

Setting a Course for a Sustainable Landscape



SOUTH ATLANTIC
LANDSCAPE CONSERVATION COOPERATIVE

What does the SALCC do?

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



Indicators and Targets: Why do they matter?

- The blueprint will need to paint a compelling picture of the future of the South Atlantic region



Indicators and Targets: Why do they matter?

- The blueprint will need to paint a compelling picture of the future of the South Atlantic region



- It needs to represent why we care about the ecosystems of the area





Developing the process



Natural Resource Indicators Process Team

- Purpose: To develop the process for building off existing efforts to set indicators and measurable targets for SALCC natural resource goals



Who was on the team?

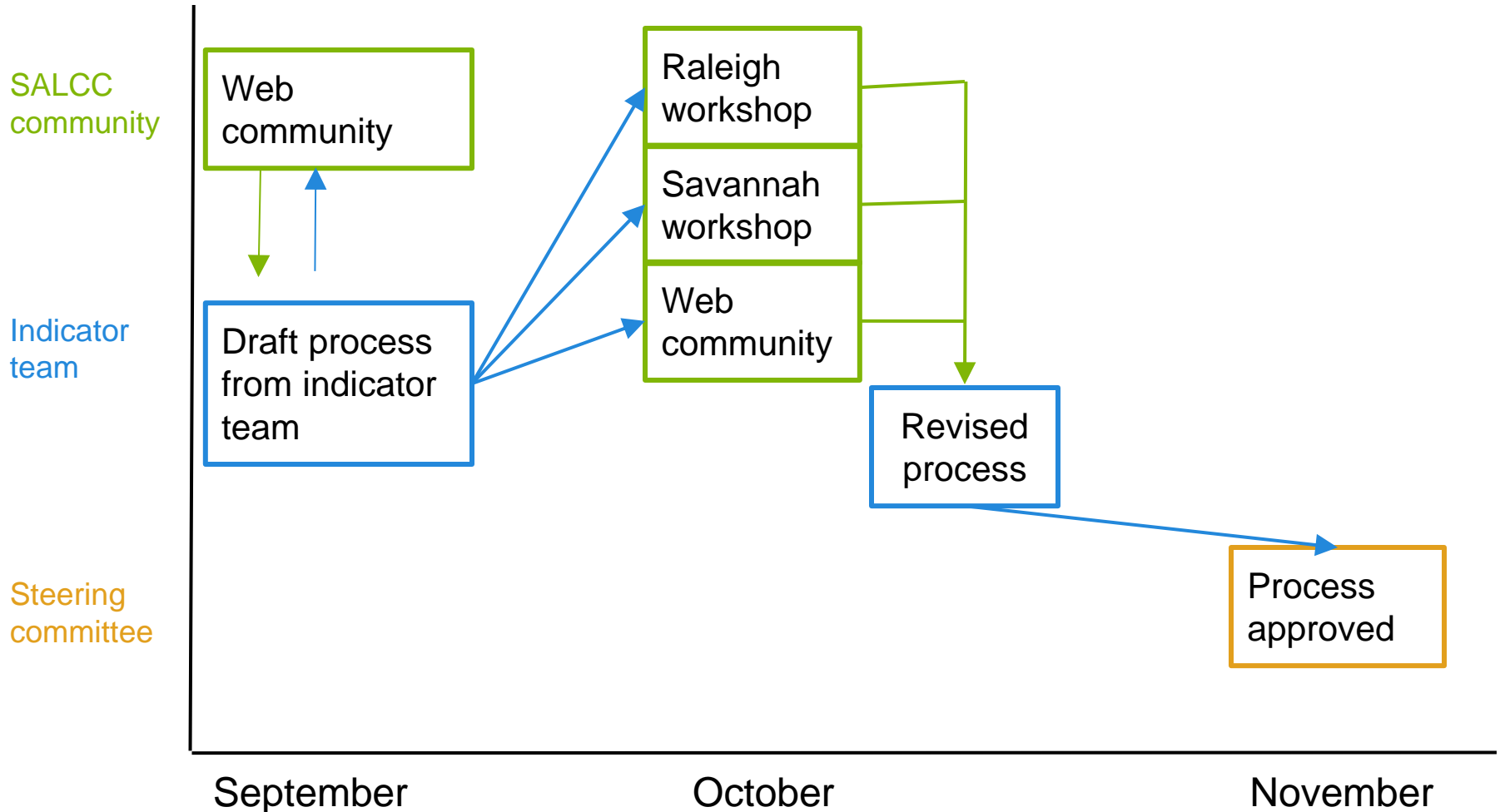
Jon Ambrose	GA DNR / SWAP
Shannon Deaton	NC WRC / SWAP
John Stanton	FWS / ACJV
Linda Pearsall	NC DENR / Natural Heritage
Robert Boyles	SC DNR - Marine division
Pete Campbell	FWS / ENCSEVA
Dean Carpenter	NC DENR / APNEP
Maria Whitehead	TNC



Who was on the team?

Mary Long	USFS
Tim Pinion	NPS
Wilson Laney	FWS/ Numerous partnerships
Roger Pugliese	SAFMC
Reggie Thackston	GA DNR / Private lands
Breck Carmichael	SC DNR
Rick Durbrow	EPA
Vic Engel	USGS / Everglades restoration
Jimmy Evans	GA DNR

Indicator process flowchart (Sept - Nov)





Definitions



Terms

Goal: Desired conservation outcome that is difficult to measure

Indicator: A metric that is designed to inform us easily and quickly about the conditions of a system

Target: A measurable endpoint for an indicator



Indicator framework

Broad goals

Natural resources

- Integrity of ecological systems
- Viability of key species

Cultural resources

- Sites
- Objects
- Biotic cultural resources

Socioeconomic resources

- Recreation
- Human health
- Economy



Ecosystems (Natural Resources)

- Marine
- Estuarine
- Beach and dunes
- Forested wetlands
- Tidal and nontidal freshwater marshes (managed and unmanaged)
- Freshwater aquatic (streams, lakes, ponds)
- Scrub-shrub (includes cliffs and outcrops)
- Pine woodlands, savannas, and prairies (includes longleaf, loblolly, and slash systems)
- Upland hardwood forests
- Landscapes (Habitat aggregate)
- Waterscapes (Habitat aggregate)



Crosswalk of partners
indicators to framework

Synthesis of existing plans

- Compile spreadsheet of existing indicators for each habitat type
- Build off existing work to minimize redundancy

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Category	Indicator	Guild	Species	Scientific Name	Taxonomic Group	Citation	Notes
Biological	presence/absence		swallow-tailed kite	<i>Falco sparverius</i>	bird	I. SPWS Biologists Convention	
Biological	presence/absence		R-floresquid	<i>Caryakonus rufescens</i> (sub-species endemic in US)	mammal	SA/CC priority appendix	Wide distribution - Getatas WAP
Biological	presence/absence		southernstem myotis	<i>Myotis austroriparius</i>	mammal	SA/CC priority appendix	Wide distribution - Getatas WAP
Biological	presence/absence		rusty blackbird	<i>Euphagus carolinus</i>	bird	I. SPWS Biologists Convention	
Biological	presence/absence		prothonotary warbler	<i>Protonotaria citrea</i>	bird	I. SPWS Biologists Convention	
Biological	presence/absence		wood duck	<i>Aix sponsa</i>	bird	I. SPWS Biologists Convention	
Biological	presence/absence		black bear populations	<i>Ursus americanus</i> (also <i>americanus floridanus</i>)	mammal	SA/CC priority appendix	Wide distribution - 1 states WAP
Biological	presence/absence		American woodcock	<i>Scelopax minor</i>	bird	USFWS Biologists Convention	
Biological	presence/absence		cerulean warbler	<i>Dendroica cerulea</i>	bird	USFWS Biologists Convention	
Biological	presence/absence		hooded warbler	<i>Vireo olivaceus</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		golden mouse	<i>Ochrotomys nuttalli</i>	mammal	USFWS Biologists Convention	
Biological	presence/absence		Swainson's warbler	<i>Limnodynastes swainsonii</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		Wood Duck	<i>Aix sponsa</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		Black-throated Green Warbler	<i>Dendroica virens</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		Brown-headed Nuthatch	<i>Sitta pusilla</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		Prothonotary Warbler	<i>Protonotaria citrea</i>	bird	Atlantic Coast Joint Venture	
Biological	presence/absence		Northern Parula	<i>Parula americana</i>	bird	Atlantic Coast Joint Venture	

Sources

- **Sources**
 - SWAPs
 - Atlantic Coast Joint Venture
 - Albemarle-Pamlico National Estuary Program: 2012 Ecosystem Assessment
 - Southeast Aquatic Resources Partnership: Southeast Aquatic Habitat Plan
 - USFWS Southeast Biologist Conference
 - NOAA Southeast and Caribbean Regional Team (SECART)
 - NPS Inventory and Monitoring Program
 - National Bobwhite Conservation Initiative 2.0
 - Fishery Management Plans
 - USFS Management Indicator Species
 - America's Longleaf Conservation Plan
 - National Fish and Wildlife Foundation Longleaf Stewardship Fund
 - ENC/SEVA Strategic Plan



Selection criteria



Criteria for indicator selection

- Can be a species, collection of species, or habitat metric (biotic or abiotic)
- ~ 3 indicators per habitat



Criteria for indicator selection

Ecological criteria

- Ability to represent a variety of organisms and ecological attributes within that habitat type throughout a major portion of the LCC
- Sensitivity to big landscape threats in the region while having predictable and limited sensitivity to other factors such as natural variations or disturbances (i.e., high signal to noise ratio)

Practical criteria

- Ease of monitoring with existing programs and resources
- Amount of overlap with existing plans and processes
- Ability to model indicator based on current data or existing projects



Criteria for indicator selection

Social criteria

- Ability to resonate with the American public
- Ability to link with an economic value
- Level of interest by public land or water managers
- Level of interest by private land or water managers



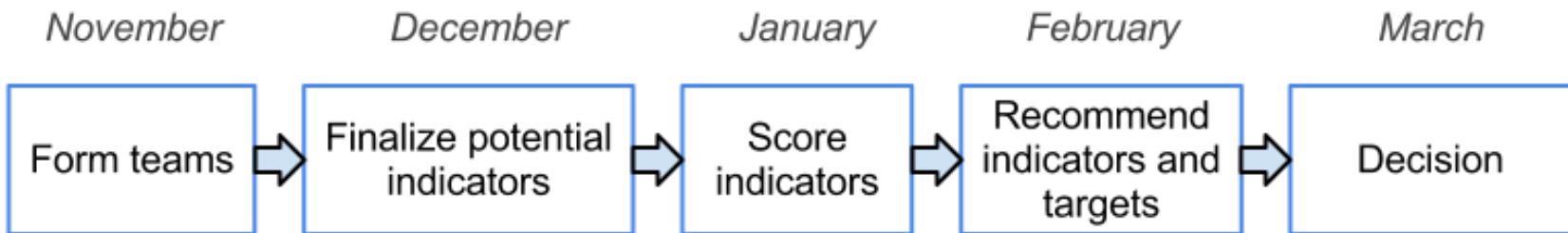
Criteria for target selection

- Amount of overlap with existing plans and processes
- Is the target achievable?
- Is there enough capacity to monitor the target?
- [In the future] Amount of overlap with cultural and socioeconomic goals

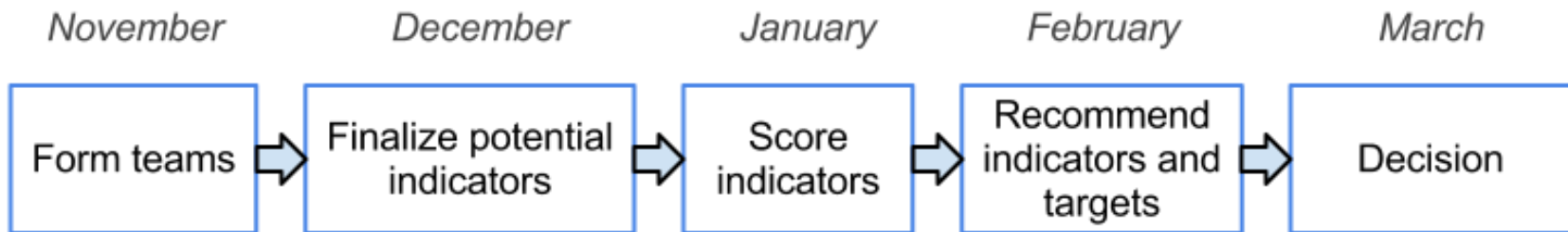


Selection process

Simple timeline



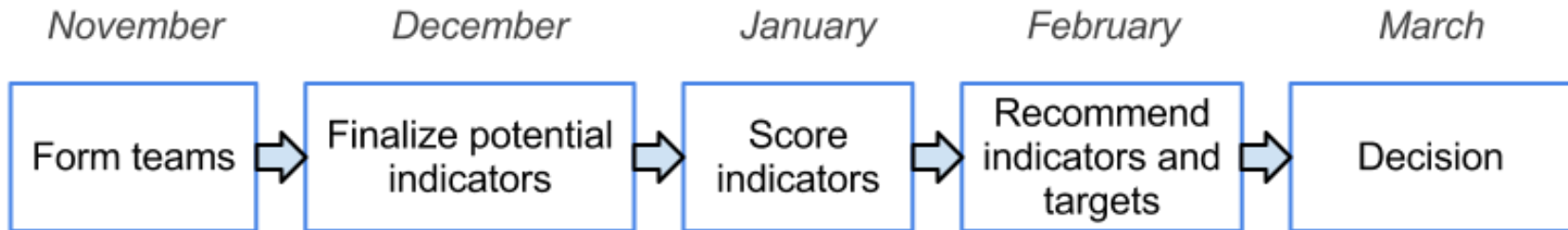
Simple timeline



Nov 2012: Form two teams to select and revise indicators

- Selection team role
- Revision team role

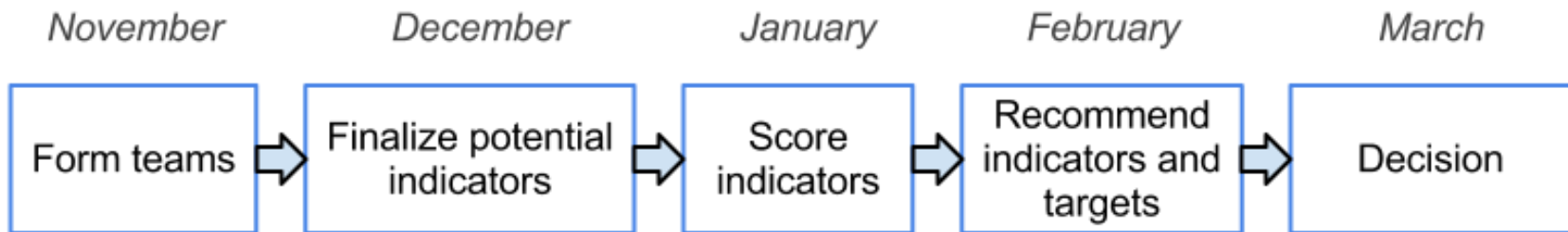
Simple timeline



Dec 2012: ID key indicators not in crosswalk of partner indicators

- Selection team gathers input and makes decision
- Revisions team captures lessons learned

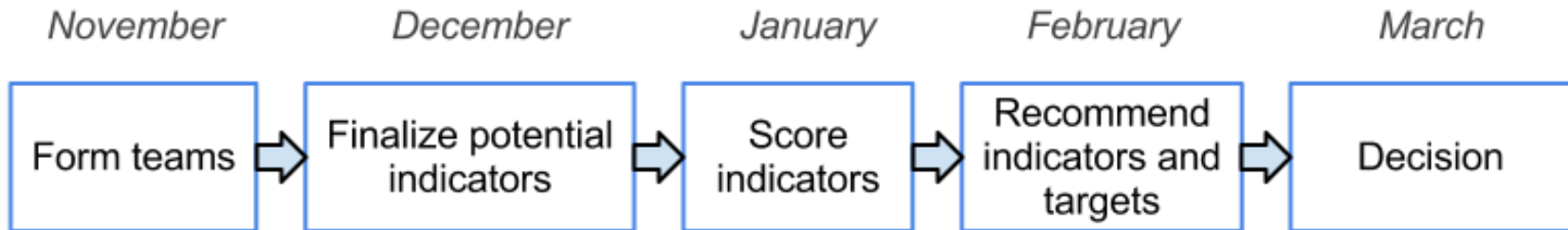
Simple timeline



Jan 2013: Key audiences score potential SALCC indicators

- Selection team gathers input
- Revisions team captures lessons learned

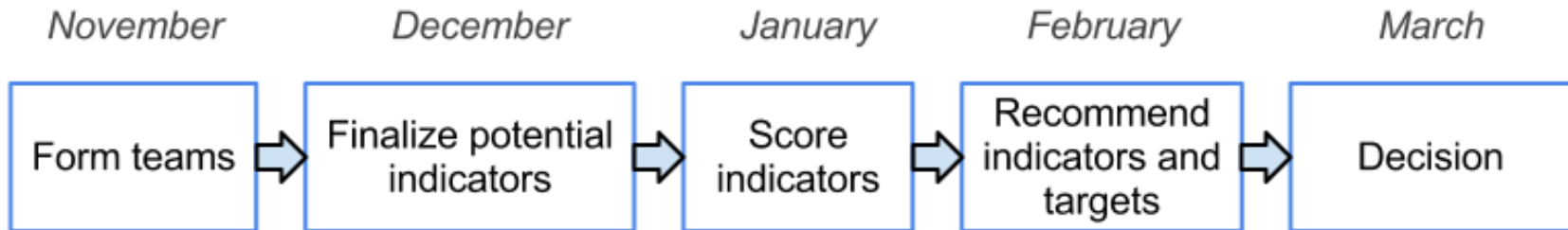
Simple timeline



Feb 2013: Recommendations from selection and revisions team

- Selection and revisions team meet to make final recommendations

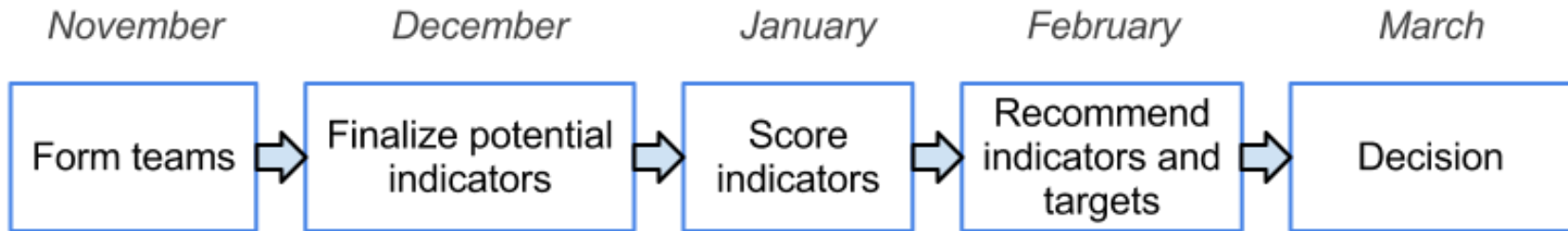
Simple timeline



Mar 2013: Steering committee decision on indicators and process to test and revise

- Decision on recommendations from selection and revisions team

Simple timeline



Spring 2013?: Assessment of indicator function

- Begin implementation of revision process



Implementing the process

Indicator selection team members

- | | | | |
|--------------------|---------|----------------------|--------|
| • Joe DeVivo | NPS | • Billy Dukes | SC DNR |
| • Tim Pinion | NPS | • Reggie Thackston | GA DNR |
| • Brian Watson | VA DGIF | • Jan MacKinnon | GA DNR |
| • Beth Stys | FL FWC | • Jimmy Evans | GA DNR |
| • Wilson Laney | FWS | • Jon Ambrose | GA DNR |
| • John Stanton | FWS | • Duke Rankin | USFS |
| • Maria Whitehead | TNC | • Roger Pugliese | SAFMC |
| • David Whitaker | SC DNR | • Ryan Heise | NCWRC |
| • Mark Scott | SC DNR | • Scott Anderson | NCWRC |
| • Breck Carmichael | SC DNR | • Lisa Perras Gordon | EPA |



Indicator review

Detailed input from 235 experts in marine, freshwater, and terrestrial resources in the South Atlantic region and 9 experts representing all 5 adjacent LCCs

- 197 online reviews
- Feedback from all adjacent LCCs
- Input from regional partnerships
- Phone interviews with 18 local experts
- Integration of feedback of final recommendations by 20 member Indicator Team



The approach to expert review

- A representative sample of reviewers get interviews
- Everyone else gets the online review form

Part 3 of 5: Practical criteria

Next, it's time to rank the potential indicators based on practical criteria. If you're not sure how to answer, select "Don't know".

You're only being asked to review one of the three practical criteria of the SALCC indicator process. The other two ("Amount of overlap with existing plans and processes" and "Ability to model indicator based on current data or existing projects") are being determined by a synthesis of existing plans and modeling information.

Please score the potential indicators based on the following practical criteria

5. Ease of monitoring with existing programs and resources

	Poor	Average	Good	Great	Don't know
Abundance of american oystercatcher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abundance of piping plover	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abundance of red knot	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abundance of wilson's plover	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acres of beach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beach bird index (Piping plover, American Oystercatcher, Wilson's plover, Red knot, Least tern)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Miles of armored beach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of loggerhead sea turtle nests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Number of successful loggerhead sea turtle nests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments

Empty text box for additional comments.

Prev

Next



Indicator revision team members

- Joe DeVivo NPS
- Tim Pinion NPS
- Dave Steffen VA DGIF
- Brian Branciforte FL FWC
- Laurel Barnhill FWS
- Greg Moyer FWS
- Jan MacKinnon GA DNR
- Chris Goudreau NCWRC



March 2013 Steering Committee meeting

- Natural resource indicators and targets approved
- Process for testing and revising indicators and targets approved
- More info:

<http://www.southatlanticlcc.org/page/indicators>



Next steps and lessons
learned



Next steps for indicators

- Natural resource indicators testing and revision process has begun
- Report card on past, current, and future state of indicators (South Atlantic 2050)
- South Atlantic Conservation Blueprint 1.0



What worked well

- Combination of individual interviews and web surveys
- Broad partnership discussion to decide on the process
- Limited time needed by indicator team members (two 2hr web meetings + a two day in person meeting)
- Idea of developing a testing/revision process early



What didn't work well

- An early focus on only species as indicators
- Early thinking that we wouldn't need workshops to discuss the process