

Chapter 12

Water Quality Initiatives



12.1 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 in a particular watershed is included in the subbasin chapters (Chapters 1 – 3). 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 held a public workshop in Jefferson (April 2004). The purpose of the workshop was to inform people of the 2005 plan update and to seek input prior to finalizing the plan. Participants provided comments on specific waters in the New River basin and generalized issues related to urbanization and land use changes, streamside management, enforcement, permitting, monitoring and funding sources.

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. A few of the local organizations are highlighted in Table 21. Specific projects are described in the subbasin chapters (Chapters 1 – 3). 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 VIII.

DWQ applauds the foresight and proactive response to potential water quality problems in the watersheds identified in the subbasin chapters (Chapters 1 – 3). 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 (Section 12.2 and 12.3).

Table 21 Local Water Quality Initiatives

<p>New River Community Partners (NRCP) Sparta, North Carolina</p> <p>NRCP is a grassroots organization founded to oversee the implementation of the American Heritage Rivers Initiative (AHRI) for the New River. The Board of Directors includes grassroots leaders, small business owners, elected officials, educators, chamber of commerce directors, landowners, natural resource management professionals and historic preservationists from North Carolina, Virginia and West Virginia. A major accomplishment of the NRCP has been the development of the New River Watershed Work Plan. The plan is a working document, which changes frequently as projects are completed and new programs and/or projects begin. Several of the projects reflect the connection between natural resources protection, agricultural service, economic development, and historic and cultural preservation. To date, over \$13 million has been leveraged from federal, state, local and private sources. For more information about NRCP, contact:</p>		
Patrick Woodie Executive Director	Phone: (336) 372-8118 Email: pwoodie@skybest.com	
Ben Borda River Navigator US Army Corps of Engineers	Phone: (304) 529-5712 Email: benb@lrh.usace.army.mil	
<p><i>Accomplishments/Projects:</i></p> <ul style="list-style-type: none"> ▪ Provides support and assistance to local and regional groups for those projects described in the New River Watershed Work Plan. ▪ Coordinates with the River Navigator to create new partnerships with state and federal agencies and provide training and technical assistance related to water quality. 		
<p>National Committee for the New River (NCNR) West Jefferson, North Carolina</p> <p>NCNR is a nonprofit membership organization that works to protect, preserve and restore the unique natural and cultural qualities of the New River and its watersheds in North Carolina, Virginia and West Virginia. NCNR has developed a five-year River Protection Plan. The plan is designed to protect significant lands, restore eroding streambanks, wetlands and aquatic habitats, and increase community outreach and awareness of watershed protection. For more information about NCNR, contact:</p>		
Jeffrey Scott Executive Director	Phone: (336) 246-4871 Email: info@ncnr.org	http://www.ncnr.org/
<p><i>Accomplishments/Projects:</i></p> <ul style="list-style-type: none"> ▪ Implementing the Five Year River Protection Plan. ▪ Awarded funding from the NC Clean Water Management Trust Fund (CWMTF) for land protection and streambank restoration projects. ▪ Coordinates the New River Big Sweep clean-up efforts every September/October along the river and its tributaries. ▪ Established a volunteer water quality monitoring program for the New River headwaters. ▪ Working to protect nearly 1,000 acres of forested land and build a 5.0-mile community greenway in the historic district of Todd (Ashe and Watauga counties). Thus far, NCNR has purchased nearly 200 acres of land and protected nearly 1.5 miles of riverfront property along the South Fork New River. ▪ Established the River Builder Program, which works with landowners to reestablish riparian vegetation along streambanks that have eroded due to the removal of vegetation. NCNR has planted more than 300,000 silky dogwoods and 19,700 trees, restoring over 37 miles of riparian buffers. 		

Middle Fork Greenway Association (MFGA)

Blowing Rock, North Carolina

Established in 2000, MFGA is volunteer, nonprofit organization working to build a greenway trail along the Middle Fork South Fork New River between the Towns of Blowing Rock and Boone. MFGA is working with landowners along this nearly five mile stretch in order to obtain easements at least 20-foot wide, adjacent to the already 30-foot wide buffer zone established by a local Watershed Protection Ordinance along the river. The trail would be a 10-foot wide pedestrian/bike trail and be wheelchair accessible. For more information on the Middle Fork Greenway Project, contact:

Anne Burgess

Greenway Trail Coordinator

Phone: (828) 264-3754

Email: mstburgess@goboone.net*Accomplishments/Projects:*

- Received two grants from the NC CWMTF for surveys, environmental site assessments and legal fees to secure easements from several willing landowners along the proposed greenway trail.
- Developed the Middle Fork Greenway Trail Feasibility Study with the help of students from the Department of Geography and Planning at Appalachian State University (ASU, May 2001).
- Increasing community awareness of watershed protection and streambank restoration.

Blue Ridge Rural Land Trust (BRRLT)

Boone, North Carolina

The BRRLT is a non-profit land trust serving a seven county area of western North Carolina. The mission of BRRLT is to preserve rural communities and culture in northwestern North Carolina through the preservation of the land resources upon which they depend. For more information on BRRLT and their most recent projects, contact:

James Coman, III
Executive Director

Phone: (336) 359-2909

Email: hillshepherd@skybest.comwww.brslt.org*Accomplishments/Projects:*

- BRRLT participated in the designation of Beech Creek Bog as a State Natural Area. It is the largest Southern Appalachian bog and contains several endangered and threatened plant and animal species.
- Working with volunteers, donors and the Conservation Trust of North Carolina to raise \$500,000 to buy Bullhead Mountain. Bullhead Mountain will likely be designated as a State Natural Area by the NC Division of Parks & Recreation and is being managed by the NC State Office of the National Audubon Society.
- BRRLT has acquired several conservation easements throughout Ashe, Alleghany, and Watauga counties. Many of which are significant contributions to the protection of water quality.

12.2 Federal Initiatives

12.2.1 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. 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.

Many 319 projects are demonstration projects and educational programs that allow for the dissemination of information to the public through established programs at NC State University (NCSU) and the NC Cooperative Extension Service. Other projects fund stream restoration activities that improve water quality. Between 1998 and 2003, there was one project in the New River basin funded through the Section 319 Program. Managed by NCSU, the goal of the project – New River Watershed Christmas Tree BMP Demonstration Project – was to implement and evaluate the use of BMPs to reduce sediment and pesticide runoff, nutrient runoff, and disease. To date, there are 51 demonstration projects across Ashe and Alleghany counties. BMPs include ground cover management, chemical mowing, predator insect release, Integrated Pest Management (IPM) farms, proper mist blower use, riparian buffer plantings, proper road construction, low-impact site preparation and phosphorus incorporation. Several Christmas tree farms have multiple BMPs with several farms in Alleghany County featured during the 2003 NC Christmas Tree Association’s Fall Farm Tour. Future plans for the BMP Demonstration Project include permanent signage for educational purposes, field days for tours, a published report and a website with an extensive photo tour of the BMPs.

12.3 State Initiatives

12.3.1 North Carolina Ecosystem Enhancement Program (NCEEP)

The North Carolina Ecosystem Enhancement Program (NCEEP) is responsible for implementing wetland and stream restoration projects as part of a statewide effort to provide more ecologically effective compensatory mitigation. The focus of the program is to restore, enhance and protect key watershed functions in the 17 river basins across the state through the implementation of wetlands, streams and riparian buffer projects within selected local watersheds in advance of permitted impacts. These vital watershed functions include water quality protection, floodwater conveyance and storage, fisheries and wildlife habitat, and recreational opportunities. The NCEEP is not a grant program. Instead, the program funds local mitigation projects directly through its various in-lieu fee receipts.

Through the development of *River Basin Restoration Priorities* (formerly called *Watershed Restoration Plans*), the NCEEP identifies local watersheds (14-digit hydrologic units) with the greatest need and opportunity for watershed mitigation projects. The *RBRPs* are developed, in part, using information compiled by DWQ's programmatic activities. Additional local resource data and locations of existing or planned watershed projects are considered in the selection of *targeted local watersheds*, which are identified and mapped within the *RBRPs*. *Targeted local watersheds* represent those areas within a given river basin where NCEEP resources can be most efficiently focused for maximum benefit to local watershed functions. The NCEEP *RBRPs* are periodically updated and presented on the NCEEP website <http://www.nceep.net>.

The NCEEP can perform restoration projects cooperatively with other state or federal programs or environmental groups such as the Section 319 Program. Integrating wetlands or riparian area

restoration components with Section 319-funded or proposed projects will often improve the overall water quality, hydrologic and habitat benefits of both projects.

The NCEEP is also developing comprehensive *Local Watershed Plans*, often within targeted local watersheds identified in the *RBRPs*. Through the local watershed planning process, NCEEP conducts comprehensive watershed assessments to identify stressors in local watersheds, and then coordinates with local resource professionals and local governments to identify and implement watershed projects and management strategies to address the problems. The local watershed plans identify and prioritize wetland areas, stream reaches, riparian buffer areas and BMPs that will provide water quality improvement, habitat protection and other environmental benefits to the local watershed.

In the New River basin, NCEEP has initiated two stream restoration projects. These include: (1) restoration of over 4,000 linear feet of streambank in the Brush Creek watershed (Section 3.4.5) and (2) the potential to restore over 3,500 linear feet in the Big Horse Creek watershed (Section 2.4.2). NCEEP has also acquired two preservation projects that protect over 171 acres and preserves over 15,000 linear feet of the mainstem of the South Fork New River.

A copy of the *RBRP* for the New River basin can be found on the NCEEP website at <http://www.nceep.net/services/restplans/watershedplans.html>. For more information about NCEEP, visit <http://www.nceep.net/> or call (919) 715-7452.

12.3.2 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 New River basin, 26 projects have been funded for a total of \$5,440,080 (Table 22). For more information on the CWMTF or these grants, call (252) 830-3222 or visit the website at www.cwmtf.net.

Table 22 Projects in the New River Basin Funded by the Clean Water Management Trust Fund

Project Number	Application Name	Proposed Project Description	Amount Funded
1997B-402	National Committee for the New River (NCNR) – Stream Restoration	Start riparian buffer planting and cleanup program on New River through River Builders Program.	\$75,000
1998A-402	Boone – Stream Restoration / Boone Creek	Restore approximately 1/2 mile of Boone Creek, just upstream of Winklers Creek.	\$522,000
1998A-803	Conservation Fund – New River Watershed Planning & Outreach	Conduct a watershed planning and outreach effort in the New River Watershed.	\$92,500
1998B-401	Boone – Restoration / South Fork New River	Restore approximately 1,700 feet of the South Fork New River.	\$372,000
1998B-406	NC WR – Ore Knob Mine Restoration / Peak Creek	Assess acid pollution from abandoned Ore Knob Mine, design and construct treatment to protect Peak Creek from acid runoff, maintain treatment system and monitor for at least 20 years. USACE must first determine if project is feasible.	\$1,033,680
1999A-011	Ashe County – Creeper Trail Feasibility Study	Conduct study to determine feasibility of extending the Virginia Creeper Trail into North Carolina along Big Horse Creek.	\$636,000
1999A-402	Blue Ridge Parkway Foundation – Restoration / Big Pine Creek	Restore 800 feet of eroding stream banks and riparian areas (both sides of a 400 foot stream segment) and exclude livestock from 2,000 feet of Big Pine Creek. Monitor suspended sediment in stream above and below project area during and after project implementation.	\$8,000
1999A-409	NCNR – Stream Buffer Plantings	Continue buffer planting program along 5.3 miles of New River.	\$90,200
2000A-006	NCNR – Acquisition & Greenway / South Fork New River	Acquire through fee simple purchase 97 acres along the South Fork of the New River. Funds also available to explore acquisition of three additional donated or purchased easements.	\$329,000
2000B-002	Conservation Fund & NC Parks & Recreation – River House Acquisition	Acquire through permanent conservation easements 34 acres along the North Fork of the New River. Secure option to purchase riparian buffers on another tract for New River State Park.	\$225,000
2001A-024	New River Community Partners (NRCP) – Waterfalls Creek Land Acquisition	Provide funds to acquire an option, appraisal, and survey for 40 acres along Waterfalls Creek.	\$25,000

2001A-404	NCNR – Stream Buffer Planting	Reestablish 6.3 miles of riparian buffer by planting tree seedlings and live stakes. Monitor for 10 years. Develop and install a residential landscape model. Design and install whole tree revetment demonstration site.	\$73,000
2001B-014	Middle Fork Greenway Association (MFGA) – Acquisition / Middle Fork South Fork New River & Payne Creek	Provide funds to cover transactional costs to secure permanent conservation easements and one long-term agreement on 10 tracts along Middle Fork and Payne Branch. Establish 16 acres of riparian buffer to become part of a greenway system.	\$32,000
2001B-015	NCNR – Acquisition & Greenway at Todd / South Fork New River	Acquire riparian portion (29 acres) of a 44-acre tract along South Fork of the New River.	\$181,000
2001B-303	NRCP – CES Planning Position / New River & Mount Jefferson State Parks	Establish a 3-year position with the NC Cooperative Extension Service to bring targeted land under protection through fee simple purchase or conservation easements in the New River and Mount Jefferson State Parks and the scenic section of the New River.	\$150,000
2001B-404	NRCP – Restoration / New River / New River State Park	Stabilize 1,600 linear feet of streambank along the New River. Establish vegetated permanent riparian buffers. Includes WQ monitoring.	\$57,000
2002A-015	NCNR – Acquisition / Horner Tract	Acquire 45.5 acres through fee simple purchase along the South Fork New River. CWMTF would fund purchase of 50% of the tract.	\$128,000
2002A-401	Boone - Stream Restoration / South Fork New River, Section 2	Establish stable 50-100 foot buffers and restore stream along 4,000 feet of the South Fork New River using natural channel design and donated permanent conservation easements. Monitor results quarterly for five years.	\$700,000
2002A-403	NCNR - Buffer Restoration / River Builder Project	Establish buffers along 37 miles of the New River by planting trees. Landowners to sign a 15-year no-disturbance agreement, 30-year contract or permanent easement depending on the cost of the restoration.	\$356,000
2002B-009	NCNR – Acquisition / Blackburn Tract, Todd South Fork Greenway	Acquire through fee simple purchase 7.6 riparian acres along the South Fork New River. This property is part of an extensive protection effort and will include an interpretive trail and become part of a greenway system.	\$147,700
2002B-403	MFGA – Acquisition / South Fork New River Greenway	Fund transactional and option costs for five donated permanent riparian easements along 4,300 feet of the South Fork New River. Tracts will become part of a greenway project.	\$25,000
2002M-002	Blue Ridge Land Trust Minigrant / Brush Creek	Minigrant to pay for pre-acquisition costs for donated conservation easements on 1200 acres that border Brush Creek, Little Pine Creek and Big Pine Creek.	\$25,000

2002M-005	Blue Ridge Rural Land Trust Minigrant / Waterfall Creek	Minigrant to pay for transaction costs for the donation of permanent conservation easements on approximately 330 acres in three tracts along Waterfall Creek.	\$25,000
2003A-017	NCNR – Acquisition / Wagner Tract, Todd South Fork Greenway	Purchase permanent conservation easements on 25 riparian acres along the New River and a tributary. Adds to an extensive protection effort along the corridor.	\$82,000
2003D-002	Blue Ridge Rural Land Trust – Donated Minigrant, Ketchum Tract / Piney Fork Creek	Minigrant to pay for transactional costs for a donated easement on 81 acres along Piney Fork Creek.	\$25,000
2003D-003	Blue Ridge Rural Land Trust – Donated Minigrant, Tate Farm / Ripshin Creek	Minigrant to pay for transactional costs for a donated easement on 488 acres along Ripshin Creek and several tributaries.	\$25,000
		Total Funded	\$5,440,080

Notes:

- (1) The entire New River basin is within the CWMTF’s Western Piedmont Region.
- (2) The total funded amount excludes funded projects that were subsequently withdrawn by the applicant.
- (3) Several regional and statewide projects were funded in areas that include the New River basin. These projects include various riparian corridor planning projects and straight pipe/septic system discharge elimination programs.