



# Currents

**SPECIAL  
EDITION**

SPRING 1999

The Newsletter for the White Oak River Basin

## *An Overview*

Established by the General Assembly in 1996, the North Carolina Wetlands Restoration Program (NCWRP) is an innovative, nonregulatory initiative to restore wetlands, streams and nonwetland riparian areas throughout the state. The Department of Environment and Natural Resources - Division of Water Quality oversees the program. The goals of NCWRP are:

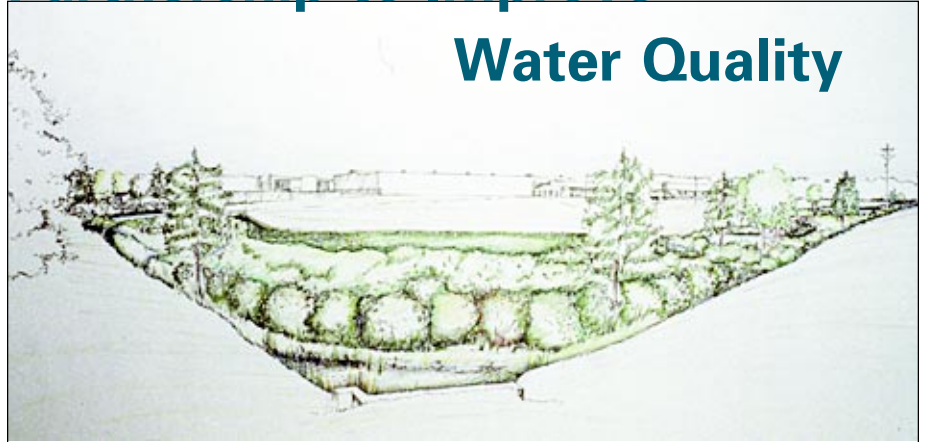
- ❑ To restore functions and values lost through historic, current and future wetland and stream impacts.
- ❑ To achieve a net increase in wetland acres, functions and values in all of North Carolina's major river basins.
- ❑ To provide a consistent approach to address mitigation that may be required by law when dredging or filling wetlands, or altering of streams, is authorized.
- ❑ To increase the ecological effectiveness of required wetlands and stream mitigation, and to promote a comprehensive approach to the protection of natural resources.

The NCWRP actively seeks landowners who have restorable wetland, riparian and stream sites. For more information about the NCWRP, call (919) 733-5208.

— Bonnie Mullen, *North Carolina  
Wetlands Restoration Program*

## Partnership to Improve

### Water Quality



The Carteret-Craven Electric Co-operative is partnering with government agencies and university researchers to build a wetland to restore Jumping Run Creek — a creek that drains into a major shellfish area within the White Oak River Basin.

The shellfish waters into which Jumping Run Creek flows have been plagued with bacterial pollution impacts for a number of years. Research to mitigate these impacts began in 1997. The effort is part of a comprehensive, watershed-wide approach to test techniques to decrease closure of the resource. Wetlands, which store and filter stormwater, are one technique being implemented. Thanks to the willingness and generosity of the Carteret-Craven Electric Co-operative, the wetlands' effectiveness will be monitored and quantified.

*The Carteret-Craven Electric Co-operative has approved this concept drawing for the restoration area.*

The Carteret-Craven Electric Co-operative is donating a 3-acre easement within the Jumping Run Creek watershed area for the restoration of a wetland. This area will treat upstream drainage from more than one third of the watershed.

The objective of this multi-agency, multi-disciplinary project is to 1) quantify the effects of land use change on shellfish closures and 2) assess techniques that can be used to mitigate those impacts. In addition to the wetland restoration effort for CCEC site, mitigation practices will include riparian buffer restoration, bio-retention, peat filters and education.

This restoration project is a unique joint venture between



*The wetland at the Carteret-Craven Electric Co-operative site will hold freshwater, slowing its discharge into Jumping Run Creek.*

state and federal agencies and private industry to work toward water quality improvement. The Electric Co-operative's donation of property and cooperation on this restoration project not only demonstrates its commitment to environmental stewardship, but also exemplifies how development and restoration activities can be integrated to work together. Through such restoration efforts, it is hoped that new and innovative design and landscape techniques can be blended with development plans to promote water quality.

The restored area totals three acres in size and will border the front of the Co-operative's property. Drainage from the

watershed will be directed through the restored wetlands. Ground and surface water monitoring will quantify the storage and treatment capability of the restoration effort.

Implementation and site grading for the project is scheduled for mid-summer 1999, with tree and shrub planting beginning in winter 1999 and herbaceous material in spring 2000. The planted vegetation will be native and range from herbaceous marsh to bottomland hardwood to pocosin. Monitoring wells at the Co-operative's site were installed in November 1998 to establish present hydrology and to begin mapping groundwater flow patterns.

#### **Funding Agencies**

North Carolina Department of Environment and Natural Resources — DWQ 319 Program

North Carolina Clean Water Management Trust Fund

North Carolina Wetlands Restoration Program

#### **Research Participants**

North Carolina State University:  
School of Design  
Biological and Agricultural Engineering:  
Water Quality Group

North Carolina Sea Grant  
Duke Marine Lab

North Carolina Department of Environment and Natural Resources— Shellfish Sanitation Section

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Christy Perrin  
Campus Box 8109  
NC State University  
Raleigh, NC 27695-8109

To be added  
to the **Currents**  
mailing list contact:

Christy Perrin  
Campus Box 8109  
NC State University  
Raleigh, NC 27695-8109

Christy\_perrin@ncsu.edu