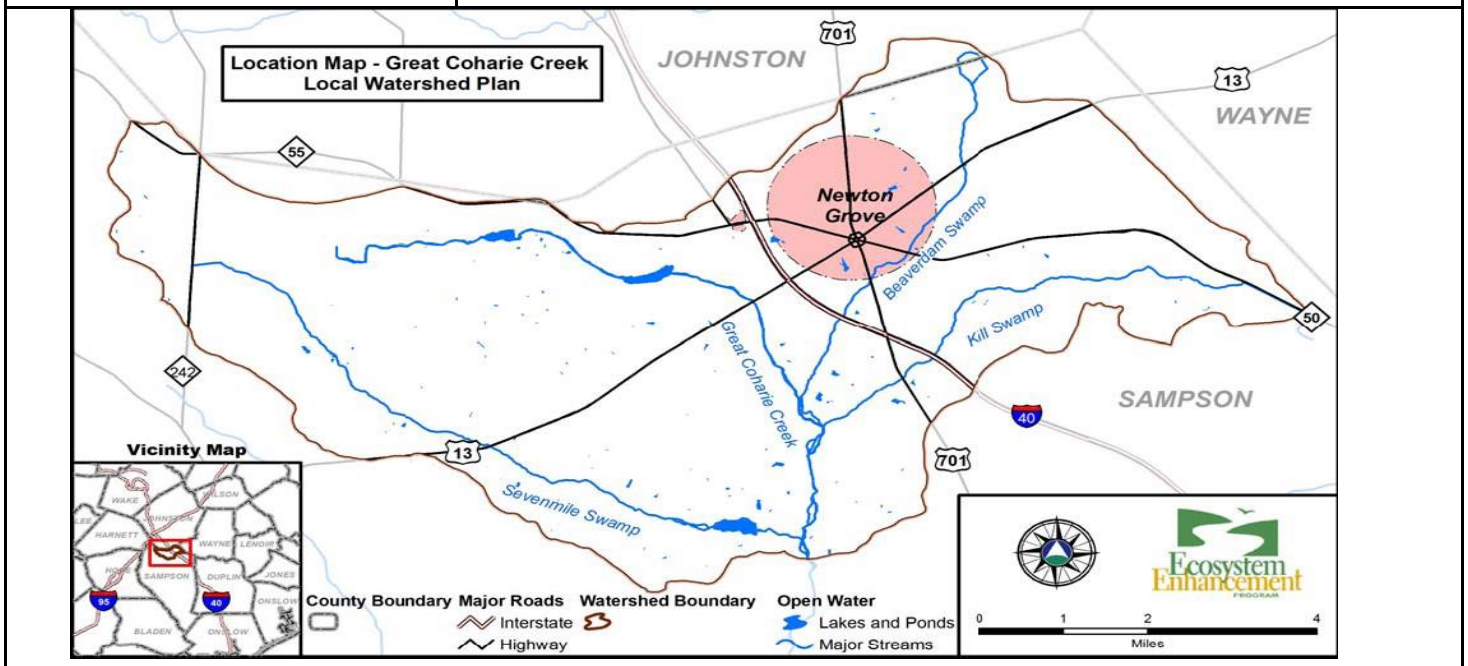


Great Coharie Creek Local Watershed Plan Fact Sheet

<p>Location: River Basin: Cataloging Unit: 14-digit Hydrologic Units: Counties:</p>	<p>Near Newton Grove, NC Cape Fear 03030006 03030006090010, 03030006090015, 03030006090020 Sampson and Johnston</p>
<p>Watershed Area:</p>	<p>53 square miles</p>
<p>Participants:</p>	<p>Sampson County Cooperative Extension, Sampson County Soil and Water, Friends of Sampson County Waterways, Mid-Carolina Council of Government, Cape Fear River Assembly, Cape Fear Arch Conservation Collaborative, Town of Newton Grove, Dept. of Forest Resources, Local Governments</p>
<p>Watershed Assessment Contractor:</p>	<p>Triangle J Council of Governments</p>



Project Overview

The planning area is the headwaters of Great Coharie Creek, in the northern portion of Sampson County and a small portion of Johnston County, including the Town of Newton Grove. In the planning area, the headwater of Great Coharie Creek is joined by Beaverdam Swamp and Kill Swamp to form the mainstem of Great Coharie Creek which then joins Sevenmile Swamp at the outlet of the watershed, where DMS has 4,850 acres of high quality preservation (HQP). This HQP area has been designated as Significant Natural Heritage Area because it supports two populations of the Significantly Rare bluff oak (*Quercus austrina*). This site also contains extensive area of Cypress Gum Swamp natural





community. Great Coharie Creek is classified as C Sw, which acknowledges natural characteristics of swamps such as low dissolve oxygen (DO) and is also considered to be a blackwater system. Agriculture is the most important industry in the area, and agricultural land uses including row crops, pasture lands, hog and chicken farms, sod turf farms and commercial agricultural operations dominate the landscape. There are many impoundments within the watershed, both naturally occurring and manmade.

The receiving waters for Great Coharie Creek have been identified by the Natural Heritage Program as the Coharie / Six Runs Creek Aquatic Habitat which contains populations of two rare fishes, Federal and State Species of Concern broadtail madtom (*Noturus* species) and State Special Concern thinlip chub (*Cyprinella* species). There are also three rare freshwater mollusks: State Threatened eastern lampmussel (*Lampsilis radiata*), State Special Concern pod lance (*Elliptio folliculata*) and State Significantly Rare eastern creekshell (*Villosa delumbis*).

Overall the assessments conducted in this watershed concluded that the primary water quality concerns in this watershed are nutrient and sediment inputs from agriculture and developed areas. High nutrient and sediment loads enter the fluvial system from the network of ditches and waterways, especially where there are no buffers. The forests and seasonally flooded riparian floodplains along the mainstem streams provide the highest hydrology, water quality and habitat watershed functions within the study area. They slow flood waters, releasing water during lower flows; significantly improve water quality, especially in the saturated root zones of woody riparian vegetation; and provide important aquatic and riparian habitat. These wide mainstem swamps act as natural filters, sustaining and improving water quality as water moves through the system.

Efforts to restore and protect the Great Coharie Creek local watershed should focus on two primary goals.

1. Reduce runoff and erosion by slowing and filtering water, nutrients and sediment at their source in the fields. This could be accomplished through agricultural best management practices (BMPs), installing vegetated buffers along ditches and waterways, and allowing ditches to become naturally vegetated with plants.
2. Protect the riparian floodplains. These seasonally flooded mainstem riparian zones are the most important feature of the Great Coharie Creek and provide tremendous ecological functions. They help sustain the rich natural heritage in the Great Coharie Creek and the Black River.

Project Schedule

The watershed plan was initiated in January 2009 with stakeholder and outreach meetings and was finalized in October 2014 with completion of the Watershed Management Plan.

Local Watershed Plan Document Links

[Great Coharie Preliminary Findings Report](#)

[Great Coharie Creek Local Watershed Plan Watershed Assessment Report](#)

[Great Coharie Creek Local Watershed Plan Watershed Assessment Report Appendices](#)

[Great Coharie Creek Local Watershed Plan Watershed Management Plan](#)

[Great Coharie Summary of Findings and Recommendations](#)



