

BUNCOMBE COUNTY SOIL AND WATER  
CONSERVATION DISTRICT

2011 ANNUAL REPORT

July 1, 2010 through June 30, 2011





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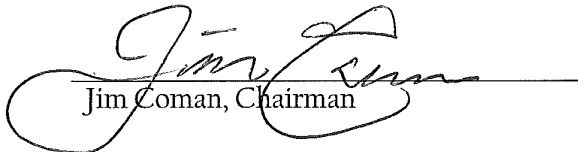
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## Message From the Board Of Supervisors

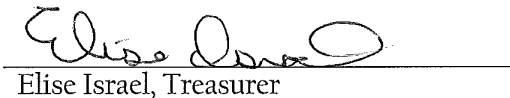
The Board of Supervisors and staff of the Buncombe County Soil and Water Conservation District are very proud of the District's accomplishments for the 2011 fiscal year, which covered the time period from July 1, 2010 through June 30, 2011. These accomplishments are summarized in this Annual Report.

The foundation for these achievements for the past fiscal year is the District's partnership with Buncombe County, the USDA-NRCS, the N. C. DENR and other private and governmental organizations. The District could not conduct a successful conservation program without these vital partners, who provide much of the needed capital and technical expertise to carry out conservation projects. We are especially grateful to the Buncombe County Commissioners for their financial support, and the assistance provided by the County Manager's office, and other county departments.

The District expresses its thanks to the EPA Section 319, the NC Agricultural Development and Farmland Trust Fund, the USDA Farmland Protection Program, the Pigeon River Fund, the NC Division of Soil and Water Conservation, the NC Foundation for Soil and Water Conservation, and the NC Farm Bureau for their financial support for farmland preservation and other conservation projects during the year.

  
Jim Coman, Chairman

  
David Snelson, Vice-Chairman

  
Elise Israel, Treasurer

  
Lynn Bonham, Secretary

  
Chase Hubbard, Member

Buncombe County Soil and Water Conservation District

Members – Board of Supervisors  
&  
Staff for FY 2011

District Board Members:

Jim Coman	Chairman
David Snelson	Vice-Chairperson
Lynn Bonham	Secretary
Elise Israel	*Treasurer
Jeff Turner	Member – July 1 – December 6, 2010
Chase Hubbard	December 7, 2010 - June 30, 2011

\*Elise Israel also serves as Treasurer for the Area I Association of Soil and Water Conservation Districts.

District Staff:

Gary Higgins	District Director
Sandra Murphy	Administrative Assistant
Anthony Dowdle	Soil Conservationist
Renee Ray	Soil Conservationist/Environmental Education Coordinator
Jennifer Beck	Watershed Resource Coordinator – Newfound Creek Project
Maria Wise	Soil Conservationist/Farmland Preservation

USDA – NRCS Staff:

Loring McIntyre	District Conservationist
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## TECHNICAL ASSISTANCE AND COST SHARE PROJECTS

### Conservation Planning:

Natural Resource Management Plans are the foundation on which best management practices are planned and installed. NRCS and District staffs develop Natural Resource Management Plans for agricultural operations, urban landowners, and others. These plans are comprehensive of all the soil, water, and related natural resources on the land unit being planned. The purpose of the planning process is to work with the land users or managers to develop strategies for maintaining or improving the resource base. Plans contain the management decisions that are made after a careful review of resource problems, the potential of the resource base, and the feasibility of installing best management practices.

In the 2011 fiscal year, NRCS and District staff developed plans for a total of 941 acres.

### North Carolina Agricultural Cost Share Program (NCACSP)



The North Carolina Agriculture Cost Share Program reimburses farmers for seventy-five percent of the cost of installing measures that improve off-site water quality. These cost-shared measures or “best management practices” must meet current USDA-NRCS standards and are designed by District and NRCS personnel. During the FY011 fiscal year, District cost-share staff **Anthony Dowdle** and **Renee Ray** developed 14 contracts totaling \$74,562. When installed, with the landowner’s twenty-five percent contribution, a total of \$ 99,416

worth of best management practices will be “on the ground” and protecting water quality.

The District worked with 6 landowners to complete BMPs from portions of 6 contracts. The total cost-share on these projects was \$ 26,056. Landowner contributions totaled \$ 8,685, bringing the total value of BMPs installed \$ 34,741. Installed BMPs are listed below.

Planned and completed BMPs for FY08:

<u>Best Management Practice</u>	<u>Planned</u>	<u>Installed</u>
Fencing to exclude livestock from streams	6,681 l. ft.	5,109 l. ft.
Watering tanks to provide alternative water source	14.0	5.0
Wells & Pumps to provide water for watering tanks		1.0
Spring Developments to provide water for watering tanks	1.0	

Pipeline for alternative watering systems		2,646 l. ft.
Heavy Use Area Protection for eroding areas	1.0	1.0
Vegetation for critically eroding areas		1 ac.
Cropland Conversion to Grass	1.75 ac.	
Stream bank stabilization		55 l. ft.

The District is required to conduct an annual spot check of 5% of all active NCASCP contracts which is done by staff and members of the Board of Supervisors. The goal of the spot check is to determine whether cost-shared BMPs are being maintained for their intended purpose. This year's spot check was conducted in May of 2011 on five farms in the county. All spot-checked items were in good condition and functioning as they were intended.

### Newfound Creek Watershed Project

During FY2011 the primary focus of the Newfound Creek Watershed project was implementation of the \$459,201 EPA Section 319 grant. That grant paid for various project activities, including the salary and benefits for the Watershed Resource Coordinator, and installation of best management practices. During the fiscal year, best management practices were installed on 16 properties as listed below:

<u>BMP</u>	<u>Installed</u>
Repair of failing septic systems	6 systems
Wells for livestock	4
Livestock watering tanks	10
Livestock exclusion fencing	6,119 l. feet
Cropland Conversion	10.7 acres
Critical Area Planting	0.4 acres
Access Road Improvement	830 l. feet
Animal trails and walkways	520 l. feet
Bio-Retention (rain garden)	1

Total cost share on these projects totaled \$131,201. District staff also planned 2 projects for access road improvements that will be installed in FY12.



Farm access road improvements  
at Lynn Brown Farm



Rain garden and level spreader installed to control stormwater at Yesterday Spaces Event Center and Farm

### Outreach



Project WET workshop at Newfound Community Center

In addition to planning, design, and installation of best management practices, the Watershed Resource Coordinator Jenn Beck conducted 4 stakeholder's meetings, worked with Education Coordinator Renee Ray to conduct a PROJECT WET workshop, developed articles for the SWCD newsletter; and assisted with Environmental Education Field Days.

The Watershed Resource Coordinator also worked with BCTV to film a segment on a bio-retention basin and level spreader installed at the Yesterday Spaces Event Center and Farm in Leicester.

### Survey of Landowners:

The SWCD staff completed a survey of 14 landowners who installed best management practices under the grant. The results of the survey show that the voluntary, incentive-based approach to installing best management practices is an effective option and popular with the landowners in the watershed.

### Water Quality

Water samples are collected twice a month and analyzed for fecal coliform and nutrient levels by UNCA's Environmental Quality Institute. Water sampling was interrupted for a portion of the fiscal year due to the Environmental Quality Institute being relocated from UNC-A, but resumed in the spring of 2011. Sampling will continue through the end of the grant August 31, 2011,



## Ecosystem Enhancement Program

The District is working in conjunction with the Ecosystem Enhancement Program on a large scale farm project on the main stem of Newfound Creek and several small tributaries. The SWCD involved developing a plan for agricultural best management practices and overseeing construction of agricultural BMPs. As of the end of the fiscal year, 20 livestock watering tanks had been installed in addition to approximately 2,000 linear feet of animal trails and walkways. Stream restoration has been completed on some of the small tributaries and the next step in the process is installing temporary and permanent fencing to exclude livestock from the riparian zones.



## Community Conservation Assistance Program (CCAP)

The total CCAP allocation for the 2011 fiscal year was **\$4,176**, and an additional **\$4,000** was added to that allocation from left over CCAP funds. The total of **\$8,176** was obligated to a contract to install a storm water wetland at a condominium complex.

A large storm water wetland project was completed in December of 2010 in a West Asheville neighborhood. The wetland captures, stores, and treats runoff from about 2 acres of streets, parking lots, and residential areas.

## Consultations

Citizens of Buncombe County often access the technical expertise of the District and NRCS staff through various types of consultations. Consultations provide staff an opportunity to provide assistance to clients in several ways. A consultation can happen when a client visits the office to access various types of information such as brochures, soils data, soils maps, flood plain maps, topographic maps, archived aerial photographs, or other information. These same types of information can be transmitted by mail or in some cases electronically as well. Clients can also obtain the information they need from meetings with staff, via e-mail, or telephone conversations. In many cases, a site visit may be necessary to properly assess a resource problem and arrive at solutions. All these types of client assistance are grouped in a category called “consultations”. In the 2011 fiscal year, the District and NRCS staffs estimate they assisted clients through **250 consultations**. Staff time spent on a consultation can range from a five-minute phone conversation to several hours spent on a trip to a client’s site and follow-up assistance.

## Erosion Control/Stormwater Plan Reviews

The Erosion Control Ordinances of both Buncombe County and the City of Asheville require that erosion control plans submitted to them be reviewed by the Soil and Water Conservation District. The District staff makes a site visit to each project, and does assessments of the soil conditions and reviews the seeding specifications. A written reply is sent to either the city or the County for each plan received by the District office. The review process by the District averages about two and one-half hours for each plan.

Last year the District reviewed 13 erosion control plans and 12 stormwater plans for the County and 10 erosion control plans and 1 environmental assessment for the City of Asheville.

## Operation Reviews/Waste Management System Assistance

The Soil and Water Conservation District, pursuant to the requirements of the State's non-discharge rules relating to confined animal operations, conducts annual operation reviews of 7 such operations in the county. These operations are required to have an animal waste management system in place, and manage the system and animal waste in accordance with a plan developed by the District and the NRCS. Districts do operation reviews to help operators meet the requirements of the state's Compliance Reviews. Personnel from the N. C. DENR, Division of Water Quality conduct compliance reviews. The eight operations with these systems and plans in Buncombe County are dairy operations. The annual operation review consists of a visit to the operation to assess the physical condition of the components of the waste management system and crop application fields, the record keeping by the operator, and any possible instances of discharge to surface waters from the operation.

During the 2011 fiscal year, the District conducted 7 operation reviews. The District staff provides follow-up assistance to help operators in maintaining compliance with state laws, and may visit an operation several times during the year.

Buncombe SWCD Outreach / Environmental Awareness for 2010/2011



Education Coordinator Renee Ray works with a fifth grade class

Below is a summary of some of the educational programs the SWCD conducted in FY11:

<u>Activity</u>	<u># Completed</u>	<u># Reached</u>
Environmental Education Field Days	3	600
Poster and Essay Contest	25	250
Classroom lessons	25	625
Career Day	2	100
WNC Regional State Fair	1	15,000
Quarterly Newsletter (mailed)	4	3,760
Quarterly Newsletter (emailed)	4	1,600
Web site (estimated)	1	18,000
BCTV programs (estimated)	2	25,000
Sponsor Envirothon Teams	2	11
Sponsor Students - Resource Conservation Workshop	2	2
Assist With Area 1 Envirothon	1	220
Assist With NC Envirothon	1	250
Host Project WET Workshop	1	20

The District staff was also able to get information to the public using a number of different sources where it is impossible to tell who and how exactly how many received the information. This would be through the use of BCTV, other local media (newspaper, TV, radio), Buncombe County web page, signs and newsletters in public places, etc.



Woolly Adelgid station-Spring 2011 field days

## Farmland Preservation

The District assists the Agricultural Advisory Board with the administration of the Buncombe County Voluntary Farmland Preservation Ordinance. The staff assists with meeting agendas, minutes, newsletters, processing applications, writing conservation plans, ranking applicants for conservation easements, and other duties. The Buncombe County Planning Department assists the Board with some of these duties as well.



### Voluntary Agricultural Districts Program:

During the 2011 fiscal year, **18 new farms** were added to the program, and new applications approved totaled **782.03 acres**. Previous applications approved totaled **34.56 acres**. However, 4 farms were withdrawn from the program for various reasons for a total of **292.13 acres**. This resulted in a gain of acres in the program of **524.46 acres**. As of June 30, 2011 there were **362 farms in the program totaling 27,114.74 acres.**

### Conservation Easement Program:



Sycamore Valley Farm

Maria Wise worked with several conservation easements during the year, one of which was a **140 acre** easement in the heart of Leicester at the Sycamore Valley Farm. The easement was made possible by funds from Buncombe County, the NC Agricultural Development and Farmland Preservation Trust Fund, the USDA-NRCS, and a donation from Sycamore Valley Farm of a portion of the value of the easement. That easement closed in December, 2010. The process of developing a conservation easement on the Kirstein farm in Broad River got underway during 2011 as well with the land survey. When completed, this easement will add another **300 acres** to the conservation easement program. This farm is adjacent to the Fortune property which had surveying done in 2011 and is **78 acres** in size. Initial planning and work began on the **118 acre** Merschat property in Barnardsville in FY11. The Kirstein, Fortune, and Merschat properties were all donated easements with Buncombe County picking up the transaction costs.

The Buncombe County Commissioners also approved transaction costs for a 230 acre working farm in Leicester, and a 77.5 acre working farm in Sandy Mush. The Commissioners have been tremendously supportive of farmland preservation programs in the County.

### Enhanced Voluntary Agricultural Districts program:

In February, 2011 the Buncombe County Board of Commissioners passed a revised Farmland Preservation Ordinance. One of the changes they made to the ordinance was to include the Enhanced Voluntary Agricultural Districts program (EVAD). In exchange for signing a binding ten-year agreement with the County, the farmer gains additional benefits, one of which is a ninety percent cost share rate on state cost sharing programs. Qualification criteria for the program is the same as the Voluntary Agricultural Districts Program. No applications were received for the EVAD program in the 2011 fiscal year because the revisions to the ordinance were made late in the fiscal year.

### Friends of Agriculture Breakfast:

In February, 2011 the Buncombe SWCD in cooperation with the Agricultural Advisory Board and the Cooperative Extension Service Buncombe County Center began having a “Friends of Agriculture Breakfast”. The events are held once each quarter at 7:00 a.m. and provide a free country breakfast to all who attend and a short program following. The first two breakfasts were well attended and the first two program speakers were Bill Yarborough from the NCDA, and John Queen of the WNC Livestock Market. The breakfasts are a great opportunity to get farmers and those who support farming together to exchange information and ideas.



### Conservation Seed Drill



During the 2011 fiscal year, the SWCD’s seed drill was rented 13 times and used to renovate 160 acres of pasture/hayland; and plant 22.75 acres of pasture/hayland. The seed drill enables farmers to plant grass without tilling the soil, thereby decreasing soil erosion and was given to the SWCD by the N. C. Foundation for Soil and Water Conservation.

Drilled grass pasture shortly after germination