

# A SOLUTION FOR SHORELINE MANAGEMENT: LIVING SHORELINES

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*Living shoreline at Camp Albemarle in 2017*



*Living shoreline at Camp Albemarle after Hurricane Florence*



*Bulkhead at Camp Albemarle after Hurricane Florence*

## What is a living shoreline?

Shoreline change and erosion are continuous processes, driven by currents, waves, winds, storms, sea levels and human influences. Bulkheads are “hardened” structures commonly installed along sound-side shorelines to try to reduce erosion. Unfortunately, they destroy natural marsh and cause increased erosion of nearby properties. Living shorelines are an alternative solution for shoreline management that maintain the natural marsh. These systems often use marsh plants and sometimes oyster or rock to create a more natural and productive shore.

## Did you know?

- North Carolina has over 12,000 miles of shoreline bordering the bays, creeks and sounds that make up our estuaries.
- Estuaries are where fresh water and salty ocean water meet. They are home to many important fish and shellfish that need protection.
- Each year an estimated 26 miles of estuarine shoreline are “hardened.”
- Bulkheads are a temporary fix and often need costly repair.
- Living shorelines are longer-term, less-expensive and reduce erosion while maintaining or restoring the shoreline’s natural system.
- Living shorelines are more storm-resilient. After Hurricane Florence, none of the North Carolina Coastal Federation’s living shoreline projects had major damage.

## Benefits

- Reduced erosion
- Maintained natural marsh
- Protected coastal habitat
- Filtered and improved water quality
- Buffered shore for changing water levels



# Check out our list of contractors and engineers who have been trained to install living shorelines in your region.

## **NORTHEAST COAST CONTRACTORS**

**Outer Banks Excavating**  
(252) 202-8733  
mperry@perrymarine.com

**Total Marine Services Inc.**  
Winkie Silver  
(252) 473-5130

**Backwater Environmental**  
(252) 473-5130  
backwater.biz

## **NORTHEAST COAST ENGINEERS**

**Bissell Professionals**  
(252) 261-3266  
bissellprofessionalgroup.com

**Quible & Associates**  
(252) 291-8147  
quible.com

**Albemarle & Associates, Ltd.**  
(252) 441-2113  
albemarleassociates.com

## **CENTRAL COAST CONTRACTORS**

**Restoration Systems, LLC**  
(252) 333-9852  
restorationsystems.com

**Sandbar Oyster Company**  
(252) 732-4516  
sandbaroystercompany.com

**Bobby Cahoon**  
**Marine Construction**  
(252) 249-1617  
bobbycahoonconstruction.com

**Mud Bucket Dredging**  
(252) 241-1504  
mudbucketdredgingnc.com

**Brooks Dredging and  
Marine Construction, Inc.**  
(252) 728-6886  
brooksdredging.com

**TD Eure Marine  
Construction, LLC**  
252-728-4191  
tdeuremarine.com

## **SOUTHEAST COAST CONTRACTORS**

**Connaway**  
**Marine Construction**  
(910) 264-9599  
frontyardshrimp@gmail.com

**Maritech, LLC**  
(910) 270-4058  
adamknierim@gmail.com

## **GET IN TOUCH WITH THE COASTAL FEDERATION FOR MORE INFORMATION**

**Northeast Office**  
637 Harbor Road  
Wanchese, NC  
(252) 473-1607

**Central Office**  
3609 N.C. 24 (Ocean)  
Newport, NC  
(252) 393-8185

**Southeast Office**  
309 W. Salisbury St.  
Wrightsville Beach, NC  
(910) 509-2838