Chapter 20 Water Quality Initiatives

20.1 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 1-10. DWQ encourages local agencies and organizations to learn about and become active in their watersheds.

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 rule-making 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. The following local organizations and agencies (Table 21) are highlighted to share their efforts towards water quality improvement. Specific projects are described in the subbasin chapters (Chapters 1–10).

DWQ applauds the foresight and proactive response to potential water quality problems acted upon by these local efforts. 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 in the following sections.

Table 21 - Local Water Quality Initiatives

Roanoke River Basin Association

Office Location: Henderson, North Carolina

A non government organization consisting of private citizens, other non government environmental organizations and citizens groups that have a specific interest in the ecological, social and economic well being and integrity of the entire Roanoke River Basin. The mission of RRBA is to work with local, state and federal agencies, regional leaders, and the community to foster desirable economic, social and ecological conditions in the region. RRBA is especially concerned about issues relating to the inter-basin transfer of water between watersheds. For more information, contact:

Harrel B. Johnson Phone: (252) 257-3050 http://www.rrba.org/

Executive Director Email: hjohnson@rrba.org

Current and Continuing Projects:

Participation in the Virginia Roanoke River Basin Advisory Committee.

- Participation in the USACOE Kerr 216 study.
- Participating in the current American Electric Power relicensing study at Smith Mountain Lake in Va.
- Participating in The Stakeholders Board for the control of nuisance aquatic plants in Lake Gaston.
- Supporter of the Citizens opposed to the Off site landing field in Washington Co. NC

The Nature Conservancy

Office Locations: Arlington, Virginia (Home Office); Durham, North Carolina (NC Chapter Office); Roanoke Rapids, NC (Roanoke River Project Office)

The Nature Conservancy is a leading international, nonprofit organization dedicated to the following mission: to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Founded in 1951, The Nature Conservancy works in all 50 United States and 27 countries, and working with public and private partners, has protected more than 117 million acres of land and 5,000 miles of river around the world. The Nature Conservancy has about 1 million members and supporters, including more than 1,500 dedicated volunteers. The Nature Conservancy has 3,200 employees, 720 of whom are scientists. The Nature Conservancy has had a Lower Roanoke River Conservation Project since 1981.

The Nature Conservancy envisions that the Lower Roanoke River will be managed so that conservation of natural resources and native ecosystems, recreation, flood control, economic development, and hydropower production are balanced in ecologically and economically sustainable ways.

For more information on the Roanoke River project of The Nature Conservancy, contact:

Sam Pearsall Phone: (919) 403-8558 http://nature.org

Roanoke River Project Director Email: sampearsall@tnc.org

and NC Science Director

Current and continuing projects on the Roanoke River:

- Comprehensive conservation planning for the entire river valley below Roanoke Rapids Dam.
- Land protection and conservation working closely with US Fish and Wildlife Service, NC Wildlife Resources Commission, and many other partners, by late 2005 we have helped to protect about 61,000 acres in the floodplain.
- Participation in the development of the settlement and final license for Dominion Resources at Lake
 Gaston and Roanoke Rapids and continuing active participation in the Cooperative Management Team for
 adaptive management of river flows.
- Active participation in the USACE Section 216 Study, with the goal of establishing modified flows to better support downstream ecosystems while stabilizing lake levels upstream.
- Support for the development of the Roanoke River paddle trail and other support for the development of ecotourism in the project area.

Piedmont Land Conservancy

Office Location: Greensboro, North Carolina

Piedmont Land Conservancy is a non-profit, grassroots land trust in nine North Carolina Counties: Alamance, Caswell, Forsyth, Guilford, Randolph, Rockingham, Stokes, Surry, and Yadkin. Their mission is to protect natural and scenic lands, farms, and open space in piedmont North Carolina to enrich the quality of life for our communities and for future generations. PLC serves as the only local land trust serving the Piedmont Triad region of North Carolina. PLC has protected more than 11,000 acres of land including farmland, parks, forestland, wetlands, rivers, gardens, greenways, and historical areas that provide multiple benefits such as wildlife habitat, water quality protection, recreational areas, and outdoor education to the current generation as well as future generations.

For more information contact:

Charles Brummitt Phone: (336) 691-0088 Executive Directior email: info@piedmontland.org

http://www.piedmontland.org

Dan River Basin Association (DRBA)

Office Location: Madison, North Carolina and Martinsville, Virginia

A nonprofit association dedicated to maintaining and improving the water quality of the Dan River and its watershed in both North Carolina and Virginia. DRBA focuses on river access, citizen watershed awareness and river recreation. DRBA conducts a variety of voluntary initiatives including educational programs, riparian greenways, river history, StreamWatch monitoring, river clean-up work sessions, and guided outings. DRBA is funded by contributions from members, grants and donations. DRBA is guided by a Board of directors with representatives from across the watershed, local agencies as well as many volunteers from a variety of backgrounds and expertise. DRBA and its partner organizations have collaborated on several successful grant applications, providing funding for programs, a museum exhibit, a working recreation of an 18th century river bateau and for watershed projects in the fifteen counties of the Dan River Basin. DRBA has just received a major grant to hire a Program Director for activities in Virginia. We hope to be hiring staff to work on the North Carolina portion of the watershed soon. For more information, contact:

Ken Bridle Office Phone: (336) 591-5882 www.danriver.org

DRBA Stewardship Chair Cell Phone: (336) 207-5348

Email: bridle@mindspring.com

Current and Continuing Projects:

- Our core belief is that citizens will protect the water resources what they understand and value. To foster this understanding we organize an outing on or around the river the first Saturday of each month. These activities are free and available to all interested.
- Educational activities related to watershed awareness and water quality. We regularly have a display and
 information at several local festivals and participated in the establishment of a River Festival in Eden, NC.
- We publish a monthly newsletter and distribute newspaper inserts and press releases related to the Dan River watershed and water quality issues throughout the watershed.
- We are actively working to integrate the parts of the watershed that occur across state lines. This boundary is an important regulatory, administrative and psychological barrier that divides the basin.
- We work with partner organizations to conserve riparian land, develop river walks, a historical river exhibit and canoe access sites.
- We were instrumental in the establishment of the new Mayo River State Park and conducted the land use study that guides the acquisition of land for this new park.
- DRBA is the designated StreamWatch coordinator for the basin and is actively recruiting and training StreamWatch volunteers to monitor their local waters.

20.2 Federal Initiatives

20.2.1 Clean Water Act – Section 319 Program

Section 319 of the Clean Water Act provides grant money for nonpoint source demonstration and restoration projects. Approximately \$1 million is available annually through base funding for demonstration and education projects across the state. An additional \$2 million is available annually through incremental funding for restoration projects on impaired waters. All projects must provide non-federal 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. 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.

There is one current project in the Roanoke River basin that has been funded through the Section 319 Program between 1999 and 2004. The project, 'Watershed Quality Improvement and Restoration Demonstration', is located in Warren County. This project was funded in fiscal year 1999 to the NC Division of Soil and Water Conservation for funding BMPs that will reduce sediment delivery to impaired waters. The BMPs are also designed to improve stream bank stability and prevent the off-site movement of pesticides, phosphorus, nitrogen, and fecal coliform

Descriptions of projects and general Section 319 Program information are available at http://h2o.enr.state.nc.us/nps/Section 319 Grant Program.htm.

20.2.2 National Estuary Program

Congress established the National Estuary Program and the Albemarle and Pamlico Sounds as an "Estuary of National Significance" in 1987. Section 320 of the Clean Water Act directs EPA to develop plans for attaining or maintaining water quality in the estuaries of national importance. This includes protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on water, requires that control of point and nonpoint sources of pollution to supplement existing controls of pollution.

Today, Albemarle-Pamlico National Estuary Program (APNEP) is implementing a Comprehensive Conservation and Management Plan (CCMP) that was developed by numerous stakeholders to meet the goals of Section 320. The CCMP was ratified by the NC Governor and accepted by the US EPA in 1994. Additional information is available online at http://www.apnep.org

20.2.3 National Wildlife Refuge System

The Roanoke River National Wildlife Refuge (Refuge) is one of more than 540 National Wildlife Refuges found in the United States and its territories. The Refuge was established August 10, 1989 to protect and enhance wooded wetlands consisting of bottomland hardwoods and swamps with high waterfowl value along the Roanoke River. Administered by the U.S. Fish

and Wildlife Service, management emphasis is placed on federal trust species such as migratory birds, migratory fish and federally listed endangered and threatened species and their habitats. Presently, the Refuge consists of 20,978 acres. Refuge lands are located in Bertie County and begin in the vicinity of Hamilton, NC and extend to the mouth of the river in five separate tracts of land.

The Refuge staff has been involved with projects and activities designed to protect, conserve and restore the integrity of the plant, fish and wildlife communities found within the coastal plain reach of the Roanoke River Basin. Some of the studies and monitoring activities being carried out on refuge lands include: annual avian point surveys, monitoring wood duck productivity via wood duck boxes, wood duck banding, water quality monitoring, forest regeneration studies, forest health studies, Swainson's warbler productivity study and when warranted anadromous fish surveys.

A fifteen year Comprehensive Conservation Plan and Environmental Impact Statement has been completed for the Refuge and can be found online at: http://www.fws.gov/southeast/planning/FinalDocs.htm. The plan outlines management programs and activities for the Refuge for the next fifteen years.

20.3 State Initiatives

20.3.1 Coastal Habitat Protection Plan

Recognizing the need to both protect habitat and prevent over fishing, the North Carolina General Assembly passed the Fisheries Reform Act in 1997. The law contains the directive to protect and enhance habitats supporting coastal fisheries. The law requires cooperation among three rule-making commissions: Environmental Management Commission (EMC), Coastal Resources Commission (CRC), and Marine Fisheries Commission (MFC). Because the commissions must work together to develop, adopt, and implement plans to protect and restore fisheries habitats, the Coastal Habitat Protection Plan (CHPP) was developed by the Division of Marine Fisheries and adopted in early 2005. The Coastal Habitat Protection Plan was developed to:

- 1. document the ecological role and function of aquatic habitats for coastal fisheries;
- 2. provide status and trends information on the quality and quantity of coastal fish habitat.
- 3. describe and document threats to coastal fish habitat, including threats from both human activities and natural events:
- 4. describe the current rules concerning each habitat;
- 5. identify management needs; and
- 6. develop options for management action using the above information.

For more information regarding the CHPPs document visit: http://www.ncfisheries.net/habitat/index.html

20.3.2 North Carolina Ecosystem Enhancement Program

The North Carolina Ecosystem Enhancement Program (NCEEP) is a nonregulatory program 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 & storage, fisheries & 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 & opportunity for watershed mitigation projects. The *RBRP*s are developed, in part, using information compiled in DWQ's Basinwide Water Quality Plans and Basinwide Assessment Reports. 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 *River Basin Restoration Priorities* 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. For example, the NCEEP's efforts can complement projects funded through 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 the project.

The NCEEP is also working to develop comprehensive **Local Watershed Plans**, often within Targeted Local Watersheds identified in the *River Basin Restoration Priorities*. Through the Local Watershed Planning process, EEP conducts comprehensive watershed assessments to identify causes and sources of major functional problems in local watersheds, and then coordinates with local resource professionals and local governments to identify & implement watershed projects and management strategies designed to address these problems. NCEEP Local Watershed Plans identify and prioritize wetland areas, stream reaches, riparian buffer areas and best management practices that will provide water quality improvement, habitat protection and other environmental benefits to the local watershed. There are currently no active local watershed planning efforts in the Roanoke River basin.

EEP has also acquired several preservation tracts and is in the process implementing four restoration projects in the Roanoke basin. A substantial amount of wetland and stream preservation was obtained through EEP's High Quality Preservation initiative that took place during the program's transition period.

For more information about the NCEEP and its Watershed Restoration Plans, visit the NCEEP website at http://www.nceep.net/.

20.3.3 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 Roanoke River basin, 22 projects have been funded for a total of \$13,553,100 (Table 22) for 1997A-2005A. 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 Roanoke River Basin Funded by the Clean Water Management Trust Fund (as of August 2005)

Project Number	Application Name	Proposed Project Description	Amount Funded	CWMTF Region	Subbasin
		Construct wastewater collection &			
		treatment system, will consist of			
	Stovall- Wastewater	pressure sewer collection system		Eastern	
	Collection System	with spray irrigation treatment		Piedmont/Central	
1997B-515	and Land Application		\$800,000	Coastal Plain	03-02-06
		Install pumping station to reroute			
	Stoneville- WWTP	wastewater from Town of			
	Elimination and	Stoneville's WWTP to Town of			
	Regionalization/May	Mayodan's facility. Decommission			
1998A-501	o River	Stoneville WWTP.	\$643,000	Western Piedmont	03-02-02
		Acquire through fee simple 393 ac			
	Piedmont Land	along Dan River; includes			
	Conservancy- Acq/	additional permanent easements			
1998B-009	Dan River Bends	along 1.8 miles of the Dan River.	\$642,000	Western Piedmont	03-02-01
		Construct 2 stormwater wetlands			
		to treat runoff from 57 ac of			
		heavily developed land. Develop			
		urban greenway and berm/buffer			
	Plymouth-	system along 1200 ft on the Water			
	Constructed	Front Alley which would vary		Eastern	
	Wetlands/ Roanoke	from 50 to 100 ft. Berm to route		Piedmont/Central	
1998B-704	River	runoff to wetlands.	\$835,000	Coastal Plain	03-02-09
1990B 701	NC Wildlife	runon to wettands.	ψουυ,οοο	Coustai i iain	03 02 07
	Resources	Acquire through fee simple 2,588			
	Commission -	ac along the Roanoke River and		Eastern	
	Pollocks Ferry Acq/	Conocannara Swamp; acquire		Piedmont/Central	
2000A-011	Roanoke R	1136 acres of riparian buffers.	\$1,650,000	Coastal Plain	03-02-08
	Piedmont Land	Acquire 18.8 ac tract under	. ,,-		
	Conservancy- Dan	conservation easement and			
2000B-016	River Acq	reforest.	\$75,100	Western Piedmont	03-02-01
200010	Roanoke Rs-	icioicst.	\$13,100	W CStCIII I ICUIIIOIIt	03-02-01
		Design/construct natural channel		Eastern	
	Restoration/Roanoke	Design/construct natural channel stream restoration project along		Piedmont/Central	
2000B-409	River Tributary	1,400 feet of Lions Watch Ck.	\$617,000		03-02-08
∠UUUD-4U9	Kivel Hibutary	1,400 leet of Lions watch Ck.	\$017,000	Coastai Fiaili	03-02-08

2000B-601	Askewville- Sewage Collection System Construction	Design/construct sewer collection system for 120 units (failing septic systems of straight pipes). Convey collected wastewater to Windsor's permitted WWTP.	\$705,000	Eastern Piedmont/Central Coastal Plain	03-02-10
2000M-002	Piedmont Land Conservancy- Moretz Acq Minigrant	Minigrant for preacquisition costs for 18.8 acres.	\$25,000	Western Piedmont	03 02 01
2001A-512		Replace 6,700 LF of gravity sewer to eliminate infiltration/ inflow along Marlowe Creek and develop/adopt ordinance(s) to nonpoint source pollution, and buffer protection.	\$708,000	Eastern Piedmont/Central Coastal Plain	03-02-05
2001B-037	NC Wildlife Resources Commission - Acquisition/ Johnson Tract/ Caswell Gamelands/ South Country Line Creek	Acquire through fee simple 71 acres along South Country Creek.	\$57,000	Eastern Piedmont/Central Coastal Plain	03-02-04
2001B-703	Gaston - Stormwater Design/ Lee Creek	Provide funds to design settling ponds and covered drain culverts to reduce erosion and stormwater runoff into Lee Creek.	\$20,000	Eastern Piedmont/Central Coastal Plain	03-02-08
2002A-801	Concerned Citizens of Tillery - Landowner Outreach/ Roanoke R.	Conduct a planning project to identify appropriate lands for protection along Conconnara Swamp.	\$42,000	Eastern Piedmont/Central Coastal Plain	03-02-08
2002B-803	Piedmont Land Conservancy- Planning/Upper Dan R.	Establish sediment monitoring stations on 30 sites in portions of the Dan River drainage; protect 285 riparian areas along tribs through donated easements. Develop a watershed plan.	\$160,000	Western Piedmont	03-02-01
2003A-604	NCSU - Septic Tanks/ Sertoma 4-H Center, Vade Mecum Creek	Design, permit and construct on- site wastewater treatment and disposal system to replace failing system. Includes donated easement on 142 riparian acres.	\$232,000	Western Piedmont	03-02-01
2003M-003	Piedmont Land Conservancy- Minigrant - Len's Knob	Minigrant to pay for transactional costs for fee simple of 2240 acres in Surry County on the Upper Mitchell River.	\$25,000	Western Piedmont	
2004B-042	NC Widlife Resources Commission-Acq/ Cashie River Tracts	Protect through fee simple 1,475 floodplain acres along the Cashie River.	\$440,000	Eastern Piedmont/Central Coastal Plain	03-02-10

Table 22 continued

2004B-044					
	NC Wildlife	D			
	Resources	Protect through fee simple 255		г .	
	Commission-Acq/	acres along Country Line Creek.		Eastern Piedmont/Central	
		CWMTF funds to purchase the			02 02 04
	Country Line Creek	riparian 95 acres.	\$193,000	Coastal Plain	03-02-04
		Decommission Town's WWTP and			
	H-1:C T C	eliminate 50,000 gpd discharge to			
	Halifax, Town of - WW/	Quankey Creek. Waste routed to Town of Weldon's WWTP.			
	Regionalization, Collection	Project includes replacement or repair of 18,609 LF of collection		Eastern	
	Rehabilitation,	lines and rehabilitation of a pump		Piedmont/Central	
2004B-507	Quankey Creek	station.	\$2,297,000	Coastal Plain	03-02-08
2004D-307	Qualikey Creek	Rehabilitate Littleton's existing	\$2,277,000	Coastai i iaiii	03-02-08
		wastewater collection system			
		(34,000 LF), replace 1,500 LF,			
	Littleton, Town of -	repair 118 manholes, and construct			
	WW/ Collection	2 new pump stations. Will reduce			
	System and Pump	contamination of Little Stone			
	Station	House Creek, Lake Gaston,		Eastern	
	Rehabilitation, Little	Butterwood Br and Little Fishing		Piedmont/Central	
2004B-512	Stonehouse Creek	Ck.	\$2,738,000	Coastal Plain	03-02-07
		Protect through working forest	, , , , ,		
		easement a 183-acre dairy farm on			
		tributaries to Roanoke Rapids			
		Lake. CWMTF funds to purchase			
		easement on 71 riparian acres. The			
	District - Acq/ Iles	USDA Farmland and Ranchland		Eastern	
	Farm, Roanoke	Preservation Program to provide		Piedmont/Central	
2005A-004	Rapids Lake	matching funds.	\$208,000	Coastal Plain	03-02-07
	Piedmont Land	Protect 321 acres, including 168			
	Conservancy - Acq/	riparian acres, along Hyco Lake		Eastern	
	Berry Tract, Hyco	and tributaries through purchase of		Piedmont/Central	
2005A-027	Lake	a conservation easement.	\$441,000	Coastal Plain	03-02-05

Notes:

- (1) The total funded amount excludes funded projects that were subsequently withdrawn by the applicant.
- (2) Two regional and statewide projects were funded in areas that include the Roanoke Basin. These projects include riparian corridor planning and implementation activities and a freshwater mussel relocation program.

20.3.4 NC Construction Grants and Loans Programs

The NC Construction Grants and Loans Section provides grants and loans to local government agencies for the construction, upgrades and expansion of wastewater collection and treatment systems. As a financial resource, the section administers five major programs that assist local governments. Of these, two are federally funded programs administered by the state, the Clean Water State Revolving Fund (SRF) Program and the State and Tribal Assistance Grants (STAG). The STAG is a direct congressional appropriations for a specific "special needs" project within NC. The High Unit Cost Grant (SRG) Program, the State Emergency Loan (SEL) Program and the State Revolving Loan (SRL) Program are state funded programs, with the later two being below market revolving loan money. In the Roanoke River basin, 9 applicants received a total of \$29,478,672 in grants and loans from these programs (Table 23).

As a technical resource, the Construction Grants and Loan Section, in conjunction with the Environmental Protection Agency, has initiated the Municipal Compliance Initiative Program. It is a free technical assistance program to identify wastewater treatment facilities that are declining but not yet out of compliance. A team of engineers, operations experts and managers from the section work with local officials to analyze the facility's design and operation. For more information, visit the website at http://www.nccgl.net/. You may also call (919)-715-6212 or email Bobby.Blowe@ncmail.net.

Table 23 - NC Construction Grants and Loans Programs disseminated within the Roanoke River Basin

Program	Applicant	Project #	Offer Date	Project Description	Loan/Grant Offered (\$)
SRF ¹	Henderson	CS370410-04	6/19/92	WWTP improvements, including phosphorus removal	2,500,000
SRF ¹	Williamston	CS370435-04	8/5/99	Upgrade and expansion to 2.4 MGD	7,000,000
SRF ¹	Mayodan	CS370466-04	11/19/02	Mayodan expansion 3.0 to 4.5 MGD, Regional facility for Madison and Stoneville	5,500,000
SRF ¹	Plymouth	CS370500-04	5/6/98	WWTP upgrades	1,968,500
SRF ¹	Rockingham County	CS370793-01	10/20/98	Construction of gravity sewer, force mains and pumping stations	4,302,532
SRF ¹	Stokes County	CS370813-01	8/3/94	New package WWTP and collection system	1,200,000
STAG ²	Henderson	XP-97440302	5/18/04	Sewer extension to the Mills River area	2,884,700
SEL ³	Roxboro	E-SEL-T-00-0033	5/23/01	Sewer rehabilitation	400,000
SRL ⁴	Rich Square	E-SRL-T-95-0030	1/18/96	WWTP improvements	500,000
SRG ⁵	Granville County	E-SRG-T-00-0103	3/6/02	New Sewer to Stovall	223,000
SRG ⁵	Rich Square	E-SRG-T-02-0126		Sewer rehabilitation and spray irrigation system	2,999,940

- 1 SRF Clean Water State Revolving Fund (SRF) Program
- 2 STAG State and Tribal Assistance Grants
- 3 SEL State Emergency Loan Program
- 4 SRL State Revolving Loan Program
- 5 SRG High Unit Cost Grant Program

20.3.5 Clean Water Bonds - NC Rural Center

Outdated wastewater collection systems, some more than 70 years old, allow millions of gallons of untreated or partially treated wastewater to spill into the state's rivers and streams. The NC Rural Economic Development Center, Inc. (Rural Center) has taken the lead role in designing public policy initiatives to assist rural communities in developing and expanding local water and sewer infrastructure. The Rural Center is a private, nonprofit organization. The Rural Center's mission is to develop sound, economic strategies that improve the quality of life in North Carolina, while focusing on people with low to moderate incomes and communities with limited resources.

To support local economic development and ensure a reliable supply of clean water, the Rural Center administers three Water and Sewer Grant Programs to help rural communities develop water and sewer systems. The Supplemental Grants Program allows local governments and qualified nonprofit corporations to improve local water and sewer systems by addressing critical needs for public health, environmental protection and/or economic development. The maximum grant amount is \$400,000 and must be used to match other project funds. The Capacity Building Grants Program provides funding for local governments to undertake planning efforts to support strategic investment in water and sewer facilities. Projects typically include preliminary engineering reports, master water/sewer plans, capital improvement plans, feasibility studies, and rate studies. The maximum grant amount is \$400,000. The Unsewered Communities Grants *Program* funds the planning and construction of new central, publicly owned sewer systems. This grant is designed to cover 90 percent of the total cost of a project, not to exceed \$3 million. Qualifying communities for this program must not be served by an existing wastewater collection or treatment system. For each grant program, priority is given to projects from economically distressed counties of the state as determined by the NC Department of Commerce (www.nccommerce.com).

The water and sewer grants listed above are made possible through appropriations from the NC General Assembly and through proceeds from the Clean Water Bonds. In 1998, North Carolina voters approved an \$800 million clean water bond referendum that provided \$330 million to state grants to help local governments repair and improve water supply systems and wastewater collection and treatment. The grants also address water conservation and water reuse projects. Another \$300 million was made available as clean water loans.

Since the program's beginning, the Rural Center has awarded nearly 500 communities and counties more than \$64 million to plan, install, expand, and improve their water and sewer systems. As a result, these communities have served new residential and business customers, created and preserved thousands of jobs, and leveraged millions of dollars in other water and sewer funds. Table 24 lists the grants that were awarded in the Roanoke River Basin between 1999 and 2005. For more information on the Water and Sewer Grants administered by the Rural Center visit www.ncruralcenter.org/grants/water.htm.

20.3.6 Virginia Roanoke River Basin Advisory Committee (VRRBAC) and the Roanoke River Basin Bi-State Commission

The Virginia Roanoke River Basin Advisory Committee (VRRBAC) was established in the executive branch of state government as an advisory committee to the Virginia delegation to the Roanoke River Basin Bi-State Commission. The Roanoke River Basin Bi-State Commission was established and composed of members from the Commonwealth of Virginia and the State of North Carolina. The purpose of the Commission in short is to safeguard the Roanoke River Basin's natural resources for the citizens of the Roanoke River Basin. This duty includes providing guidance, making recommendations, identifying problems, disseminating information, and promoting communication, coordination, and education among stakeholders. NC has passed similar legislation. The advisory committees of both States assist the Roanoke River Basin Bi-State Commission fulfilling its responsibility.

Table 24 - Clean Water Bonds Awarded in the Roanoke River Basin

County	Recipient	Grant Amount	Grant Type	Year Awarded
Halifax	Roanoke Rapids Sanitary Dis.	\$40,000	Capacity	August 2004
Rockingham	City of Eden	\$40,000	Capacity	February 2004
Bertie	Town of Kelford	\$31,000	Capacity	August 2002
Halifax	Town of Halifax	\$40,000	Capacity	August 2002
Rockingham	City of Eden	\$40,000	Capacity	August 2002
Martin	Town of Williamston	\$40,000	Capacity	March 2002
Rockingham	City of Eden	\$40,000	Capacity	March 2002
Bertie	Town of Windsor	\$40,000	Capacity	August 2001
Caswell	Town of Yanceyville	\$21,000	Capacity	August 2001
Rockingham	Town of Stoneville	\$40,000	Capacity	August 2001
Washington	Town of Plymouth	\$40,000	Capacity	February 2001
Bertie	Town of Askewville	\$36,400	Capacity	December 1999
Rockingham	Town of Mayodan	\$20,000	Capacity	December 1999
Bertie	Town of Windsor	\$400,000	Supplemental	February 2004
Halifax	Town of Weldon	\$400,000	Supplemental	February 2004
Granville	Town of Stovall	\$400,000	Supplemental	June 2003
Martin	Town of Jamesville	\$200,000	Supplemental	August 2001
Rockingham	Town of Madison	\$400,000	Supplemental	August 2001
Washington	Town of Plymouth	\$400,000	Supplemental	February 2001
Martin	Hamilton	\$198,560	Supplemental	August 2000
Halifax	Roanoke Rapids	\$150,000	Supplemental	April 2000
Caswell	Yanceyville	\$200,000	Supplemental	February 2000
Rockingham	Mayodan	\$200,000	Supplemental	February 2000
Bertie	Town of Windsor	\$185,396	Supplemental	December 1999
Halifax	Town of Halifax	\$64,135	Supplemental	December 1999
Bertie	Askewville	\$2,739,500	Unsewered	August 2000
Caswell	Milton	\$1,307,000	Unsewered	August 2000

A goal of VRRBAC is to open channels of communication. The Committee meets throughout the Roanoke basin in an effort to be available to all basin constituents. It is important that dialogue take place, which is representative of all areas of the basin. There must be rural and urban cooperation on water issues. Speakers representing various groups, State Agencies, Local Governments, different geographic areas, and interests have addressed VRRBAC. Localities and State entities have provided meeting facilities for the meetings. Such participation demonstrates that VRRBAC has strong partnerships in the region, which helps in carrying out the work of the Committee. Broad public support of policy and regional consensus is the best way to bring about positive change associated with environmental and related health issues. Better efficiency of protection efforts will result as all partners, public, private, federal, state, and local officials, can share and leverage resources. Such coordination and consensus building in the entire basin

on watershed management issues is essential to sound watershed decision making and management. Sub-committees have been given direction to promote such an effort using broad-based input consolidated from as many interested parties as possible.

The sub-committees formed are Agriculture and Forestry, Lake Interests, Municipal Interests and Permit Holders, River Interests, and Water. The sub-committees are to prepare position papers on important issues and bring them back to the full Committee for adoption. An effort is being made to bring the most knowledgeable people possible to the table, where the work must take place. The objective is to obtain membership that will represent stakeholders throughout the basin and maintain a geographical and urban/rural balance.

Since the inaugural meeting of VRRBAC certain characteristics and issues of the basin have become evident. The importance of natural resources to the economic vitality of the Basin is apparent. People reside in and come to the Roanoke River Basin area to pursue various interests including vacation, lifestyle, esthetics, boating, fishing, etc. These activities and personal values help drive the economic engine of the local and regional area. In addition, agriculture is vital to the region's lifestyle and economy. Clean water and ample flow and supply are recognized as essential to existing beneficial uses and future economic development. There are interrelationships within the basin involving flow, as events in one section of the basin can impact other parts. Environmental, ecosystem, human health, power generation, aquatic life, and economic needs of the basin must be balanced. The generally good water quality of the Roanoke basin is valued and must be preserved. Issues and topics which are crucial to the well-being of the basin people include 1.) inter-basin transfer of water, 2.) water withdrawals, 3.) regulation of flow and storage, 4.) invasive species, 5.) recreation and fishing, 6.) water quality and 7.) lake vitality.

VRRBAC has adopted several positions regarding the Basin's natural resources. It supports the implementation of BMPs and other strategies such as Low Impact Development (LID) and Nutrient Management Plans to correct pollution problems. VRRBAC favored the development of a Virginia State-wide Water Policy, but only one that mandated local stakeholder input and was against the inter-basin transfer of water that is detrimental to the people of the basin. VRRBAC is opposed to any new water withdrawal until such time that the real and potential needs for the foreseeable future are determined. For more information please see the VRRBAC website. http://www.deq.virginia.gov/vrrbac/