

# Ocean and Coastal Resource Management

Section 309: Living Shorelines























## Agenda

- Welcome & Introductions
- Summary of DHEC 309 Strategy and Objectives (D. Burger)
- Update: NERRS Science Collaborative Living Shorelines Research Project (S. Johnson)
- Presentation: Living Shorelines and NFIP CRS Open Space Preservation Credit (D. Stroud)
- Discussion: Economic Valuation of Living Shorelines (All)
- Wrap Up and Plans for Next Meeting (D. Burger)



### CZMA Section 309

- Assessment based on stakeholder input and analysis of resources under management authorities.
- 5-Year Strategy resulting in a Program Change/Enhancement
  - New Regulation, Enforceable Policy, etc.
- Website Search: CZM 309



## Section 309: Living Shorelines

### Challenge:

Current lack of regulatory definition results in longer application review times, loose design standards and requirements, and potentially ineffective projects.

#### Goals:

- 1. Identify "success criteria" for LS projects
- 2. Establish a regulatory definition of "living shoreline"
- 3. Develop specific regulatory project standards for individual permitting of living shoreline projects

## South Carolina Department of Health and Environmental Control Healthy People. Healthy Communities.

### Ten General Considerations

- The extent to which the activity requires a waterfront location or is economically enhanced by its proximity to the water;
- 2. The extent to which the activity would harmfully obstruct the natural flow of navigable water. If the proposed project is in one or more of the State's harbors, or in a waterway used for commercial navigation and shipping, or in an area set aside for port development in an approved management plan, then a certificate from the South Carolina State Ports Authority declaring that the proposed project or activity would not unreasonably interfere with commercial navigation and shipping must be obtained by the Department prior to issuing a permit;
- 3. The extent to which the applicant's completed project would affect the production of fish, shrimp, oysters, crabs, or clams or any marine life or wildlife, or other natural resources in a particular area, including but not limited to water and oxygen supply;
- 4. The extent to which the activity could cause erosion, shoaling of channels or creation of stagnant water;
- 5. The extent to which the development could affect existing public access to tidal and submerged lands, navigable waters and beaches, or other recreational coastal resources;
- 6. The extent to which the development could affect the habitats for rare and endangered species of wildlife or irreplaceable historic and archeological sites of South Carolina's coastal zone;
- 7. The extent of the economic benefits as compared with the benefits from preservation of an area in its unaltered state;
- 8. The extent of any adverse environmental impact which cannot be avoided by reasonable safeguards;
- 9. The extent to which all feasible safeguards are taken to avoid adverse environmental impact resulting from a project;
- 10. The extent to which the proposed use could affect the value and enjoyment of adjacent owners.



# Section 309: Community Ratings System

- Opportunity: Align the state-mandated Local Comprehensive Beach Management Planning process with elements of the NFIP Community Ratings System (CRS)
- Significant interest in preservation and enhancement of natural flood plain function, Open Space Preservation, public information and higher local standards

South Carolina Department of Health and Environmental Control Healthy People. Healthy Communities.

# Benefits to Coastal Zone Management

- Living shorelines, when constructed at appropriate estuarine shoreline sites, can lead to habitat improvement, water quality improvement, and greater hazard resilience. This suite of benefits cannot be attained through the use of bulkheads or revetments.
- Through the continued monitoring of a subset of existing living shoreline projects, DHEC-OCRM and other agencies such as SCDNR (including the NERRS) and USACE will gain information about design features and environmental conditions that work and those that do not.
- Furthermore, the results will help inform the development of specific project standards, which will in turn allow DHEC-OCRM to evaluate proposed living shoreline permit applications more effectively and efficiently and allow for others to implement these projects appropriately.
- Preservation and restoration of estuarine shorelines provide flood protection benefit; Incentives for counties and municipalities through NFIP CRS Program



## South Carolina Department of Health and Environmental Control Healthy People. Healthy Communities.

	2016	2017	2018	2019	2020
Work Group					
Success Criteria					
Identify Additional Sites					
Monitor					
Monitoring Contract					
Site Assessment					
Internal Documentation of Findings and Recommendations					
Notice of Drafting					
APA					
Education and Outreach					



### **Economic Valuation**

- Individual: Installation, maintenance and protective benefit (SLR, storms), property value, etc.
- Community: Preservation of natural floodplain function, CRS OSP Credit incentives for local governments
- Market for consultation, materials and labor



## **Next Steps**

- Continue monitoring
- Define "success criteria"
- Begin APA process for drafting regulation
- Identify public information needs
- Training program
  - Knowledge X with GA and NC
  - Identify key organizations with training capacity















### **Contact Us**

Dan Burger Director, Coastal Services Division 843.953.0251 burgerdj@dhec.sc.gov

#### **Stay Connected**

























