

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 is key to water quality improvements. There are good examples of local agencies and groups using these cooperative strategies throughout the state. A few of the local organizations are highlighted in Table 17. 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 by the organizations mentioned 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.

Table 17 Local Water Quality Initiatives

<p>Cherokee County Soil and Water Conservation District 225 Valley River Avenue, Suite J Murphy NC 28906-2924</p> <p>Soil and Water Conservation Districts are organized to plan and carry out a conservation program that the local people need and want. District affairs are managed by individuals and groups involved in a coordinated conservation program, including resources from local, state and federal agencies. This way, governmental assistance in conservation practices remains under local control. It was felt that local people, rather than the Federal Government, could better manage their own resources through a Soil and Water Conservation District.</p> <p style="text-align: center;">Tel: 828-837-6417 Fax: 828-837-2727</p>						
<p>Clay County Soil and Water Conservation District PO Box 57 Hayesville NC 28904</p> <p>Soil and Water Conservation Districts are organized to plan and carry out a conservation program that the local people need and want. District affairs are managed by individuals and groups involved in a coordinated conservation program, including resources from local, state and federal agencies. This way, governmental assistance in conservation practices remains under local control. It was felt that local people, rather than the Federal Government, could better manage their own resources through a Soil and Water Conservation District.</p> <p style="text-align: center;">Tel: 828-389-9695 Fax: 828-389-0262</p>						
<p>Hiwassee River Watershed Coalition 87 Upper Peachtree Road Murphy, NC 28906 The Hiwassee River Watershed Coalition, Inc. strives to facilitate water quality improvements throughout the upper Hiwassee River watershed, across political boundaries, while honoring local initiatives.</p> <p>The Coalition began in the early 1990s as local concern for sedimentation in the Brasstown Creek watershed. Because the watershed is divided almost equally between two states, the founders realized the need for a separate entity beyond the federal, state and local programs already in existence. The Coalition was formally organized in 1995 as a nonprofit organization that encompasses portions of two states, three Soil & Water Conservation Districts, four counties, and six municipalities.</p> <p>The Soil and Water Conservation Districts and County Commissions are the original members of the Coalition and still appoint the Board of Directors today. However, the Coalition membership now includes nearly 300 individual, family and business members as well.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Office Email Address:</td> <td style="width: 33%;">Phone/Fax:</td> <td style="width: 33%;">Toll Free:</td> </tr> <tr> <td>hrwcoalition@brmemc.net</td> <td>(828) 837-5414</td> <td>(877) 863-7388</td> </tr> </table> <p><i>Accomplishments/Projects:</i></p> <ul style="list-style-type: none"> ▪ Brasstown Creek Restoration Project ▪ Valley River Restoration Project ▪ Peachtree-Martins Watershed Planning ▪ Extensive outreach and education 	Office Email Address:	Phone/Fax:	Toll Free:	hrwcoalition@brmemc.net	(828) 837-5414	(877) 863-7388
Office Email Address:	Phone/Fax:	Toll Free:				
hrwcoalition@brmemc.net	(828) 837-5414	(877) 863-7388				

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 percent 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.

Between 1999 and 2004, there was one project in the Hiwassee River basin funded through the Section 319 Program. The project aimed to demonstrate low impact development principles at the Clay-Towns Industrial Park site and contributed data to TVA's "Guide to Design Principles for Sustainable Industrial Development".

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.

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*.

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 government 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*. In essence, targeted local watersheds represent those areas within a river basin where NCEEP resources can be focused for maximum benefit to local watershed functions.

The *RBRP* for the Hiwassee River Basin can be found on the NCEEP website at <http://www.nceep.net/services/restplans/watershedplans.html>. A revised *RBRP* with updated selections for *Targeted Local Watersheds* will be posted to this website by summer 2006.

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.

In the Hiwassee River Basin, NCEEP launched the Peachtree-Martins Creek Local Watershed Plan in 2005. In cooperation with the Hiwassee River Watershed Coalition, NCEEP is developing a watershed management plan for this 39 mi² area in three phases: initial watershed characterization, intensive field and GIS watershed assessment, and development of management strategies to address local and ecological priorities. As part of this process, the Tennessee Valley Authority has developed an Integrated Pollutant Source Identification (IPSI) for the Peachtree-Martins Creek area, which includes a GIS database of stream and land attributes and a non-point source pollutant loading model. The Peachtree-Martins Creek Local Watershed Plan should be complete in summer 2007 and updated information is available through the *LWP* factsheet at <http://www.nceep.net/services/lwps/localplans.htm> and on the Hiwassee River Watershed Coalition's website at <http://www.hrwc.net/peachtreemartinslwp.htm>.

NCEEP Projects in the Hiwassee River Basin

In the Hiwassee River Basin, NCEEP has one constructed stream restoration project—Trout Cove Branch, an approximately 3,900 ft project. However, NCEEP is actively pursuing projects and expects to implement both stream and wetland projects, focusing on the Peachtree-Martins Creek *LWP* area.

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 Hiwassee River basin, -- projects have been funded for a total of \$3,851,000 (Table 18). For more information on the CWMTF or these grants, call (252) 830-3222 or visit the website at www.cwmtf.net.

Table 18 Projects in the Hiwassee River Basin Funded by the Clean Water Management Trust Fund

Project Number	Application Name	Proposed Project Description	Amount Funded
1998B-404	Hiwassee River Watershed Coalition, Inc. - Restoration & NPS/ Brasstown Creek	Restore streambanks on 10,000 ft of mainstem and 10,000 ft of tribs. Reestablish 10,000 ft of buffer, restore 100 acres of bare areas within 300 ft of streams, and restore 1,000 acres of pastureland. ID future wetland restoration & stormwater sites.	\$2,100,000
2001A-401	Hiwassee River Watershed Coalition, Inc - Stream Restoration Valley River	Collect ecological data on the Valley River to establish baseline conditions, conduct nonpoint source survey, stabilize 3,300 LF of streambanks and buffers, and treat 125 acres to reduce erosion. CWMTF funds to be used only for the first year of work.	\$400,000
2004A-802	Hiwassee River Watershed Coalition, Inc - Planning/ Brasstown Creek Restoration Monitoring	Monitor 10 existing stream restoration projects for two years in the Brasstown Creek watershed. Will include measurements for channel stability, habitat and biological monitoring, plant survival, flow and suspended sediment, and photo documentation.	\$185,000
2004B-401	Hiwassee River Watershed Coalition, Inc. - Rest/ Town Branch Restoration	Restore 970 linear feet of Town Branch, a tributary of the Valley River, using natural channel design. Project is part of a larger restoration effort in the Valley River watershed.	\$61,000
2004B-402	Hiwassee River Watershed Coalition, Inc. - Rest/ Valley River Tributaries	Design, permit and construct a stream restoration, enhancement and stabilization project on 3 sites (12,700 LF of stream) in the Valley River watershed. This project continues an existing effort to restore streams in the Valley River watershed.	\$966,000
2005A-002	Cherokee County - Acq/ Valley River and Town Creek Greenways	Protect through fee simple purchase 31.79 acres along the Valley River and Town Creek. CWMTF funds to purchase the 10.4 riparian acres. Tract would become part of a greenway system and would protect a Regionally Significant Aquatic Habitat.	\$139,000
Total Funded			\$3,851,000

Notes:

- (1) The entire Hiwassee River basin is within CWMTF's Mountain Region
- (2) A regional straight pipe and septic system discharge elimination program was funded in an area that includes the Hiwassee River basin.

