

Greenville County Soil & Water Conservation District

Annual Report 2011



Mission

Our mission is to protect natural resources through education, programs, and cooperative efforts with partner organizations to achieve common goals for the benefit of all citizens of Greenville County by promoting and enhancing prudent soil and water conservation practices.

Objectives

Urban & Land Use Planning • Conservation Awareness • Sustainable Agriculture
Water Quality and Quantity • Customer Service

Commissioners



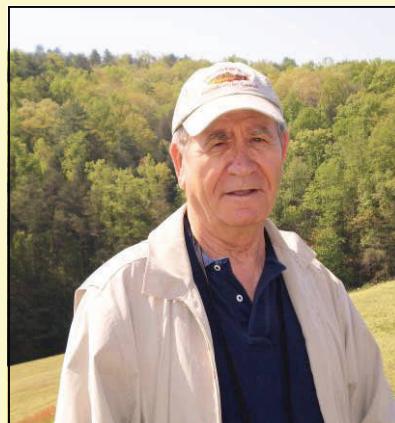
*Dr. Robert Hanley, Chairman
Marine biologist*



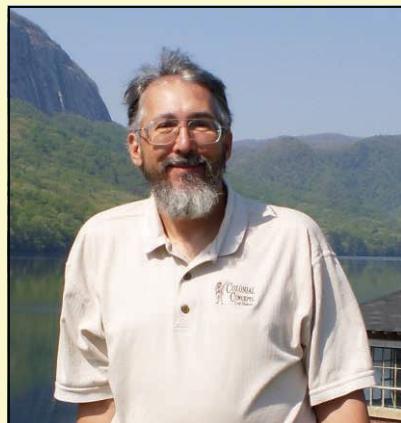
*Claire Bradberry, Vice-Chairman
Cattle farmer*



*Danny Howard, Secretary-Treasurer
Clemson Extension Office
Lead County Agent*



*Darrell Harrison, Commissioner
Earth Team volunteer with NRCS*



*David Gibble, Commissioner
Business owner and Farmer*

Affiliate Member Donations Underwrite the Conservation Education Effort of the District

Businesses and individuals across the Upstate supporting the Greenville County Soil & Water Conservation District's educational program with financial donations during 2010-2011:

2010-2011 Affiliate Members

Regular - \$35

Joe M. Barron, P.E.
Bob Jones University
Cely Construction Company, Inc.
Dr. William N. Gressette, Jr.

Danny & Nan Howard
Ted V. Howie Realty
North Greenville University
Melvin Pace, *Pace Building Co.*

Contributing - \$50

Bob & Claire Bradbery
Dennis & Judy DeFrancesco
Mr. & Mrs. William H. Earle
Jim & Beverly Fogle
Furman University
Dr. & Mrs. Rob Hanley
Hayes Food Products, Inc.

Howard Farms
Grady & Mary Rose Jones
Lynne Newton
Fred & Kay Payne
Paul Wickensimer
J. Randall & Pat Wynn

Associate - \$100

Alliant Energy
Dobbins Engineering, Inc.
Mrs. Vance Drawdy
Butch & Diane Kirven

Pat Jenkins, P.E.
Laurens Electric Cooperative, Inc.
Rogers & Callcott Engineers, Inc.

Sustaining - \$150

AgSouth Farm Credit
Ashmore Brothers, Inc.
Blue Ridge Electric Cooperative

Caliber Engineering Consultants, LLC
Farm Bureau of Greenville County
McCall Environmental

Donor - \$200

Darrell & Georgia Harrison
Pecan Dale Farmstead

Friend- \$500

Strange Bros. Grading Co., Inc.

Benefactor- \$1,000

GE Power Systems

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A Message from the Chairman

Fellow Conservationists:

As the District wraps up another year, the Upstate once again is experiencing drought conditions. This natural condition emphasizes the importance of water conservation. For the second year, the Greenville Soil and Water Conservation District, in cooperation with the United States Natural Resources Conservation Service and several area drinking water providers, is supporting the “Every Drop Counts” program. Every Drop Counts offers free irrigation system checks to residential and commercial water system customers. Through this program, a trained irrigation system technician visits the property to conduct an irrigation system check, which includes coverage, time of day, and length of time that an irrigation system is activated. The technician uses this information to generate a written report for the home owner or property manager. In some instances, technicians can also train the property owner/manager on how to adjust the system to improve its effectiveness. Every Drop Counts can benefit the property owner and the environment by improving irrigation system efficiency.

The District is responsible for maintenance of nine watershed dams in Greenville County. Through the generous support from Greenville County, government, over the last two years the District has inspected and, where necessary, repaired the control structures on each of these dams. We continue to maintain the dams through semi-annual mowing and annual inspections of the control structures. The District appreciates the cooperation of the landowners on whose land these dams are situated.

Time does not permit a listing of all of the District’s accomplishments. However, one project does deserve mention. This fall, the District in cooperation with NRCS, Upstate Forever, Trout Unlimited and other partners initiated a habitat improvement project on the South Saluda River. Unfortunately, this project has stirred some controversy, including a lengthy and costly appeal process. The project in the South Saluda River involves placement of rock structures in the river that will ultimately improve trout habitat. These structures should also improve overall water quality. Construction of the first phase is underway, approximately one year later than planned. The District appreciates the support of many local entities, some public, some non-governmental, and individuals who have given their time and talent to support this project during the permitting and appeal process.

In the end, the South Saluda project demonstrates what the Greenville Soil and Water District is all about, cooperation. We succeed through cooperative efforts with federal, state and local public, non-governmental and private entities. We measure our success by the services we provide to Greenville County.

Sincerely,

Dr. Robert Hanley, Ph.D.
Chairman

From the District Manager's Desk...

It's been another exciting year for the District. Our education programs, under JC Ward's direction, were bigger and better than ever. Please see what a great job she has done on page 7 of this report. NRCS services offered through the District are also covered on page 8. Other services the District offered are included here, from the District Manager's desk...

One of our primary conservation projects this year was maintaining our nine watershed dams. Last year the maintenance focused on rehabilitating the moving parts of the dam, and this year we addressed vegetative overgrowth and deterioration of the stilling basins at each of the dams. The dams are in better shape now than they were when they were built due to the addition of rock in the stilling basins, and addition of stainless steel rodent guards on the toe drains. We are proud of the dams and the work that they do year after year, increasing water quality downstream and controlling flooding.



Rocks in the stilling basin of a District dam



Forefront: toe drain pipe replaced this year

One other dam maintenance item we addressed this year was a kudzu problem on one of the dams. While kudzu is vegetation, and vegetation is key to stopping soil erosion, kudzu is not the best choice of vegetation for the task. Kudzu has only one root crown and so does not make a mat of intertwined roots which hold the soil. In addition, the kudzu grows thickly and quickly, and shades out other vegetation. It is nearly impossible to inspect a dam for problems such as erosion or holes if the kudzu is covering it. We attacked the problem by consulting the best talent NRCS had to offer in the southeast. We first mowed the kudzu, then plowed the sides of the dam with a harrow. After raking all of the cut vines and roots off of the dam, the dam was seeded with grasses and then mulched back with the dried kudzu vines. The dam will need to be mowed closely a few times to keep the kudzu from coming back. If the vines are kept small enough, and starved enough, the grasses that were planted are expected to take over.



Kudzu on the dam



After kudzu-control program

A partnership between the Greenville County GIS department and the District brought a new service to the citizens of Greenville County this year. All of the watershed dams were put into the mapping system that is available to all county residents on-line. In addition, the top of dam elevation for each dam has been drawn to show the easement line, inside which the District has easement to maintain the dams. We are excited to share this information with the residents in such an efficient way, and hope that it is helpful information for those who may be affected by this easement.

2009-2010 Education Program Report



Greenville County Soil & Water Conservation District's educational programs convey messages of natural resource conservation to a wide, multi-generational audience. Education Programs are made possible through the generosity of Affiliate Member donations.

- 368 County teachers participated in environmentally-themed workshops through the SWCD. Workshops included activities from Project WILD, Leopold Education Project and Project WILD Aquatic.
- 30 school classroom presentations, reaching 900 students, were delivered by Education staff
- 13 afterschool, summer camps and community group presentations on conservation reached 201 children
- 4 middle school students were awarded Science Fair prizes for outstanding projects on water quality and conservation
- District Education Program Manager, JC Ward, served as a 'Green Steps' school mentor for a wildlife habitat restoration project at Christ Church Episcopal School
- Rain Garden project assistance and educational signs provided to Rain Garden at The Center in Fountain Inn and Christ Church Episcopal School
- 40 participants attended detention/retention pond maintenance presentations
- 1100 members of the public stopped by the SWCD's educational booths at Bark in the Park, Cupids & Canines, America Recycles Day, Girl Scout events and Earth Fest
- Educational signs on water pollution from pet waste were posted in 9 area pet stores
- 725 pet waste bag dispensers were given to dog owners at Paws for a Cause, Bark in the Park, 12 Strays of Christmas, Cupids & Canines, Greenville County Humane Society and Camp Bow-Wow
- 9 new 'Scoop the Poop' stations were installed in parks throughout the County
- 100 oil recycling pans were distributed through Greenville County Solid Waste Division's Recycling Centers
- 4 newsletter articles on water conservation were distributed to Homeowners' Associations
- 1,000 new storm drain markers were installed by the City of Simpsonville
- Environmental Attitudes & Behaviors were assessed in a survey of Greenville County residents in association with Carolina Clear and Clemson University
- 518 rain barrels and aerators were sold to homeowners through Greenville County Solid Waste and Air Quality divisions

Natural Resource Conservation Service

This past year has been a busy one working with farmers and landowners to address natural resource concerns on their property. The Greenville field office of the Natural Resources Conservation Service (NRCS) works in partnership with the Soil and Water Conservation District to provide technical and cost share assistance to farmers and private landowners in the county. From trout waters in the northern end of the county to cattle farms in the southern end, NRCS staff is helping people help the land.



Rock cross vanes, like this one on the Middle Saluda River provide critical habitat for native trout

Thanks to willing landowners and the NRCS funded Wildlife Habitat Incentives Program, trout fishermen (and ladies) on the South Saluda will have better fishing opportunities. With the installation of cross vanes, pools will be created which improve habitat, which improves fishing.

Several farmers in the county utilized the Environmental Quality Incentives Program (EQIP) to improve water quality and reduce erosion on their farms by installing water bars, fencing, watering tanks, pipeline, wells, heavy use areas and planting pasture. Farmers are good stewards of the land and the EQIP program enables them to do an even better job of conserving our natural resources.

In addition to cost share programs we also provide conservation planning assistance to landowners involving erosion, drainage, forestry, wildlife or soils. If you are a landowner in Greenville County, we will be glad to work with you to develop a conservation plan on your property which will aid you in determining how to best utilize your land and conserve the resources for the next generation.

Fiscal Summary of Benefits to Greenville County Citizens

Construction	\$160,918
Education	\$17,779
Money disbursed through NRCS's EQIP program	\$40,021
Total	\$218,718

The Foothills RC & D Council is changing, but is still here to serve you



J hook in the Middle Saluda trout habitat project. J hooks allow fishermen to walk to the middle of the stream, provides trout habitat, and diverts the water from eroding river banks

The Foothills Resource Conservation and Development Council, started in 2001, is the newest Council in South Carolina. However, they have made a big splash in a short time.

The Council covers the areas in Anderson, Greenville, Oconee, Pickens and Spartanburg Counties. Set up as a 501(c)(3) corporation, the Council is instrumental in obtaining grant and cost-share funding for projects in these areas. Foothills RC & D is a long-time partner of the Soil & Water Conservation District.

Foothills has helped fund 43 trout habitat restoration projects in the Upstate, served as an educational outlet for the community, aided in drinking water reservoir studies, and helped to renew natural resources and pride in an urban area. The hard work of the Council has garnered several awards.

In 2008, Foothills was awarded a membership in the prestigious National Circle of Diamonds Program. Although Foothills is the newest RC&D council in South Carolina, they were the first to receive the award. In 2008, Foothills also received the Outstanding Project Award for the Southeast region for a Partners for Trout project. This project had spent nearly \$1.3 million to improve South Carolina's trout waters.

In 2011, Foothills was recognized again regionally for the Outstanding Council member (Darrell Harrison) and the Outstanding Coordinator (Dave Demarest) of the year. These two worked tirelessly to further the programs of the Foothills Council.

While the RC&D worked with natural resources in more rural areas, they were also instrumental in restoring a stream and numerous subsequent tree plantings at Long Branch Baptist Church in downtown Greenville. The church had purchased and demolished several abandoned houses used for drug-dealing. Long Branch was looking for help with an urban stream running through the property. Using cost-share funds, grant funds, and NRCS expertise, the area has become a park-like setting with ongoing children's natural resource education that the residents are proud to call their neighborhood.

During recent Federal budget cuts, all funding for RC&D Councils was cut. Pursuant to this, the Foothills Council was left with no staff. The Council made a progressive and generous decision to stay incorporated in order to assist in case opportunities arose where the 501(c)(3) status could help others to obtain funding for worthy projects. Dave Demarest and Shirley Hester will be missed, but the Council is determined to continue its mission to help the resources and communities in the Upstate. We look forward to more great projects through the Foothills RC&D Council.

Soil & Water Conservation District Staff



Kirsten Robertson, District Manager



JC Ward, Education Program Manager

Not pictured: Linda Creel, Administrative Support

USDA Natural Resources Conservation Service Staff



Pictured from left: Collin Buckner, Soil Conservationist; Hollis Berry, Soil Conservation Technician; Lynne Newton, District Conservationist



**GREENVILLE COUNTY
SOIL & WATER CONSERVATION DISTRICT**
301 University Ridge, Suite 4800
Greenville, SC 29601

ADDRESS SERVICE REQUESTED