

Chapter 11

Water Quality Initiatives

11.1 The Importance of Local Initiatives

As the Basinwide Planning Program completes its third cycle of plan development, there are many efforts being undertaken at the local level to improve water quality. Information about local efforts particular to a watershed or subbasin is included in Chapters 1-2. DWQ encourages local agencies and organizations to learn about and become active in their watersheds.

In an effort to provide water quality information and gain public input, DWQ partnered with local watershed associations, the National Resource Conservation Service, and Soil and Water Conservation Districts to host the Western North Carolina Basinwide Water Quality Conference in 2005. The purpose of the conference was to educate people about water quality concerns specific to the mountain region and show how participation in the Basinwide Planning process can benefit local initiatives.

An important benefit of local initiatives is that local people make decisions that affect change in their own communities. There are a variety of limitations local initiatives can overcome including: state government budgets, staff resources, lack of regulations for nonpoint sources, the rulemaking process, and many others.

These local organizations and agencies are able to combine professional expertise in a watershed. This allows groups to holistically understand the challenges and opportunities of different water quality efforts. Involving a wide array of people in water quality projects also brings together a range of knowledge and interests, and encourages others to become involved and invested in these projects. By working in coordination across jurisdictions and agency lines, more funding opportunities are available, and it is easier to generate necessary matching or leveraging funds. This will potentially allow local entities to do more work and be involved in more activities because their funding sources are diversified. The most important aspect of these local endeavors is that the more localized the project, the better the chances for success.

The collaboration of these local efforts are key to water quality improvements. There are good examples of local agencies and groups using these cooperative strategies throughout the state. Specific projects are described in the subbasin chapters (Chapters 1 – 2). Nonpoint source program descriptions and contact, Soil and Water Conservation District (SWCD), NC Cooperative Extension Service and USDA Natural Resources Conservation Service (NRCS) contact information can be found in Appendix VII.

DWQ applauds the foresight and proactive response to potential water quality problems in the watersheds listed above. Federal and State government agencies are interested in assisting local governments and citizen groups in developing their water quality management programs. The distribution of several grantors is discussed below.

11.2 Federal Initiatives

11.2.1 Clean Water Act – Section 319 Program

Section 319 of the Clean Water Act provides grant money for nonpoint source demonstration and restoration projects. Through annual base funding, there is approximately \$1 million available for demonstration and education projects across the state. An additional \$2 million is available annually through incremental funds for restoration projects. All projects must provide nonfederal matching funds of at least 40% of the project's total costs. Project proposals are reviewed and selected by the North Carolina Nonpoint Source Workgroup made up of state and federal agencies involved in regulation or research associated with nonpoint source pollution (NPS). Information on the North Carolina Section 319 Grant Program application process is available online at http://h2o.enr.state.nc.us/nps/application_process.htm. Descriptions of projects and general Section 319 Program information are available at http://h2o.enr.state.nc.us/nps/Section_319_Grant_Program.htm.

11.3 State Initiatives

11.3.1 North Carolina Ecosystem Enhancement Program (NCEEP)

The North Carolina Ecosystem Enhancement Program (NCEEP) is responsible for providing ecologically effective compensatory mitigation in advance of permitted impacts associated with road projects and other development activities. The fundamental mission of the program is to restore, enhance and protect key watershed functions in the 17 river basins across the state. This is accomplished through the implementation of wetlands, streams and riparian buffer projects within selected local watersheds. The vital watershed functions that NCEEP seeks to restore and protect include water quality, floodwater conveyance and storage, fisheries and wildlife habitat.

The NCEEP is not a grant program, but can implement its restoration projects cooperatively with other state or federal programs such as the Section 319 Program. Combining NCEEP-funded restoration or preservation projects with 319 or other local watershed initiatives (e.g., those funded through the Clean Water Management Trust Fund or local/regional Land Trusts) increases the potential to improve the water quality, hydrologic and habitat functions within selected watersheds.

Watershed Planning by NCEEP

The selection of optimal sites for NCEEP mitigation projects is founded on a basinwide and local watershed planning approach which results, respectively, in the development of *River Basin Restoration Priorities* and *Local Watershed Plans*.

River Basin Restoration Planning

In developing *River Basin Restoration Priorities (RBRP)* (formerly called *Watershed Restoration Plans*), the NCEEP identifies local watersheds (14-digit Hydrologic Units) with the greatest need and opportunity for restoration, enhancement or preservation projects. These high-priority watersheds are called “targeted local watersheds” (*TLWs*). Targeted local watersheds are identified, in part, using information compiled by DWQ's programmatic activities (e.g., *Basinwide Assessment Reports*). Local factors considered in the selection of *TLWs* include: water quality impairment, habitat degradation, the presence of critical habitat or significant

natural heritage areas, the presence of water supply watersheds or other high-quality waters, the status of riparian buffers, estimates of impervious cover, existing or planned transportation projects, and the opportunity for local partnerships. Recommendations from local resource agency professionals and the presence of existing or planned watershed projects are given significant weight in the selection of *TLWs*.

Targeted local watersheds represent those areas within a river basin where NCEEP resources can be focused for maximum benefit to local watershed functions. TLWs are therefore given priority by NCEEP for the implementation of new stream and wetland restoration/enhancement or preservation projects.

The 2001 *Watershed Restoration Plan* for the Savannah River basin can be found on the NCEEP website at <http://www.nceep.net/services/restplans/watershedplans.html>. The NCEEP is currently updating their selections of Targeted Local Watersheds within the Savannah River basin. Table 19 provides a summary of proposed TLWs for the Savannah basin as of September 2006. The NCEEP is seeking comments from local resource professionals regarding these selections.

Table 19 Proposed Targeted Local Watersheds (TLWs) for the Savannah River Basin

Name of Watershed [major streams]	Total Area	14-digit HU Code	Rationale for Selection as TLW for NCEEP Projects
Horsepasture River, including Logan Creek	[33.1 mi ²]	03060101 010020	Highest % developed area of all HUs in the basin; highest % degraded buffers in the basin; highest # of natural heritage element occurrences in the basin; high % Significant Natural Heritage Areas (SNHA); designated Trout (Tr) waters; decline in bioclassification rating from 1999-2004; increases in fecal coliform; non-point source stresses; photographic evidence of instream habitat degradation in tributary streams (e.g., Hog Back Creek near the community of Sapphire); increased land clearing and road-building activities in the watershed; NCEEP stream mitigation project on Logan Creek.
Chatooga River, including Fowler Creek and Norton Mill Creek	[33.8 mi ²]	03060102 010010	Second highest % development in basin; second highest road density; second highest # natural heritage element occurrences; high % SNHA; designated Tr and ORW streams; habitat degradation and sediment & nutrient inputs associated with land clearing, road construction and increases in impervious cover; non-point source runoff & stormwater stresses from Cashiers; decline in bioclassification for Norton Mill Creek from 1999-2004 (perhaps associated with land clearing, buffer zone degradation and new residential development in the Highlands area).

To provide comments on these proposed TLWs, please contact the NCEEP Watershed Planner for the Savannah basin, Hal Bryson, at (828) 268-2919 or via email at <mailto:hal.bryson@ncmail.net>. The updated *River Basin Restoration Priorities* for the Savannah is scheduled to be posted to the NCEEP website by early 2007.

Local Watershed Planning

In addition to river basin restoration planning, The NCEEP also develops *Local Watershed Plans (LWPs)*, usually within targeted local watersheds identified in the *RBRPs*. Through the local watershed planning process, NCEEP conducts watershed characterization and field assessment tasks to identify critical stressors in local watersheds. The NCEEP planners and their consultants coordinate with local resource professionals and local governments to identify optimal watershed projects and management strategies to address the major functional stressors identified. The *LWPs* prioritize restoration/enhancement projects, preservation sites, and best management practices (BMP) projects that will provide water quality improvement, habitat protection and other environmental benefits to the local watershed.

Although there is presently no NCEEP Local Watershed Planning initiative in the Savannah River basin, it is possible that such an effort will be undertaken in the future. Decisions regarding the possible need for new LWP initiatives within a given basin are made annually by NCEEP planners. These decisions are based primarily on the quantity and type of compensatory mitigation projects the Program is required to implement, as well as the opportunity for local partnerships within selected 14-digit hydrologic units within the basin.

NCEEP Projects in the Savannah River Basin

In the Savannah River basin, NCEEP has initiated one stream mitigation project to date. This is the Logan Creek project, which comprises approximately 3,300 feet of stream restoration, 1,600 feet of stream enhancement, and 3,100 feet of stream preservation. This creek is a tributary to the Horesepasture River, near the town of Cashiers in Jackson County. The project is currently in the early design phase; construction is expected to begin in 2007. Additional NCEEP project opportunities in this basin are likely to be realized in the coming months and years.

For additional information about NCEEP's Project Implementation efforts, go to: http://www.nceep.net/services/implementation/project_implementation.htm. For additional information about NCEEP in general, including its various program activities and products, visit <http://www.nceep.net/>.

11.3.2 Clean Water Management Trust Fund

The CWMTF offers approximately \$40 million annually in grants for projects within the broadly focused areas of restoring and protecting state surface waters and establishing a network of riparian buffers and greenways. In the Savannah River basin, -- projects have been funded for a total of \$875,00 (Table 20). For more information on the CWMTF or these grants, call (252) 830-3222 or visit the website at www.cwmtf.net.

Table 20 Projects in the Savannah River Basin Funded by the Clean Water Management Trust Fund

Project Number	Application Name	Proposed Project Description	Amount Funded
2004B-037	NC Div Parks & Recreation - Acq/ Gorges State Park, Toxaway River	Protect through fee simple purchase 184 acres along the Toxaway River and place under the Gorges State Parks system and management.	\$875,000
		Total Funded	\$875,000