Coastal Program – NC NERR Partnership
Research and monitoring program:  
*Who we are and what we do*  

- Goal: advance understanding of coastal ecosystems to inform management
Research and monitoring program: 
*by the numbers* 2014-2019

- **23** years of water quality monitoring
- **81** research projects in reserves
- **8** graduate research fellows
- **15** partner organizations
- **17** peer-reviewed publications
- **28** workgroups & committees
Reserve and DCM research collaborations

- Estuarine shoreline stabilization
- Beneficial use of dredged material
- Environmental windows for dredging
Estuarine shoreline stabilization

- Performance and resilience of living shorelines?
- Effectiveness of alternative materials?
- Do bulkheads increase erosion of salt marsh?
Performance & resilience of living shorelines

before Florence

after Florence
Beneficial use of dredged material

- Effective enhancement strategy for marshes in face of SLR?
- Effects of different sediment addition thickness?
- Response of low vs high marsh spp. to sediment addition?
Enhancing marsh resilience with sediment addition
Environmental windows for dredging

• Impacts of dredging on water quality and fisheries
• Magnitude and extent of sediment plume?
• Spatiotemporal patterns of larval fishes?
Dredging impacts to water quality and fisheries
Coastal Training Program

Training Initiatives with Coastal Program

Evaluation Period: December 2009 - September 2019

Goal: Deliver science-based trainings and technical assistance to decision-makers to inform decisions regarding coastal resources
Five events reaching 171 marine operators & owners
Wetland Workshops

• Four events reaching 167 decision-makers

• Regulatory staff delineation training in 2014
Living on a Barrier Island

Nine events reaching 425 real estate professionals
Trainings with Planners

• Planning for Open Space – two events, reaching 68 decision-makers

• Grant Opportunities: Water Access, Parks, and Boating Infrastructure – two events, reaching 82 decision-makers
Living Shoreline Training

Ten real estate trainings reaching 423 professionals
Living Shoreline Training

Ten decision-maker trainings reaching 503 professionals
Living Shoreline Training

2016 coastal program training reaching 35 staff members
2017 – three events reaching 52 decision-makers

Dinner and a Living Shoreline MOVIE
Benefits of this Partnership
Estuarine and Living Shorelines

Living Shorelines Strategy

North Carolina Division of Coastal Management

LIVING SHORELINE STRATEGY ACCOMPLISHMENTS REPORT
AUGUST 2016
Strategy Activities

- Training
- Marsh Sill Inventory & Monitoring
- Outreach and Resources
- Marsh Sill General Permit
- Research
- Shoreline Mapping Inventory

NORTH CAROLINA COASTAL RESERVE & NATIONAL ESTUARINE RESEARCH RESERVE
Partnership

DCM Living Shoreline Workgroup

- Regulatory
- Policy
- Research
- Outreach
- Training
Partnership Impact

**Increased awareness of activities internally and with partners**

**Activities informed by end users**

**Consistent agency messaging**

**Increased awareness of options by public and decision-makers**
Abandoned and Displaced Vessels
Abandoned and Displaced Vessels

Communications process

Community support

State & Regional Debris Action Plans

Best practices for removal

Disaster response
Abandoned and Displaced Vessels

Abandoned & Derelict Vessel Clean-Up Workshop: Limited-Time Opportunities for Vessel Removal in Coastal Communities
Abandoned and Displaced Vessels