

# LIVING SHORELINES FROM BARRIERS TO OPPORTUNITIES



April 12, 2016

**SOUTH ATLANTIC LIVING SHORELINES SUMMIT**



# Committee Members

---

- Todd Miller (Committee Chair) - N.C. Coastal Federation
- Tim Dillingham - American Littoral Society
- Niki Pace - Mississippi-Alabama Sea Grant
- Tom Ries - Scheda Ecological Associates
- Bill Cary - Brooks Pierce Law Firm



# Living Shoreline Definition

---

A living shoreline is any shoreline management system that is designed to protect or restore natural shoreline ecosystems through the use of natural elements, and if appropriate, manmade elements. Any elements used must not interrupt the natural water/land continuum to the detriment of natural shoreline ecosystems.



# Background

- Importance of Shoreline Ecosystems and Estuaries
- Shoreline Type and Location
- Types of Shoreline Management Systems
- Impact of Shoreline Management System on Estuarine System





# Background

- Potential Impact of Sea Level Rise
- Economics of Shoreline Management Systems
- Regulatory Overview
- Trends in Shoreline Management



# Institutional Obstacles

---

- Inertia
- Lack of broader planning context
- Lack of an advocate

# Inertia

- Familiarity with “traditional” methods
- Lack of knowledge
  - Efficacy
  - Impacts
- Federal regulatory system



# Lack of a broader planning context

- Site specific decisions
  - Understate negative cumulative impacts of hardening
  - Overlook system values of living shorelines
  - Impose entire cost on only one beneficiary--site owner





# Lack of a broader planning context

---

- Existing regulatory scheme does not adequately consider system-wide impacts/benefits
- Lack of system-wide planning tools



# Lack of an advocate

- Many beneficiaries of living shorelines
- Do not recognize their common interest
- Have not coalesced into an effective force



# Strategies

---

- Education and Outreach
- Regulatory Reform
- Improving Institutional Capacity
- Government Agencies as Role Models





# Education and Outreach

## Targets

- Owners
- Designers
- Contractors and suppliers
- Regulatory
- Political bodies
- Public





# Education and Outreach

## Subjects

- Efficacy
- Impacts
- Costs
- Values
- Sea level rise
- Directory of professionals
- Demonstration sites



# Education and Outreach

## Methods

- Web presence - data
- Web-based interactive training
- Demonstration projects
- Targeted professional outreach and training
- Public information campaign and branding



# Education and Outreach

## Recommendations

- Establish centralized reliable database
- Develop manual of best practices and decision guides
- Establish Living Shoreline Academy



# Regulatory Reform

---

- Permitting of hardened structures does not adequately address current science
- Living shorelines are usually the least damaging alternative and are generally practicable in most estuarine settings
- Current state/federal system is confusing and inefficient





# Regulatory Reform

## Recommendations

- Develop coordinated permitting system that
  - considers current science
  - considers system beyond the site
  - ranks hardened structures as last resort
  - considers other mandates
  - uses estuary based planning



# Regulatory Reform

## Recommendations

- Reevaluate NWP 13
- States should consider limiting availability of NWP 13
- Provide incentives and disincentives



# Improving Institutional Capacity

---

## Recommendations - Private sector

- Education: techniques; efficacy; impacts; economics
- Certifications – “Living Shoreline Professionals”
- Volunteers – cost and public education benefits



# Improving Institutional Capacity

---

## Recommendations - Public sector

- Education: techniques; efficacy; impacts; economics
- Specialization within permitting staff
- Encourage private sector expertise and partnerships





# Improving Institutional Capacity

Recommendation -  
funding

- Public and private funding of living shoreline initiatives should give high priority to increasing institutional capacity



# Government Agencies as Role Models

---

## Recommendations

- Use public lands for living shoreline demonstrations
- Adopt policies and guidance that promote and support living shorelines
- Political units at all levels plus collaborations
  - GSAA, GOMA, SERPPAS , and others
- NGOs assist in developing policies, practices, and guidance



# Next Steps

---

- RAE: Establish Living Shoreline Academy and database
- All affected NGOs:
  - Support and encourage innovative state regulatory programs
  - Provide leadership in moving other states away from business-as-usual
  - Provide leadership in focusing funding, education, and reform efforts on the Strategies
  - Provide leadership in identifying incentive systems and cost-shifting mechanisms



# Next Steps

---

- All funding sources: Focus on living shoreline projects and initiatives that advance the Strategies
- Corps:
  - Re-exam permitting process and use of NWP 13
  - Work with constituencies to develop coordinated system





# Next Steps

---

- State agencies:
  - Continue living shoreline initiatives
  - Act as role model with demonstration projects, education, and policies promoting living shorelines
  - Reassess impacts of business-as-usual
  - Cooperate with other jurisdictions in developing system-wide planning/permitting methods



# Next Steps

---

- Other agencies (DoD; GSAA; GOMA; SERPPAS; etc.):
  - Continue living shoreline initiatives
  - Act as role model with demonstration projects, education, and policies promoting living shorelines
- Cooperate with other jurisdictions in developing system-wide planning/permitting methods



Report available at [www.estuaries.org](http://www.estuaries.org)

Follow the Living Shorelines Initiative tab - [www.estuaries.org/  
living-shorelines](http://www.estuaries.org/living-shorelines)



# Discussion

