



# ON-THE-GROUND PROJECTS

## Spotlight on Oyster Reef and Estuarine Shoreline Restoration, Bogue Sound, Pine Knoll Shores, North Carolina

### Project Partners

North Carolina  
Coastal Federation

North Carolina Aquarium  
at Pine Knoll Shores

US Fish and Wildlife  
Service

Atlantic Coastal Fish  
Habitat Partnership

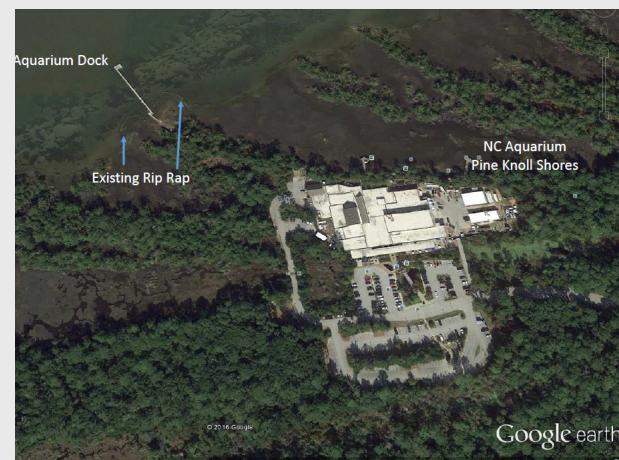
The North Carolina Aquarium at Pine Knoll Shores is an ideal place to learn about coastal habitats and the plants and animals that live there. However, it is also one of the many places along the coast of North Carolina experiencing shoreline erosion from sea level rise, storms, and high wave activity. In 2001, the North Carolina Coastal Federation previously stabilized a portion of the shoreline with a stone sill and landward salt marsh grass plantings. Despite this successful restoration project, erosion continues to occur along the shoreline of the aquarium at locations that have not yet been protected with living shorelines. For this project, the federation will restore 300 linear feet of oyster reef and estuarine shoreline to further protect these important resources.

The oyster reef and salt marsh will provide valuable nursery and feeding habitat for red drum, summer flounder, three species of shrimp and a minimum of 22 other fish species. These waters are also designated Essential Fish Habitat for black sea bass.

For this project, an oyster marsh toe revetment will hold sediment in place and absorb wave energy. An oyster sill will also absorb wave energy and allow sediment to accumulate and promote salt marsh growth. Salt marsh plants will be planted landward of the sill in the spring following deployment of the oyster reef materials.

Two hundred and fifty community and student volunteers will learn about the importance of fish habitat and living shorelines through hands-on restoration activities that include oyster reef construction, salt marsh grass plantings and project monitoring.

The U.S. Fish and Wildlife Service provided the Atlantic Coastal Fish Habitat Partnership with conservation dollars to partially fund the construction, monitoring and outreach portions of the restoration. Pre- and post-project monitoring will assess oyster recruitment, vegetation cover, and sediment accretion.



Aerial view of the project site



Project text and photos provided by the North Carolina Coastal Federation.

For more information on the Partnership visit us at: [www.atlanticfishhabitat.org](http://www.atlanticfishhabitat.org)