

## City of Wilmington Grey to Blue Stormwater Planning Initiative (319 Grant)

**Project Partners:** North Carolina Coastal Federation (NCCF) and the City of Wilmington.

**Consulting Contractor:** Withers & Ravenel

**2 year project starting in January 2010 ~ Amount Awarded to NCCF \$106,216**

### Project Summary

Wilmington and NCCF are partnering to draft a watershed restoration plan for Hewlett's and Bradley Creek watersheds, following EPA and NC DWQ's guidelines. The plan will be designed to reduce nonpoint source pollution loadings that contribute to water quality impairment and provide the foundation for broader city-wide efforts to protect and restore water quality. This plan is being developed in lieu of preparing a Total Daily Maximum Load (TMDL) for these two creeks.

The plan will be based on decades of accumulated water quality monitoring and scientific research by government agencies and the University of North Carolina at Wilmington (UNCW). This research has documented the relationships between the intensity of land development, hydrologic modifications within these two watersheds, and increasing bacteria levels in downstream tidal creeks. The goal is to demonstrate an efficient and effective method for addressing water quality impairments in other tidal creeks and sounds in North Carolina without first exhausting valuable time and resources in preparing TMDL's.

### Project Goals

- Develop a plan to reduce the volume of stormwater generated by land uses within these two watersheds
- Focus stormwater reduction efforts in locations where they will yield the greatest and most cost effective stormwater volume reductions
- Engage the public in helping to identify opportunities to reduce the volume of stormwater and in measuring progress in accomplishing plan goals

### Specific outputs of this project include

1. DWQ-approved watershed-based plan for Bradley and Hewlett's Creek watersheds to identify pollutant point sources, retrofit opportunities, quantify anticipated water quality benefits and meet the other EPA elements
2. An implementation plan and timeline, including construction drawings for up to five small-scale retrofit sites within the watersheds. Opportunities to leverage other funding sources will be identified and pursued for the implementation phase of the watershed-based plans
3. A set of design standards and a handbook to foster the use of sustainable stormwater management devices on City street improvement projects
4. A GIS/web-based stormwater retrofit atlas for the City of Wilmington, including a publicly accessible website component
5. Public education materials, meetings, and workshops