

**NAME:** Little Oyster Creek Sanctuary

**LOCATION:** Lower Neuse River in Pamlico Sound, Pamlico County, NC

**ACRES:** 10 acres oyster reef

**NON-FEDERAL SPONSOR:** North Carolina Department of Environment and Natural Resources

**PROJECT DESCRIPTION:**

This project will restore 10 acres of unproductive soft bottom to a protected oyster reef site within the estuary of the Neuse River, Pamlico Sound. This 10-acre site will, for North Carolina, incorporate a new reef building technique that could significantly reduce costs and increase the surface area available for oyster recruitment and growth. Ultra Balls and Reef Pyramids will be used to compare the biological and economic benefits relative to traditional limestone mounds.

**EXPECTED BENEFITS:**

The project will enhance the productivity of the state's primary and secondary fish nursery areas and will benefit recreationally and commercially important finfish species, such as gag, black sea bass, sheepshead, and flounder. This will result in healthier fisheries since many of the state's fishery species are estuarine dependent at some point in their life cycles. Establishing this reef will also help to foster formation and expansion of naturally occurring oyster reefs by protecting the oysters that recruit to the site allowing development of a naturally selected brood stock that will increase larval production. Direct and indirect ecosystem services such as increased filtering capacity, benthic-pelagic coupling, nutrient dynamics and sediment stabilization, are expected benefits from this reef.

**STATUS:** Planning and Design