

Crisp Creek Watershed Demonstration Project Fact Sheet

The Crisp Creek watershed, a tributary to Conetoe Creek, is one of four local watersheds targeted by the NC Ecosystem Enhancement Program (EEP) for improvement. Like many coastal watersheds in North Carolina, Crisp Creek is impaired by toxic impacts from agricultural chemicals, habitat degradation from stream channelization, and high nutrient and organic loading. A restoration plan for Crisp Creek that addresses many of these issues was recently completed by the NCEEP with assistance from local stakeholders.

Recognizing the unique circumstances facing rehabilitation of working agricultural watersheds in eastern NC, EEP has partnered with NC State University Cooperative Extension to help in the next step of the

watershed plan. Faculty in the Department of Biological and Agricultural Engineering (BAE) will work with the local Drainage Commission, Edgecombe & Martin Cooperative Extension and Soil & Water Conservation Districts and other watershed residents to identify sites for demonstration projects, and design, construct and monitor a demonstration project.

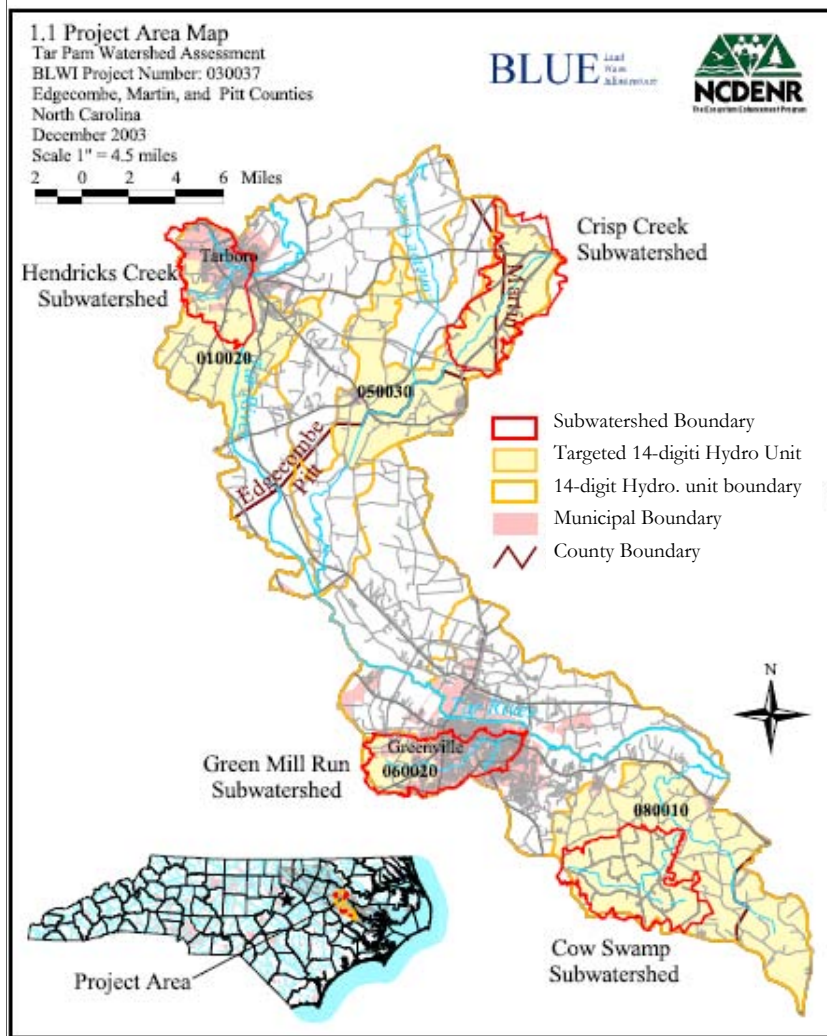
According to Robert Evans, NCSU Dept. BAE, Conetoe Creek and its tributaries have been modified several times over the years to improve drainage and mosquito problems. Although water management is still an important aspect of managing the land for agriculture, we've discovered that other functions besides draining water from the land are important for a healthy watershed.

The channelization of streams and tributaries in eastern NC has resulted in mixed consequences. Although it reduced the frequency and duration of flooding and increased agricultural productivity, it also altered adjacent wetlands and reduced the ability of the land to store flood waters, absorb pollutants, and provide habitat for fish and other wildlife.

NCSU researchers have found methods of altering channels to function more closely to how they would in a natural system. In this case, restoration of a stream is not intended to repair the stream and riparian floodplain to how it looked before human activity altered it, but to restore it to a stable system with natural functions.

EEP and NCSU believe that it is possible to improve floodplain storage, wildlife habitat, and nutrient removal while also managing the land for productive agricultural uses!

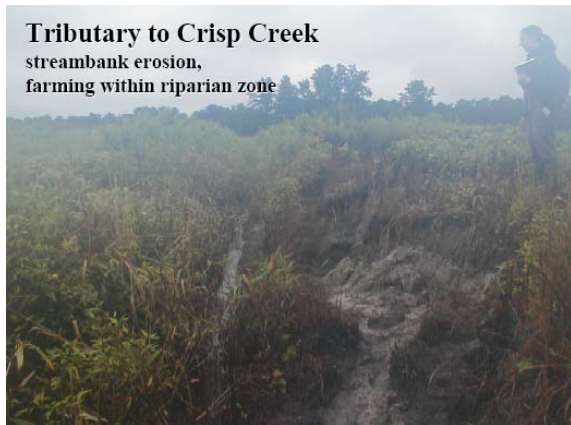
We are seeking landowners to participate, with funding for conservation easements provided by EEP. For more information, contact Mike Burchell, NCSU, at (919) 513-7372; Christy Perrin, NCSU, at (919) 515-4542, or Rob Breeding, EEP, at (919) 733-5311.



Why Crisp Creek?

NC EEP is charged with finding stream and wetland restoration sites to mitigate for future NCDOT road impacts. EEP selects areas for local watershed planning that meet the following criteria: NCDOT projects will impact wetlands and streams in the river basin (here it is the Tar-Pamlico River Basin); water bodies in the watersheds are degraded; potential opportunities for improving watershed functions exist; opportunities for achieving mitigation credits through qualifying restoration projects exist; and, local citizens express interest in participating. In addition, Crisp Creek provides a unique learning opportunity for working in an area under the jurisdiction of a Drainage District.

Tributary to Crisp Creek
streambank erosion,
farming within riparian zone



About the Watershed Plan

The Ecosystem Enhancement Program (EEP), a non-regulatory program within the NC Department of Environment and Natural Resources, sponsored a local watershed planning project in four watersheds in the middle Tar-Pamlico River Basin. These watersheds drain to Green Mill Run, Cow Swamp, Crisp Creek, and Hendricks Creek. The Watershed plans were completed in 2005.

The watershed plans were developed through a collaborative effort with local governments, resource professionals, and other local stakeholders. This group, called the Tar-Pam Local Watersheds Advisory Group, reviewed the technical work and provided suggestions and feedback throughout the planning process.

The purpose of the planning process was to assess the health of the watersheds, identify issues that can be addressed through a watershed plan, set priorities, identify watershed protection and restoration projects and eventually secure funding and implement projects in the communities. The recommendations are reflected in reports for each watershed titled **Rehabilitation Plans**, with potential projects identified in the **Site Atlases**. These

2 documents comprise the watershed plans.

A consulting firm, BLUE: Land, Water, Infrastructure (BLWI), conducted the technical watershed assessments and developed the Rehabilitation Plans and Site Atlases. Watershed Education for Communities and Local Officials (WECO) at NC State University coordinated public involvement during the process.

A CD containing the complete set of watershed plan documents is available from the EEP. The following documents are included:

- Watershed Characterization Report (Jan 2004)
- Watershed Rehabilitation Plan (June 2005)
- Site Atlas (May 2005)

To contact the NC Ecosystem Enhancement Program, call

(919) 715-0476 or visit **www.nceep.net**

For more information visit the Project Website at:

www.ncsu.edu/WECO

A HEALTHY WATERSHED NATURALLY PROVIDES MANY FUNCTIONS, INCLUDING WILDLIFE HABITAT, MAINTAINING BASE WATER FLOWS IN STREAMS, FLOOD CONTROL, AND PROCESSING POTENTIAL POLLUTANTS TO PROVIDE CLEAN WATER.