

ON-THE-GROUND PROJECTS

Spotlight on Cape Fear River Fisheries Enhancement Project

Project Partners

Cape Fear River Watch

National Atmospheric and Oceanic Administration

Southeast Aquatic Resources Partnership

> Martin Marietta Aggregates

Dial Cordy and Associates

US Fish and Wildlife Service

Atlantic Coastal Fish Habitat Partnership



The Cape Fear River was one of the most productive rivers for sturgeon and American shad in North Carolina at the beginning of the 20th century, but current commercial landings are 87% lower than historic estimates. Population declines and reduced access to spawning habitat have been caused by three lock and dam structures located between Wilmington and Fayetteville. Lock and Dam 1 has a completed rock arch ramp, allowing volitional fish passage to Lock and Dam 2.

However, 70% of fish are unable to pass the Lock and Dam 2 barrier, and until fish passage is improved, habitat restoration downstream of the dam remains the priority. Clean, hardbottom habitats with interstitial spaces are preferred spawning habitat for many riverine and diadromous fish species. Unfortunately, much of this preferred habitat in the Cape Fear river is inaccessible and is buried under sediment from numerous



Lock and Dam 2. Native rock substrate was placed approximately 800 feet downstream.

natural and anthropogenic sources.

This project restored 0.5 acres of preferential spawning habitat for American shad and sturgeon downstream of Lock and Dam 2, facilitating 32 miles of larval rearing habitat between Lock and Dams 1 and 2.To compensate for reduced access to historical spawning habitat due to fish passage barriers, 1,000 tons of mixed native rock were placed in the river, and monitored for spawning success for two years. Thirty volunteers directly assisted in the restoration efforts by handling the beginning and final substrate placements, which will directly benefit American shad and Atlantic and shortnose sturgeon, and indirectly provide potential spawning habitat for striped bass and river herring.

The U.S. Fish and Wildlife Service provided the Atlantic Coastal Fish Habitat Partnership with conservation dollars to fund the third season of biological monitoring as well as a side-scan sonar survey to ensure the habitat is stable. Both efforts are essential for ensuring the success of the enhancement project.

Project text and photos provided by Cape Fear River Watch. Lock and Dam 2 photo taken by Mike Wicker, USFWS.

For more information on the Partnership visit us at: www.atlanticfishhabitat.org