Developing the South Atlantic Conservation Blueprint Version 1.0

Background

In March 2012, developing a Conservation Blueprint became the 3 - 5 year mission of the South Atlantic LCC. In March 2013, the South Atlantic LCC adopted Natural Resource Indicators (and shortly after, Cultural Resource Indicators) as shared measures of success. The South Atlantic LCC also created a Conservation Design Team (design experts who typically lead large landscape design efforts) and a User Team (potential "early adopters" of the Blueprint who either directly make conservation decisions or are one step removed) to guide the Blueprint development process. The following document describes how Blueprint 1.0 was developed.

Team members

Conservation Design Team

Mark Anderson - The Nature Conservancy
Bob Cooper - University of Georgia
Mary Conley - The Nature Conservancy
Barry Grand - U.S. Geological Survey
Nate Nibbelink - University of Georgia
Jim Fox - University of North Carolina
Will Allen - The Conservation Fund
Paul Wagner - Army Corps of the Engineers
Dean Urban - Duke University

User Team

Beth Stys - Florida Fish and Wildlife Conservation Commission
Billy Dukes - South Carolina Department of Natural Resources
Breck Carmichael - South Carolina Department of Natural Resources
Brian Watson - Virginia Department of Game and Inland Fisheries
Brian Yanchik - Federal Highway Administration
Cherry Green - National Park Service
Charlotte Gillis - National Park Service
David Whitaker - South Carolina Department of Natural Resources
Don Imm - U.S. Fish and Wildlife Service
Emrys Treasure - U.S. Forest Service
George Willson - Consultant, The Conservation Fund
Hervey McIver - The Nature Conservancy
Jan MacKinnon - Georgia Department of Natural Resources
Jason Bullock - Virginia Department of Conservation and Recreation
John Ann Shearer - U.S. Fish and Wildlife Service
John Stanton - U.S. Fish and Wildlife Service
Jon Ambrose - Georgia Department of Natural Resources
Julie Elmore - Natural Resource Conservation Service
Kacy Cook - North Carolina Wildlife Resources Commission

Lisa Perras-Gordon - U.S. Environmental Protection Agency
Marella Buncick - U.S. Fish and Wildlife Service
Maria Whitehead - The Nature Conservancy
Mark Cantrell - U.S. Fish and Wildlife Service
Mark Scott - South Carolina Department of Natural Resources
Pace Wilber - National Oceanic and Atmospheric Administration
Pam Wingrove - U.S. Fish and Wildlife Service
Reggie Thackston - Georgia Department of Natural Resources
Rick Durbrow - U.S. Environmental Protection Agency
Roger Pugliese - South Atlantic Fishery Management Council
Ryan Heise - North Carolina Wildlife Resources Commission
Ryan Orndorff - U.S. Marine Corps
Wilson Laney - U.S. Fish and Wildlife Service

South Atlantic LCC staff

Rua Mordecai - Science Coordinator
Amy Keister - GIS Coordinator
Brad Pickens - Conservation Design postdoc
Janet Cakir - Climate and Socioeconomics Coordinator / National Park Service Liaison
Lori Barrow - Information Transfer Specialist / U.S. Forest Service Liaison
Catherine Phillips - Aquatic Liaison to the Southeast Aquatic Resources Partnership
Ken McDermond - Coordinator
Hilary Morris - South Atlantic Pathways intern

Workshops

Attendance

Around 200 people from 58 different organizations attended one of the four Blueprint workshops. Participants included a wide variety of natural and cultural resource conservation practitioners from across the South Atlantic region.

Dates and locations

Raleigh, NC
Workshop #1: Oct 22, 2013 (10am - 3pm)
Workshop #2: Oct 23, 2013 (10am - 3pm)

Savannah, GA
Workshop #3: Nov 19, 2013 (10am - 3pm)
Workshop #4: Nov 20, 2013 (10am - 3pm)

The marine environment was addressed through a separate virtual workshop with a similar format.

Selecting lands and waters

Participants worked in small breakout groups to select subwatersheds (HUC12) to be part of the Blueprint, assign conservation actions to those subwatersheds, and then do a simple group prioritization across selected watersheds. For the marine environment, workshop attendees selected Outer Continental Shelf lease blocks, removing areas from the starting point of all South Atlantic Fishery Management Council Essential Fish Habitat areas and Habitat Areas of Particular Concern. Groups assignments were based on participants' preference of spatial scale (large landscapes or smaller ecoregions) and to ensure diverse expertise in each group. Landscapes groups covered the entire South Atlantic while smaller ecoregion groups covered smaller areas covering parts of 2-3 states. Every area of the South Atlantic was covered by 6 different groups: 4 Landscapes groups (all 4 workshop days covered the entire South Atlantic) and 2 smaller ecoregion groups (2 workshop days with different regions used at each workshop location). On the 2nd day of workshops at each location, many groups chose to begin from work done by workgroups on the previous day.

Each group used both their collective knowledge and supporting geospatial layers depicting future change (e.g., urban growth, sea level rise) and selected South Atlantic LCC Natural and Cultural Resource Indicators (e.g., connectivity, historic places) to help with their selections and prioritization. Groups began by selecting subwatersheds, conservation actions, and documenting their reasoning.

Assigning conservation actions

Participants assigned conservation actions from the Open Standards for Conservation action taxonomy. Potential conservation actions included:

1) land/water protection;
2) land/water management;
3) livelihood, economic & other incentives;
4) species management;
5) education and awareness; and
6) law & policy.

Prioritization

Later in the workshop participants focused (if needed) on prioritization. During the prioritization, groups needed to ensure that their "Tier 1" subwatersheds covered no more than 30% of their area and subwatersheds with the action *Land/Water Protection* covering no more than 10% of their areas. These thresholds are based on existing literature / conservation plans (30%) and acres protected yearly in the region extrapolated to 2050 (10%).

Results

All results are available at:
http://salcc.databasin.org/galleries/d69d68b2d7b14674bffe70b39280b2d1

Additional workshop support
Lindsey Smart - Albemarle Pamlico National Estuary Partnership

Roy Hewitt - U.S. Fish and Wildlife Service
Halil Cakir - U.S. Environmental Protection Agency

Integration of workshop results

We used a simple scoring system for subwatersheds to integrate the results from the different workshops groups:

- 2 : Identified as Tier 1 at least once in both a Landscapes group <u>and</u> a smaller ecoregion group
- 1: Identified as Tier 1 at least once in either a Landscapes group <u>or</u> a smaller ecoregion group
- 0: Never identified as Tier 1

Integration of existing plans

Plans used

The following plans were formally used in scoring: TNC Ecoregional Portfolio, Atlantic Coast Joint Venture Priority Areas, EPA priority watersheds, National Bobwhite Conservation Initiative (NBCI) Biologist Ranking Index, Priority Amphibian and Reptile Conservation Areas (PARCAs), Virginia Natural Landscape Assessment, North Carolina Biodiversity and Wildlife Habitat Assessment (BWHA) integrated priorities from the Green Growth Toolbox, Georgia Priority Waters, Alabama Strategic Habitat Units (SHUs), and Florida Critical Lands and Waters Identification Project (CLIP).

Some of these plans included ranks to indicate the priority level for each area. The entire plan often included most of the LCC so we only used area ranks that roughly translated to "high priority" in a relatively consistent way across multiple plans. That resulted in the following ranks being included: North Carolina BWHA (6-10), Florida CLIP (5), Virginia Natural Landscape Assessment Land network (1-5) and Natural landscape blocks (1), and NBCI Biologist Ranking Index (1).

Additional plans tested

Due to a lack of spatial resolution, the following plans were not formally included in scoring but were evaluated to ensure the other plans provided sufficient coverage: Significant Landscapes for Longleaf Conservation, Southeast Aquatic Resources Partnership Priority Areas, and Southeast Natural Resources Leadership Group (SENRLG) Landscape Conservation and Restoration Pilot Project.

Final scoring

We used a simple scoring system to integrate existing conservation plans:

- 2 : Included in 2 or more plans
- 1: Included in only 1 plan
- 0: Not included in plans

Merging workshop results and existing plans

Instead of simply summing the scores from the workshop and the existing plans, we used the following combination of scores to assign subwatersheds to one of 5 categories.

Workshop	Existing plans	Interpretation
2	2	Highest priority
2	1	High priority
1	2	High priority
2	0	Further investigation
0	2	Further investigation
1	1	Low priority
0	1	Low priority
1	0	Low priority
0	0	Not priority

Interpreting final scores

Highest priority
Given that these subwatersheds received the highest scores from both the workshop integration and the integration of existing conservation plans, these areas are likely to remain important places for shared conservation action into the future.

High priority
While there's strong evidence for these subwatersheds being important for shared conservation action, their priority level may change in future versions of the Conservation Blueprint.

Further investigation
Since these subwatersheds have strong disagreement between the workshop integration and the integration of existing conservation plans, there's uncertainty about whether they should be a high or low priority.

Low priority
While these subwatersheds may have important conservation value, they are a lower priority compared to the "Highest priority" and "High priority" categories.