CHAPTER 6

Local Initiatives & Voluntary Incentive Programs

In the Roanoke River Basin

Chapter Topics

- Local Initiatives
- CG&L
- 319 Grants
- SWCD

Local Initiatives

In addition to local initiatives that have been planned or implemented throughout this planning cycle, this Section includes a list of watershed groups and natural resource agencies focused on improving water quality across the basin. There may be additional groups and agencies active within the basin. Please contact the DWQ **Roanoke River Basin Planner** to have your water quality improvement or protection program/projects listed here.

The Importance of Local Initiatives

Local initiatives to protect water quality are essential to any community because local citizens make decisions that affect change in their own communities. There are a variety of limitations local initiatives can overcome including limited and diminishing state government budgets and staff resources, absence of regulations for land use management, and many others. Local organizations and agencies are able to combine professional expertise in a watershed, thus allowing 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 wide 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 may be realized. This potentially allows local entities to do more work and be involved in more activities because their funding sources are diversified. The most important aspect of local endeavors is that the more localized the project, the better the chances for ongoing success.

The collaboration of local efforts are key to water quality improvements. There are good examples of local agencies and groups using these cooperative strategies throughout the basin and specific groups and projects are discussed within each of the 10-digit watershed write ups in the Subbasin Chapters. Some of these groups are listed below. DWQ applauds the foresight and proactive response of local watershed groups and local governments to address a number of water quality problems.

LAKE GASTON WEED CONTROL COUNCIL

**Information submitted by: Wally Sayko, Brunswick County (Va) Director, Chairman Public Affairs Committee August 8, 2011.*

Current activities by the LGWCC:

The second chemical application has been applied to some 1,200 acres. This product is called Sonar and is a time released product that lasts for about 40 days. Three applications are applied about 30-35 days apart. During this period tests are run to assure that the proper level of product is present to provide continuous impact on the Hydrilla.

Planned activity by LGWCC:

A company is under contract to survey the lake in the fall to determine the amount of vegetation in the lake and determine how many acres of potential Hydrilla is present. This will provide three important pieces of data to us for the following year. First, it will verify the effectiveness of this year's contracted treatment. Second, it will establish how many acres of Hydrilla still exists to determine if we need to add Grass Carp and the third is of course what areas of the lake that have Hydrilla that can be treated by chemical. Not all areas can be treated. Water over 10 feet deep for instance is not very effective and also the flow of water is critical since the chemical will be moved from the desired location.

Completed activities by the LGWCC:

We put into the lake this year over 8,400 grass carp. They were put into two locations - Big Stonehouse Creek in North Carolina and the Route 1 Bridge in Virginia. Based upon a formula that has been developed by NC Wildlife Resources Commission, this data is put into a program to determine the number of grass carp per infested acre of Hydrilla. The goal is to maintain grass carp at 15 per acre. Insertion of the 8,400 grass carp this year will bring the current rate to that level.

Activities that did not happen by LGWCC:

We were planning a significant effort to plant more controlled native plants in given areas of the lake. This effort was to be coordinated with the U.S. Army Corps of Engineers. Because of a lack of funding for the COE this plan was not carried out.

Activities by the Lake Gaston Association: (LGA)

The LGA supports the Weed Control Council efforts in a number of ways. First, it lobbies the five county governments surrounding the lake to provide full funding ($116,000 each) for weed control efforts during the annual budgeting cycle. Second, it provides volunteers in support of a lake wide weed survey each year and the native plant re-vegetation program. Third, the LGA responds to inquiries from concerned property owners regarding weed control issues. This support is provided by the LGA's Lake Environment Committee. Specifically this year, the Environment Committee:

- Repaired over 50 native plant cages in the water on the lake in conjunction with the Corps' re-vegetation program. Some of the cages suffered physical damage from boaters and some from animals. In one cage we found over 20 turtles that had to be released and in another a 3 foot Gar Fish. These areas were all repaired and any damage and plant success recorded for the COE. The monitoring and reporting of these locations is ongoing by the LGA.

- Completed training of over 26 new volunteers to participate in our annual lake aquatic plant survey. Our goal this year is to survey more than 90% of the lake with volunteers. This data is then sent to NC State, to Rob Richardson and his organization for input into a map source. This data is then shared with the LGWCC for additional information into the annual lake survey they conduct. The survey will begin in late August.

- Was instrumental in convincing two counties to maintain full weed control funding, another to restore full funding from none the previous year, and another to increase its funding from $25,000 to $75,000.

- Responded to a number of concerns by property owners that were checked out by committee members and reported back to the proper organizations. These have included concerns over runoff from farms and a Moto Cross track, to questions about types of weeds they may have near their shoreline and the effort to remove an abandoned house boat on Poplar Creek.

In May the LGA sponsored a Lake Clean Up campaign in all 5 counties. It was the first effort of this type on the lake. A lot of trash was cleaned from the lake.

Partners on the lake:

- Lake Gaston Weed Control Council, Dr. Elton Brown, President
- Lake Gaston Association, Doug Hughes, President
- Stake Holders, Pete Deschenes, Chairman
- Technical Advisory Group (TAG), Rob Richardson, Chairman
- North Carolina State University, Rob Richardson, Steve Hoyle
- Virginia Tech.
- Dominion Power, Jim Thornton
- Virginia Dept. of Inland Fisheries, Vic Dicenzo
- North Carolina Dept. of Natural Resources, Kirk Rundel

Federal, State & Local Incentive Programs

Construction Grants & Loans

The NC Construction Grants and Loans (CG&L) Section of DWQ 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 latter two being below market revolving loan money. The Section also received an additional Capitalization Grant authorized by the American Recovery and Reinvestment Act of 2009 in the amount of $70,729,100. These funds are administered according to SRF procedures. All projects must be eligible under title VI of the Clean Water Act. For more information, please see the CG&L website.

TABLE 6-1: CG&L PROJECTS FUNDED DURING 2004-2009 IN THE ROANOKE RIVER BASIN

LOCATION	PROJECT DESCRIPTION	DATE	AMOUNT	8 DIGIT HUC	FUNDING
Eden, City of	Dry Creek and Smith River Sewer Rehabilitation	5/8/2009	$714,303	03010103	ARRA
Rich Square, Town of	Rich Square Collection System Rehabilitation	5/21/2009	$1,728,180	03010107	ARRA
Roanoke Rapids SD	Replace the Disinfection System	7/31/2009	$1,241,156	03010107	SRF
Rich Square	Sewer Rehabilitation and a Spray Irrigation System	4/14/2004	$2,999,940	03010107	SRG

SECTION 319 GRANT PROGRAM

Section 319 of the Clean Water Act provides grant money for nonpoint source demonstration and restoration projects. In 2009/2010, approximately $450,000 was available annually through base funding for demonstration and education projects across the state. An additional $2 million was available annually through incremental funding for restoration projects on impaired waters statewide. 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 as well as **descriptions of projects and general Section 319 Program information**.

There were two projects in the Roanoke River basin that were funded through the Section 319 Program between 2004 and 2010. The first project, the Smith Creek Agricultural Sediment Initiative, was active from 2005 to 2008. The main objective of the project was to address severe sedimentation problems in the Smith Creek watershed in Warren County, specifically targeting segments of Smith Creek on North Carolina's 303(d) list of impaired waters. The NC Division of Soil and Water Conservation contracted with the Warren Soil and Water Conservation District to prepare a comprehensive watershed restoration plan. The plan helped guide the installation of best management practices (BMPs) within the watershed to reduce sediment delivery to the impaired waters. Eighteen cooperating landowners were involved in implementing BMPs to improve water quality.

The other project funded by the 319 Grant Program extends from 2008 to 2011 and is also with the NC Division of Soil and Water Conservation, in partnership with Stokes, Rockingham, and Caswell County Soil and Water Conservation Districts. The primary objective of this project is to install BMPs throughout the Dan River watershed to reduce sediment delivery and fecal coliform bacteria to help restore impaired waters on the state's 303(d) list. BMPs to be installed include: livestock exclusion fencing, water tanks, field borders, grassed waterways, heavy use area protection, and non-agricultural BMPs such as wetlands and rain gardens. Installation of the proposed BMPs should help prevent the off-site movement of nutrients and pesticides, and improve streambank stability and habitat for fish and macroinvertebrates. This project will build on earlier planning efforts by updating and supplementing existing documents to produce a watershed restoration plan that satisfies EPA's nine required elements. Numerous outreach and educational opportunities are also being conducted during the project to inform local citizens, students and elected officials about the purpose and effectiveness of the BMPs.

Table 6-2: 319 Grant Contracts in the Roanoke River Basin Between 2004 & 2009

Fiscal Year	Contract Number	Name	Description	8-Digit HUC	Agency	Funding
2005	EW06022	Smith Creek Agricultureal Sediment Initiative: Phase II	Agricultural BMP Implementation	03010106	DSWC	$130,000
2008	1585	Dan River Watershed BMP Implementation	BMP Implementation	03010103	DSWC	$399,900
Total Funded:						**$529,900**

Soil & Water Conservation

The North Carolina Agricultural Cost Share Program

The NC Agricultural Cost Share Program (NCACSP) helps reduce agricultural nonpoint runoff into the state's waters. The program, administered by the NC Division of Soil and Water Conservation (now within the NC Department of Agriculture and Consumer Services as of 2011) and managed by the local districts, helps owners and renters of established agricultural operations improve their on-farm management by using best management practices (BMPs). These BMPs include vegetative, structural or management systems that can improve the efficiency of farming operations while reducing the potential for surface and groundwater pollution. A full listing of all the BMPs and the categories they are grouped in is available at the following link (under Section V: Best Management Practice Guidelines)

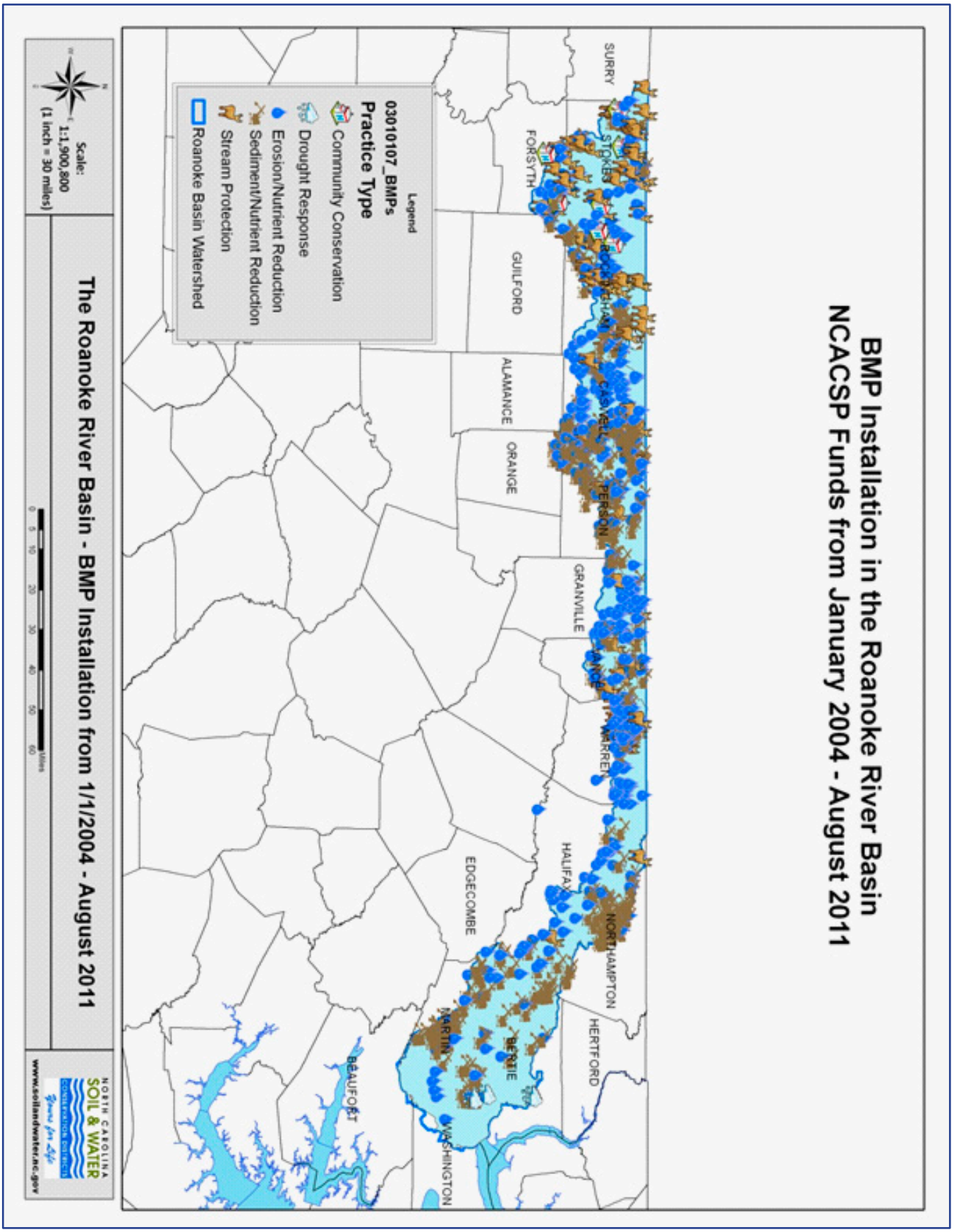
Across the Roanoke River Basin, 4,167 individual Best Management Practices were installed from January 1, 2004 through August 1, 2011. Below is a map (Figure 6-1) showing the geographic location of those 4,167 practices installed.

The western portion of the basin tends to have more Stream Protection practices installed than the eastern portion of the watershed. Moving east, there is a considerable shift into Erosion/Nutrient Reduction and Sediment/Nutrient Reduction practices. This is due to different ecoregions.

Table 6-3: Total Benefits Derived Across the Entire Basin for Those Practices Installed Through the NC Agricultural Cost Share Program Between January 1, 2004 through August 1, 2011:

Derived Benefits	Benefit Parameter	Benefit Value
Acres Affected	Acre	36,960
Nitrogen Saved	Pounds	421,609
Phosphorus Saved	Pounds	81,458
Soil Saved	Tons	166,646
Waste-N Managed	Pounds	341,306
Waste-P Managed	Pounds	230,317

FIGURE 6-1: ACSP BMP INSTALLATION IN THE ROANOKE RIVER BASIN BETWEEN JANUARY 2004 THROUGH AUGUST 2011



Clean Water Act, Section 205(j) Funded Projects

The DWQ and EPA awarded the Kerr-Tar Regional Council of Governments funding from the 2009 American Recovery and Reinvestment Act of $34,760 to complete the Roanoke River Basin Bi-State Commission and North Carolina Roanoke River Advisory Committee Activity and Project Development Operational and Coordination Support Project. The North Carolina and Virginia Roanoke River Basin Advisory Committees and the Roanoke River Basin Bi-State Commission were created by the North Carolina and Virginia legislatures in 2003. Their purposes included addressing bi-state issues of water quality, quantity, assimilative capacity, developing policy recommendations and supporting coordination between the states. This grant which concluded in 2011, provided support for the planning activities to achieve the legislative intent of these committees and commission. Over the past few quarters the Committees and Commission have been actively reviewing the issues of lifting the 1982 ban on uranium mining in Virginia and developing a more detailed charge to the Ad hoc Water Allocation Committee concerning a water allocation proposal that is acceptable to both states.

American Rivers

In 2011 American Rivers ranked the Roanoke River as the third most endangered river in America due to the possibility of uranium mining. Extracting uranium ore requires intensive use of water and chemicals, and leaves behind massive amounts of radioactive and contaminated waste. The mining, processing, and waste disposal have the possibility of leave a toxic, radioactive legacy in the watershed for centuries if not done in an environmentally sensitive manner.

More information about this ranking is found on the American Rivers website.