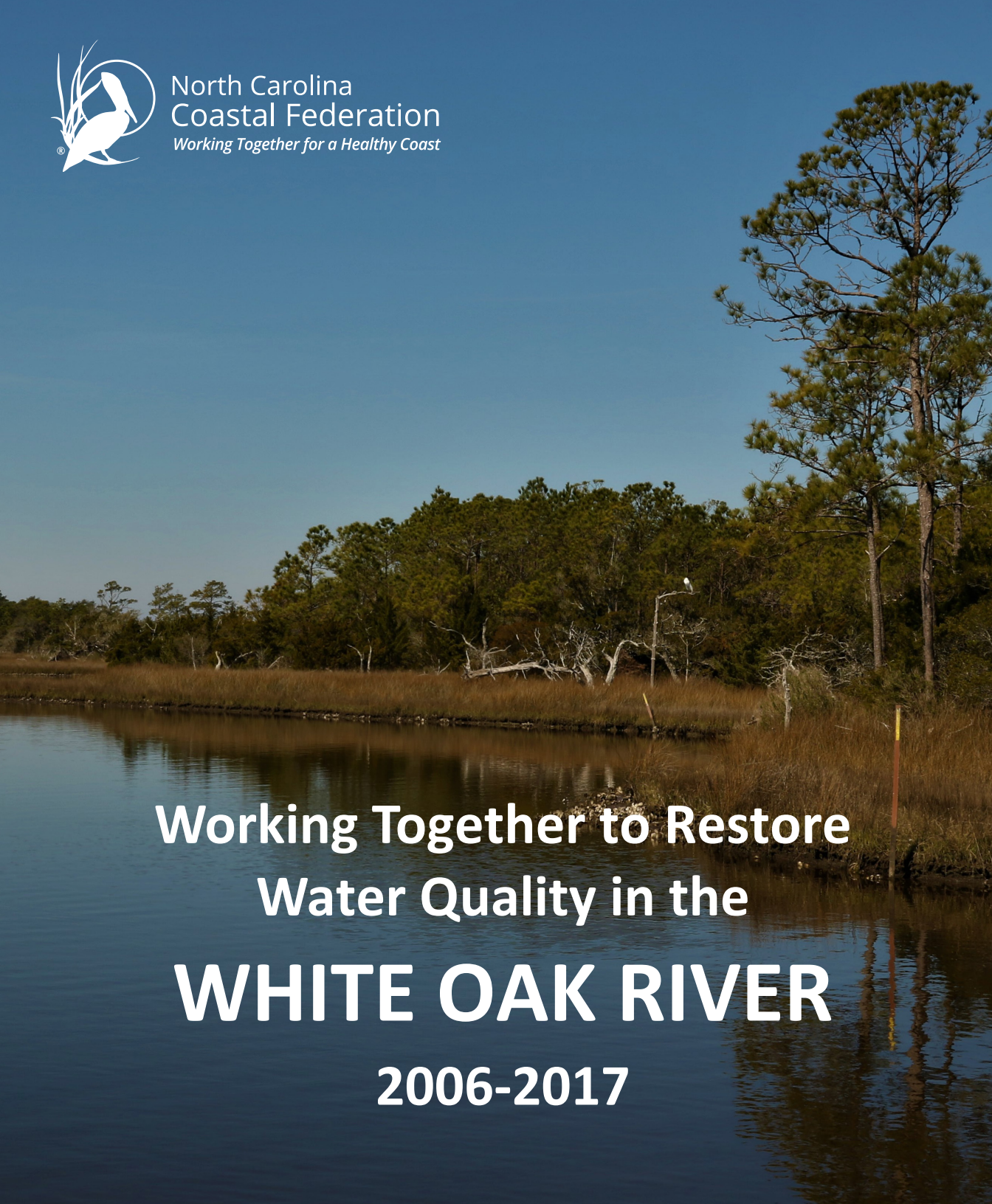




North Carolina  
Coastal Federation  
*Working Together for a Healthy Coast*

A scenic view of a river flowing through a marshy area with dense trees in the background under a clear blue sky. The water is calm, reflecting the sky and the surrounding greenery. A large, tall pine tree stands prominently on the right bank. The overall scene is peaceful and natural.

**Working Together to Restore  
Water Quality in the  
WHITE OAK RIVER  
2006-2017**

# The White Oak River Watershed

The White Oak River is 48-miles long and runs through Jones, Onslow and Carteret counties. The river includes saltwater marshes and hardwood swamps that are home to a variety of fish and wildlife. It is used for fishing, swimming, kayaking and boating and has cultural and historical significance.

## Watershed Study and Restoration Plan

In 2006, the North Carolina Coastal Federation teamed up with the Town of Cedar Point, the N.C. Department of Transportation, the N.C. Division of Energy, Mineral and Land Resources and community members to prepare a study and restoration plan for a portion of the river. The study found that polluted stormwater runoff from parking lots, driveways, rooftops and other hard surfaces is the primary cause of water quality impairment in the river. About two-thirds of the lower White Oak River is now permanently closed to shellfishing or closes temporarily after a moderate rain.

The White Oak River Restoration Plan promotes simple solutions to infiltrate rain and reduce polluted runoff flowing into Dubling Creek, Boathouse Creek, Hills Bay and the waters north of the N.C. 24 bridges in Cedar Point, on the Carteret County side of the river.

## Working Together to Reduce Runoff

Many dedicated partners including the Coastal Federation, the U.S. Forest Service, the Town of Cedar Point and East Carolina University (ECU), are working together to reduce runoff and restore the river.



## Croatan National Forest Recreation Area

Several simple techniques have been installed to help capture rainwater before it has a chance to become polluted stormwater runoff.

### These include:

— A **rain garden** (pictured above) near the boat ramp acts like a bowl to collect polluted rainwater. It soaks up and filters the rain.

— **Earthen berms in the grass swale** slow down stormwater runoff and give it a chance to soak into the ground instead of flowing into Boathouse Creek.

— **Check dams** (pictured right) made out of rock along the entrance road help slow down water flow.

— A **sloped sidewalk** forces rainwater to flow into forested areas instead of the river.

— Replacement of a **culvert** so that water flows into forested areas instead of ponding along the road.



WESTERN CARTERET FIRE AND EMS CISTERN



WESTERN PARK STORMWATER WETLAND



WESTERN PARK PET WASTE PROGRAM



### Marsh Harbour Rain Barrels

Coastal Federation staff worked with Down East Insulation to install 42 rain barrels at homes within the Marsh Harbour subdivision. The barrels collect rain so it can be used to water plants and gardens instead of becoming polluted runoff.

### Ocean Spray Water Control Structures

ECU installed three water control structures in the roadside ditches in the Ocean Spray community. The simple structures hold the rain in the ditch so it has a chance to soak into the ground instead of running into the creek.

### Cedar Point Town Hall Rain Garden

More than 50 Coastal Federation volunteers planted a large rain garden at Cedar Point Town Hall with more than 350 native trees, shrubs and perennials. Volunteers included U.S. Navy Hospital Corpsmen from the Marine Corps Base Camp Lejeune.

### Cedar Point Town Hall Cistern

A 3,000-gallon cistern at town hall captures runoff from about 75 percent of the town hall roof. The water is reused for landscaping.

### Western Carteret Fire and EMS Cistern

A 3,000-gallon cistern at the Western Carteret Fire and EMS captures runoff from the roof and is reused to wash vehicles.

### Carteret Heating and Cooling Cistern

A 1,500-gallon cistern at Carteret Heating and Cooling captures runoff from the roof and is reused to wash vehicles and to control dust on a gravel parking lot.

### Western Park Stormwater Wetland

The Coastal Federation built a large wetland at the end of a storm ditch in Western Park to reduce polluted stormwater runoff flowing into Boathouse Creek.

### Western Park Rain Gardens

The Coastal Federation installed small rain gardens in the parking lot of Western Park to capture and infiltrate runoff.

### Western Park Pet Waste Program

Three pet waste receptacles at Western Park were installed to encourage responsible pet waste disposal and prevent runoff from carrying pet waste into nearby waters.

RAIN GARDENS AT WESTERN PARK



CARTERET HEATING AND COOLING CISTERN



### Project Funders

Funding for these projects was made possible by the N.C. Attorney General's Environmental Enhancement Program, the N.C. Division of Soil and Water Conservation's Community Conservation Assistance Program and the Environmental Protection Agency Section 319 Program.



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The North Carolina Coastal Federation is a member-supported 501(c)(3) organization that has been working for 35 years to protect the coastal waters and beaches we love. Visit us at 3609 N.C. 24 (Ocean) or go to [nccoast.org](http://nccoast.org) to join us in protecting and restoring the coast.

