their respective tools to accomplish something bigger than we could individually.

The steering committee is slated to adopt the Blueprint for some specific uses during its March 2014 meeting. During the coming year, the Cooperative intends to take an active role in facilitating the use of the Blueprint to inform conservation decisions related to those uses. Work will also continue to improve the Blueprint.



Index of Functional Connectivity

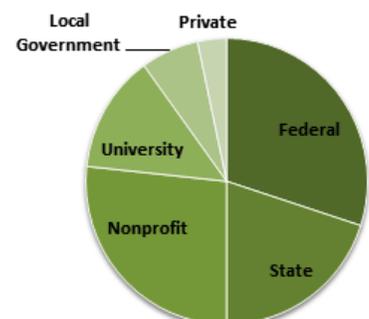
Participants had access to a number of supporting GIS layers, such as the above layer which provides an indicator of connectivity for multiple species with different home range sizes.

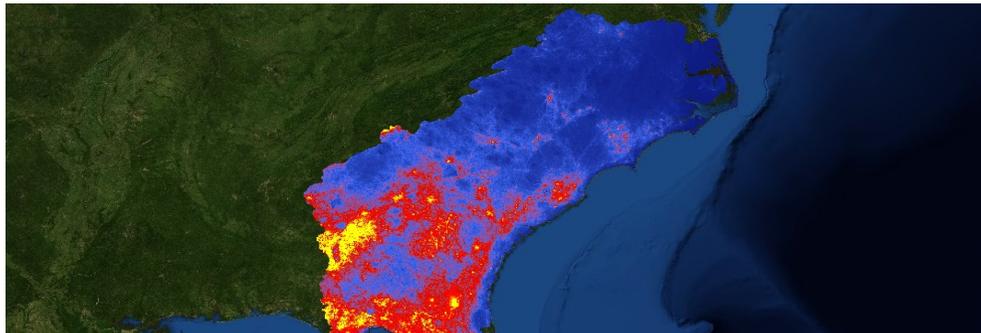


Draft Blueprints

At the workshop participants were instructed to select areas where conservation actions should be targeted. This layer represents a draft spatial result from one of the landscape groups.

Blueprint Workshop: Who Attended?





Draft South Atlantic LCC Indicator of Functional Connectivity for multiple species

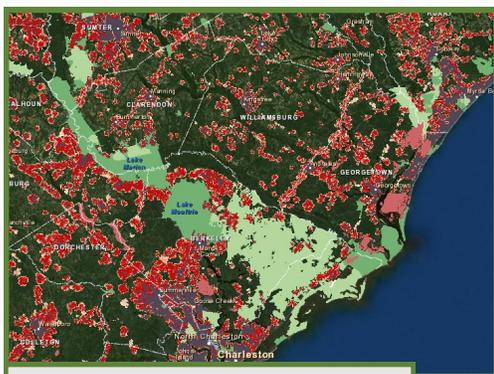
South Atlantic LCC: Featured Projects & Tools 2013

Meeting Science Priorities

The South Atlantic LCC has been integrating existing science and filling science gaps needed to develop the Cooperative’s Conservation Blueprint for the region. The following examples highlight only some of the new science and activities your Cooperative accomplished during 2013.

South Atlantic Conservation Planning Atlas:

In a coordinated effort with other eastern and southeastern LCCs, the Cooperative launched the South Atlantic Conservation Planning Atlas (CPA). The CPA is a searchable, science-based mapping platform that provides LCC products to conservation decision-makers. The CPA is currently providing projected landscape change information and will ultimately host the Cooperative’s Conservation Blueprint and associated decision support tools.



This conceptual map depicts the probability of urbanization near Charleston, SC in 2050 and is available through the CPA.

Effects of sea level rise on beach nesting species:

Sea level rise and disturbances from increased storm activity are expected to diminish coastal habitats available for sea

turtle, sea bird, shorebird, and beach mouse nesting by removing habitat and inundating nests during critical incubation periods. Researchers at the University of Central Florida are working alongside collaborators at the South Atlantic LCC to investigate these effects by linking long-term survey data to maps of coastal sea level rise vulnerability.



Cape Romain Refuge biologist Dan Ashworth looks at a loggerhead turtle hatchling. Photo: US FWS

Predicting baseline, altered, and future instream flows:

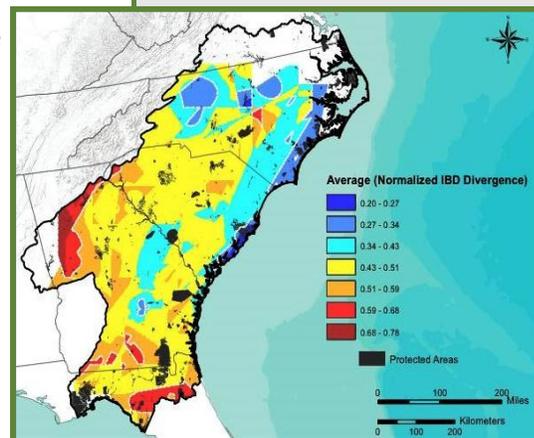
Rivers and streams of the Southeastern US are home to a globally significant array of wildlife; however, climate change and increased uses of surface water threaten these ecosystems and the species that depend on them. Over the past three years, the Cooperative has joined forces with two other southeastern LCCs and Southeast Aquatic Resources Partnership (SARP) to implement the Southern Instream Flow Network (SIFN). This research will help develop and improve protective instream flow policies by providing scientific resources and opening lines of communication among Cooperative partners.

Genetic “hotspots” in the South Atlantic:

The southeastern United States is a recognized hotspot of biodiversity for a variety of aquatic taxa. Unfortunately, the great diversity of the area is accompanied by a large proportion of species at risk of extinction. Sponsored by the South Atlantic LCC, researchers with the US Fish & Wildlife Service conducted a pilot

study that identifies genetic “hotspots” throughout the South Atlantic region. Their results show the utility of genetic datasets and may help resource managers identify current and future priority areas for conservation action through the Conservation Blueprint.

SALCC Multi-Species Genetic Divergence Landscape-Terrestrial



FOR MORE INFORMATION:

Please visit our website: www.southatlanticlcc.org



Photo: a Gullah Sweet Grass Basket Weaver starts work on a basket, National Park Service

South Atlantic LCC: Working across the landscape

Facilitating Collaboration

Working across jurisdictional boundaries and facilitating collaboration between partners has been a part of the Cooperative's history since its launch in 2010. Partnerships play a key role in the Cooperative's efforts to develop a Conservation Blueprint for the future of the region. By leveraging the strengths of these collaborations and working closely with our local and regional partners, the Cooperative can help inform future strategies to sustain the nation's natural and cultural resources for current and future generations.

Cross-LCC Coordination

Over the past year significant progress was made to make sure what we're doing as a conservation community in the South Atlantic is adding up to something bigger. For example, staff from three adjacent LCC's and the regional Climate Science Center attended one of the four Blueprint Workshops the Cooperative held throughout the region to ensure cross-LCC



The Gulf Coast Vulnerability Assessment will provide much needed coordination across multiple programs and partnerships to achieve planning and adaptation goals.

coordination of landscape priorities. In addition, the four Gulf LCCs, SE Climate Science Center, NOAA and the Gulf of Mexico Alliance are leading the Gulf Coast Vulnerability Assessment to enhance conservation and restoration planning on Gulf of Mexico coastal ecosystems and their species. Finally, the Southeastern Association of Fish and Wildlife Agencies (SEAFWA), and the Southeast Natural Resources Leadership Group (SENRLG), have asked the Southeast LCCs to work to integrate their respective conservation plans. The final integration of all Southeast LCC plans into a unified Southeastern Conservation Adaptation Strategy (SECAS) is expected by 2016.

Shared Capacity

As a true cooperative, the South Atlantic LCC looks to partner agencies to strengthen and formalize existing inter-agency partnerships teams to better enable cooperation, communication and collaboration among resource partners on large-scale conservation efforts. As part of the LCC network, the USDA Forest Service, DOI National Park Service and US Fish and Wildlife Service identified the need for greater grassroots and member involvement and established several liaison and extension positions within the South Atlantic LCC. These positions seek to improve the quality of coordination by providing assistance in establishing and



The **Blueprint** may help people and organizations find the best places to work together to sustain our natural and cultural heritage. Photo: USDA FS

maintaining strong communication channels and serving as direct conduits between their respective organizations and the South Atlantic LCC. Specifically, they seek to move Cooperative partners through the process from mere awareness of the existence of the Cooperative to involvement, participation, and contribution to the collective collaboration.



The **Blueprint** could help inform decision making by assessing future threats on cultural resources, like Connemara farms, Carl Sandburg Home National Historic Site, NC. Photo: NPS



Photo: Cape Romain National Wildlife Refuge , U.S. Fish & Wildlife Service

South Atlantic LCC: Spreading the Word

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

Monthly Webinar Series

On the third Thursday of each month, the South Atlantic LCC hosts a web forum that provides another way of sharing information and generating dialogue about what we're doing and how it's being done. Below are the topics of 2013:

- "Decision Support tools for Conservation Planning"
- "The Defense Coastal / Estuarine Research Program (DCERP)"
- "SALCC Conservation Planning Atlas"
- "South Atlantic LCC Indicator Models"
- "South Atlantic connectivity and other indicator models"
- "Your input on next steps for Blueprint design"
- "Identification of Evolutionary Hotspots Based on Genetic Data and gap Analysis of Hotspots in Protected Lands Encompassed by the SALCC"
- "Results and next steps from South Atlantic LCC Conservation Blueprint Workshops."
- "Overview of the draft South Atlantic Conservation Blueprint."
- "Synthesis of climate model downscaling products for the southeastern United States"

Researchers' Brown Bag

Each month on the second Thursday the South Atlantic LCC co-hosts the Triangle Climate and Landscape Researchers' Brown Bag with the Eastern Forest Environmental Threat Assessment Center. Below are the presentations of 2013:

- "Key Habitat Connectivity Areas"
- "Biodiversity metrics for agriculture: A database approach to foster conservation partnerships"
- "An Interactive Climate Change Tree Atlas"
- "Potential Impacts of climate change on soil erosion vulnerability across the conterminous U.S."
- "Warming in the city: Global change affects herbivores and their natural enemies on street trees"
- "Synthesis of Climate Model Downscaling Products for the Southeast U.S"
- "Southern Forest Futures Project"
- "Pine Integrated Network: Education Mitigation, and Adaptation Project (PINEMAP)"
- "Albemarle Sound-Pilot Study of the National Monitoring Network for US Coastal Waters and their Tributaries"
- "Can forests take the heat? Managing pests and ecosystem services in a warming climate"










IN THIS ISSUE

LCC National Council Membership Announced

Reviewing the results from Blueprint workshops

For Tribal Communities, Managing and Adapting to Change is Nothing New

Your input on testing the South Atlantic Terrestrial Indicators

US Department of Interior Secretary Sally Jewell Discusses Sea Level Rise at Cape Romain Wildlife Refuge

News from the South Atlantic LCC
December 2013 Newsletter

LCC National Council Membership Announced
by Marshall Williams, Regional Environmental Coordinator, US Army Regional Environmental and Energy Office

The South Atlantic LCC published a monthly Newsletter that delivers articles and announcements on landscape conservation efforts and events across the South Atlantic area.

FOR ARCHIVED PRESENTATIONS OR NEWSLETTERS

Please visit our website:
www.southatlanticlcc.org



Photo: Fort Pulaski National Monument, GA, National Park Service

South Atlantic LCC: 2012-2013 Report Card

Report Card Overview

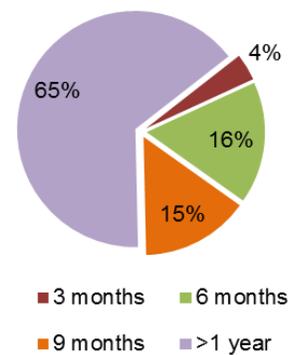
The South Atlantic LCC has committed to a regular review of the effectiveness of the partnership in implementing our strategic plan and adhering to our guiding principles. This report card presents the findings from an on-line survey of Cooperative stakeholders (N=56) and steering committee members (N=15). The feedback considered the first year of operations (03/2012 - 03/2013) under the strategic plan. This report card is an important step in our continuing dedication to transparency and to providing all those who are interested a voice in the Cooperative.

Stakeholder Engagement

Respondents were asked to indicate how involved they are with their LCC

I look at the website	75%
I read the newsletter regularly	75%
I contribute to the newsletter by either posting a blog or an event	6%
I am a member of one of the SALCC workgroups or committees	29%
I have participated in a SALCC workshop	41%

How long have you been involved with the SALCC?



Report Card Summary

Successes	Challenges & Barriers	Recommended Improvements
Taking on big, ambitious goals	Lacking financial resources & time	Ramp up development of Conservation Blueprint
Transparent, open & inclusive	Partner fatigue & maintaining relationships	Clarify partner roles
Operational effectiveness & efficiency	Skepticism/lack of familiarity toward LCCs	Emphasize & document that LCCs are a value-adding organization
Sharp focus on the mission	Congressional & partner expectations	Strengthen inreach efforts within participating agencies
Stakeholders engagement	Different, & sometimes conflicting agency missions	Increase consistency between LCCs & Climate Science Centers
Cooperation with JVs & habitat partnerships	Linkages & consistency between LCCs & Climate Science Centers	Quantify & communicate stakeholder return on investment
FWS linkages with LCC indicator process	Vast geographic expanse	Integrate social, human & cultural dimensions

With regard to what efforts the South Atlantic LCC undertook during 2012, most stakeholders (70%) felt the Cooperative involved them in efforts they were interested in.

Select quotes from anonymous survey participants

"I feel like I'm part of this effort and what this broad partnership wants to be"

"The SALCC needs to expand outreach to lay audiences as materials are developed and collaborate more with neighboring LCCs for projects"

"I think the SALCC is probably in the forefront of all LCCs; however, there is much work to do with respect to inclusion of the ground level."

"Going forward, it would be more valuable for the SALCC to help stakeholders connect and share information more so than creating and sharing datasets."

"I think that all of the right ingredients are in place for success. What remains unproven is the effective realization of many of the conceptual goals in some practical sense."

South Atlantic LCC:

Leadership & Integration



Photo: Conifer Road Wet Savannah, Ricky Wrenn, Francis Marion National Forest, SC.



Enhancing Collaboration

South Atlantic LCC staff met with several Atlanta area organizations in June to share updates and identify ways the Cooperative is working to promote a sustainable landscape



Working across Partners

South Atlantic Coordinator, Ken McDermond and South Atlantic LCC Steering Committee Vice Chair, Mike Harris, GA DNR



Building Bridges

Members of the South Atlantic staff, USDA FS, and SE CSC participated in an Inter-Tribal meeting to initiate a potential ethno-botanical study

Steering Committee

The South Atlantic LCC Steering Committee, which serves as the decision making body, is composed of leaders from fifteen organizations that represent a broad set of interests and organizations. 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. This Committee works with the South Atlantic 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.

Cultural Resource Committee

Members of the Cultural Resources integration committee work through the South Atlantic staff to provide advice and recommendations to the Steering Committee on cultural resource management concerns. Cultural resources are irreplaceable indicators of the wide array of lifeways, ideas, beliefs, practices, and experiences that, over time, have led to the world we live in today. This Committee works to incorporate cultural resources into the Conservation Blueprint in support of the mission of the South Atlantic LCC. A representative from this committee also serves on the Steering Committee.

Southeastern Climate Science Center

In addition to working with a diverse array of partners, the South Atlantic LCC 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.



Photo: Congaree National Park, SC, National Park Service

South Atlantic LCC: Partners & Staff

Steering Committee Member Organizations

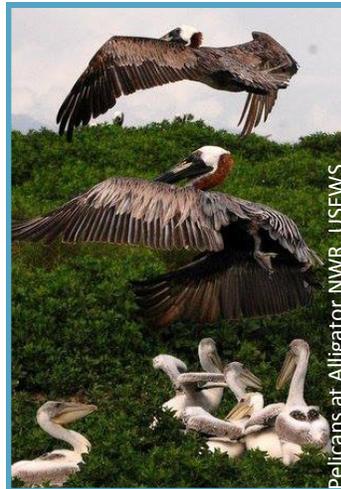
Florida Fish and Wildlife Conservation Commission
 Georgia Department of Natural Resources
 National Oceanic and Atmospheric Administration
 National Park Service
 The Nature Conservancy
 North Carolina Department of Cultural Resources
 South Atlantic Fishery Management Council
 South Carolina Department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

South Atlantic LCC Partnership Committee

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

South Atlantic LCC Cultural Resource Committee

North Carolina State Historic Preservation Office
 Catawba Indian Nation
 Florida Division of Historical Resources
 Georgia Department of Natural Resources' Historic Preservation Division
 South Carolina Department of Archives and History
 The Palmetto Trust for Historic Preservation
 U.S. National Park Service
 U.S. Department of Defense
 U.S. Fish and Wildlife Service



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