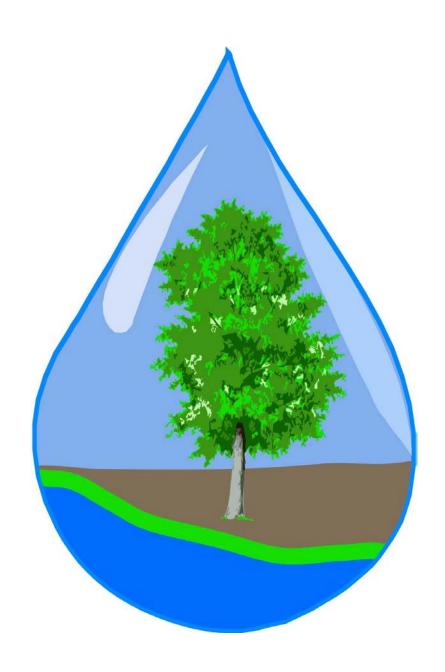
WILSON SOIL & WATER CONSERVATION DISTRICT



2017 – 2018 ANNUAL REPORT

WILSON SOIL AND WATER CONSERVATION DISTRICT

SUPERVISORS

Bryan Lamm........ Chairman
Gary Scott.......Vice-Chairman
Carroll Coleman. Secretary-Treasurer
Adam Gardner......Member
Alan Sharp...... Member

DIRECTOR RESOURCE CONSERVATIONIST II Ricky Hayes

RESOURCE CONSERVATIONIST I - AG COST SHARE Josh Pate

USDA-NRCS PERSONNEL David Little, Jr. – Soil Conservationist

COOPERATING AGENCIES AND BUSINESSES

Wilson County
The State of North Carolina
United States Department of Agriculture

In addition, the following organizations have contributed funds, donations and/or services to our educational efforts. We thank them for their contributions.

Smithfield Foods
Perry's Bulldozer Service
Bridgestone Americas, Inc.
Crop Production Services
Wilson County Farm Bureau, Inc.
A Carroll Coleman Farm Management Service

This 2017-2018 Annual Report of the Wilson District's activities summarizes the conservation efforts and accomplishments from July 1, 2017 through June 30, 2018.

INTRODUCTION

The Wilson Soil & Water Conservation District encompasses all the land and waters, including incorporated towns within Wilson County. The District brings together technical experts and private landowners to plan and to implement sound conservation practices and to provide comprehensive conservation leadership to communities. The District is the primary means through which voluntary and incentive based conservation programs are delivered on both agricultural and non-agricultural lands. It also conducts outreach and education programs for all age levels. Programs include classroom presentations, environmental field days, poster, essay and speech competitions, area and state envirothons, continuing adult education and landowner training.



Wilson Soil & Water Conservation District Board Members L-R Seated - Carroll Coleman, Adam Gardner L-R Standing - Bryan Lamm, Gary Scott, Alan Sharp

DISTRICT BOARD of SUPERVISORS

A non-partisan, five-member board of local supervisors governs the Wilson District. Three of the supervisors are elected at general election and the State Soil & Water Conservation Committee appoints two. Supervisors receive no pay for their services. However, when funds are available, they receive some travel and subsistence reimbursement from the State for performance of official duties. The Board of Supervisors meets once a month at the Agriculture Center. Board meeting times and dates are posted on the Wilson County website.

DISTRICT FUNDING

The Wilson County Soil and Water Conservation District is allocated administrative funds through the budget of the Wilson County Board of Commissioners. The State of North Carolina, through the Division of Soil and Water Conservation, provides 50% of the Ag. Cost Share position salary along with operating expenses. Other funding is obtained through State and Federal grants and generous donations by supporters.

DISTRICT OFFICE

The Wilson County Soil and Water Conservation District Office is in the Wilson County Agriculture Center building at 1806 Goldsboro Street, SW in Wilson. The District also shares its office with the Natural Resource Conservation Service (NRCS), which furnishes technical assistance to the District, other government agencies, landowners, homeowners, and tenants of Wilson County free of charge.

DISTRICT STAFF



Ricky Hayes, Director of Wilson SWCD, Resource Conservationist II, directs the everyday operations of the District and meets with landowners and producers to inform them of District programs available to assist with soil erosion and water conservation issues. Ricky provides clients with assistance in the design and layout of Best Management Practices and is involved with administering all CRP programs. He is active in environmental education programs with K-12 students, 4-H groups, and Area IV Envirothon teams. Ricky is a CEE (Certified Environmental Educator), a CPESC (Certified Professional in Erosion and Sediment Control), a member of the Area IV Envirothon Committee, and is a member of the local FAC committee and the Wilson County Safety Committee.



Josh Pate, Resource Conservationist I, is responsible for managing the NC Agricultural Cost Share funds for Wilson County. To further aid farmers and landowners, he assures the appropriate NCACSP funds are available to install and maintain Best Management Practices (BMP's) when needed. Josh also assists with the EQIP and CRP programs. He assists with school programs and activities throughout the year and is Treasurer of the Area IV Envirothon Committee.



Dave Little, NRCS Soil Conservationist, provides technical supervision to the District. As a Certified Conservation Planner, he works with landowners and operators individually and in groups, to develop conservation plans using agronomic and engineering practices. Dave administers USDA conservation cost share programs such as EQIP and the Food Security Act provisions related to Highly Erodible Land and Wetlands.

0.200 REGULATIONS

All animal waste operations that are above the minimum animal unit numbers set by the State were required to be certified by December 31, 1997. The District is responsible for providing technical and financial assistance to operators who must comply. In addition, the District assisted with the revision of animal waste utilization plans, irrigation system calibrations, and sludge surveys that are required by the NC Division of Water Resources.

2014 FARM BILL

The 2014 Farm Bill was enacted on February 7, 2014. NRCS offers voluntary Farm Bill conservation programs that benefit both agricultural producers and the environment. Some programs will be available immediately, while others will require limited time to be set up within the Agency. Details of some programs are shown below. Current Farm Bill contracts remain in effect.

NRCS offers technical and financial assistance to help agricultural producers make and maintain conservation improvements on their land. The programs authorized in the 2014 Farm Bill are: Regional Conservation Partnership Initiative (RCPP), Conservation Innovation Grants (CIG), Conservation Stewardship Program (CSP), Environmental Quality Incentives Program (EQIP), Emergency Watershed Protection Program (EWP). NRCS works with partners to leverage additional conservation assistance for agricultural producers and landowners in priority conservation areas.

The **Conservation Stewardship Program (CSP)** presents a significant shift in how NRCS provides conservation program payments. CSP participants will receive an annual land use payment for operation-level environmental benefits they produce. Under CSP, participants are paid for conservation performance: the higher the operational performance, the higher the payment.

Environmental Quality Incentives Program (EQIP) provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation or improved or created wildlife habitat.

The Agricultural Conservation Easement Program (ACEP) provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. Under the Agricultural Land Easements component, NRCS helps Indian tribes, state and local governments and non-governmental organizations protect working agricultural lands and limit non-agricultural uses of the land. Under the Wetlands Reserve Easements component, NRCS helps to restore, protect and enhance enrolled wetlands. ACEP consolidates Farm and Ranch Land Protection Program (FRPP), Grassland Reserve Program (GRP) and Wetland Reserve Program (WRP) into one program.

The **Healthy Forests Reserve Program (HFRP)** helps landowners restore, enhance and protect forestland resources on private lands through easements and financial assistance. Through HRFP, landowners promote the recovery of endangered or threatened species, improve plant and animal biodiversity and enhance carbon sequestration.

NRCS offers **easement programs** to eligible landowners to conserve working agricultural lands, wetlands, grasslands and forestlands.

OTHER USDA or FEDERAL PROGRAMS

WHIP Wildlife Habitat Incentives Program – Encourages landowners to utilize wildlife habitat cover in their farming operations.

- CRP Conservation Reserve Program A 10-15-year program where marginal land is converted to a permanent cover and is taken out of production. These contracts receive annual payments based on soil rental rates that are established by the USDA Farm Service Agency. The following are various CRP programs and guidelines:
 - *GEN General Sign-Up Sign-up is announced yearly and is generally for converting highly erodible land into trees or grasses for 10 to 15 years with annual payments.
 - *CREP Conservation Reserve Enhancement Program This variation of the CRP program is designed to assist farmers in complying with the regulations of nutrient reduction in our rivers and streams. Cost sharing and long-term contracts are available for installing riparian buffers, filter strips and other practices to reduce sediment, nutrient and other nonpoint source impacts to nearby water systems. Cropland located up to 300 feet away from qualifying state water courses can be entered the program and payments up to \$150/ac per year can be received for up to 15 years. Thirty-year and Permanent Easements are available and provide bonus payments.
 - *CP33 Conservation Program This variation of the CRP program was developed to assist with habitat buffers for Upland birds. Strips of volunteer vegetation around field edges provide valuable nesting and support integrated pest management. The CRP Continuous Signup allows enrollment of land throughout the year in this important wildlife conservation practice. Disking is part of the yearly required maintenance.
 - *CP38 State Acres for Wildlife Enhancement (SAFE) This CRP program was developed to assist with habitat for all types of wildlife. Whole fields can be enrolled to provide nesting and habitat. The CRP Continuous Signup allows for enrollment throughout the year.
 - *CP36 Longleaf Pine Initiative This is the newest variation of the CRP program used to restore and manage longleaf pine forest on cropland. Cost Sharing and 10 or 15-year contracts are available for this practice.
- **ECP** Emergency Conservation Program Because of the damage caused by Hurricane Matthew, the USDA Farm Service Agency implemented this program to assist farmers and landowners with repairs of eroded fields, culverts, and ponds. The District met with farmers to assess the damages, documented problem areas, and if needed, provided designs for repairs.

The Wilson Soil and Water Conservation District provides administrative and technical assistance for all the above State and Federal Programs.

Contentnea Creek Debris Removal Project

In 2017, after several major storms, the State of North Carolina made available funds for removing debris from rivers, creeks, and streams to prevent or reduce flooding. The storms in Wilson County left trees and other debris blocking stream channels, which created significant flooding of cropland and woodland. The staff of the Wilson Soil & Water Conservation District conducted a damage assessment survey of all thirty-one miles of Contentnea Creek. As a result, the County of Wilson requested funding for the entire stretch and was awarded \$340,000 dollars to be used for clean-up of the lower 21 miles of Contentnea Creek. Any left over funds from this project will be applied to the clean-up of the upper 12 miles of the creek. The Wilson Soil & Water Conservation District will be responsible for the day to day inspections during the project.



Debris blockages on Contentnea Creek



COST SHARE PROGRAMS

North Carolina Agriculture Cost Share Program (NCACSP)

The NC Agriculture Cost Share Program is a State funded program to reduce the flow of sediments, nutrients, pesticides and animal waste into the State's waters. It provides incentive payments and cost-share funds to farmers of Wilson County to install Best Management Practices (BMP's) such as field borders, filter strips, water control structures, grassed waterways, no-till, and animal waste management systems.

For fiscal year 2017-2018, the Wilson County Soil & Water Conservation District was allocated \$32,715 for the NC Agriculture Cost Share Program by the North Carolina Soil & Water Conservation Commission and received \$5,000 from Impaired/Impacted Streams Grant. The monies were encumbered in 13 contracts for no-till acres, a lagoon closure, grassed waterways, field borders, tree planting, cropland conversion and cover crop. The Cost Share funds covered approximately 75% of the cost of implementing these practices, with the landowners and operators providing the other 25% of the cost.

NCACSP and EQIP cost share monies are available for Best Management Practices (BMP's) in the following categories: Agriculture Pollution Prevention, Erosion and Nutrient Management, Sediment Management, Stream Protection, and Animal Waste Management.

EQIP (Environmental Quality Incentive Program)



The Wilson District participates in the USDA – NRCS Environmental Quality Incentives Program (EQIP), which cost shares on practices to protect our natural resources. Last year, twenty-one applications were received and seven were accepted. Approximately \$290,000 was encumbered and will be utilized for cost sharing on Animal Waste Composters, On-Farm Energy Improvements, a High Tunnel, and various Forestry Practices.

Beaver Management Assistance Program (BMAP)



The District assists the North Carolina Wildlife Commission with completing applications and locating problem areas caused by beavers. Because Wilson County participates in the program, the trapping and the removal of beaver dams is cost shared by the State. Landowners pay \$20 for each separate visit a wildlife specialist makes to the property. The initial visit is free, whether it is by phone or in person. Normally, 10 visits are required to resolve the problem and the removal of the beaver dam is approximately \$125 each. The District processed 19 applications for assistance this past year and received numerous calls for information about the program. As of June 1^{st,} this year, over sixty beaver dams had been removed.

North Carolina Agriculture Cost Share Tour March 5, 2018

Each year, the District Board of Supervisors and staff must inspect 5% of all BMP's (Best Management Practices) that have been installed and are still active.



Bio-retention Pond at Wilson Community College



Staff and Supervisors inspect Ag-Wrap Well



CCAP grassed waterway at AG. Center



Annual swine incinerator inspection

NCASWCD 2018 Annual Meeting RTP Durham, NC



Ricky Hayes and Josh Pate attended the Annual Meeting on Tuesday, January 9, 2018, where during the general session, Ricky received a 30 Year Service Award. Following the General Session, they attended the District Employees Luncheon and participated in the business session immediately following lunch.

Environmental Education Programs

Each year, the staff at the Wilson Soil & Water Conservation District provide numerous programs for schools and 4-H groups throughout Wilson County. Demonstrations include the use of furs, tracks, and skulls to educate the youth about local wildlife and their habitats. Soil and water programs include the use of an enviroscape, a conservation table, and actual soil samples to educate students about preventing erosion, improving water quality, and learning about soils.



Soil Conservation Table



Soil Texture Samples and Life Box

Boy Scout Merit Badge Days

The Wilson Soil and Water Conservation District hosted a merit badge day at the Wilson County Agricultural Center on December 28, 2017 for boy scouts from several states. Approximately 75 Boy Scouts from North Carolina, Virginia, and Georgia attended the all-day event. Boy Scouts could earn badges in Journalism, Forestry, Soil Conservation, Veterinary Medicine, and Sports Education. Agencies assisting with the training were the N.C. Forest Service, Natural Resources Conservation Service, Wilson Soil & Water Conservation District, and Wilson Veterinary Hospital.

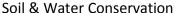
Another merit badge was held for Wilson County Boy Scouts on April 16, 2018, where about 15 scouts attended sessions to learn about forestry and soil and water conservation.





Forestry Journalism







Veterinary Medicine

Environmental Fields Days Batts Tree Farm



Students from Wilson County schools spent time at the Batts Tree Farm to learn more about the environment. Without this opportunity a lot of kids would not know the benefits of agriculture, wildlife, soil and water conservation, forestry, and aquatics. They enjoyed being outside and many of them experienced their first visit to a farm. Over 300 fourth graders participated in the annual Environmental Field Days. The event started on Tuesday morning and ended Thursday afternoon. Agents from Soil & Water, NRCS, Extension Service, Farm Service Agency and N.C. Forest Service manned six stations around the farm that gave the students hands-on experience with everything from crop products, to wildlife, forestry, aquatics and conservation.



Ricky Hayes, Soil & Water staff, explains the difference in fresh water and salt water and what type of fish live in the pond. The students were shown live aquatic insects and were told how they developed into adults after living under the water most of their life. Dave Little, NRCS, explained to the students the different layers of soil and the value of each layer. Dave told them how the soils get their textures and colorization, how worms and other insects aerate the soil and the importance of conserving soil with cover crops.





Josh Pate, Soil & Water staff, explained to his group of students the value of conservation of our soil. The students were shown how water and wind erosion affects the soil, not only on farm land but also in neighborhoods. A hands-on demonstration showed how fast rain water either runs off or is absorbed into the soil.

RESOURCE CONSERVATION WORKSHOP

The Resource Conservation Workshop is a weeklong workshop and involves study and hands on participation in a wide range of conservation topics. Students are housed at NC State University Campus under the guidance of live-in counselors. Topics covered include wildlife and fisheries management, forest management, nonagricultural uses for soils, water quality, and watershed management. This workshop provides students a chance to learn about various career paths, pursue educational goals, and potentially receive scholarships for higher education. This year the workshop was held June 24 -29. Eric Barry was selected to attend the workshop with the District paying the registration fee and travel expenses. Mr. Barry will attend our District Board Meeting in September to give us an update on his participation.

Below, students are shown participating in surveying and installing erosion control practices





Summer 4-H Programs

Each year, the District staff assists with 4-H programs such as Project Catch. This year, kids of ages 5 to 15 met at Batts Farm for a day of education and fishing. The day began with instructions on how to use the rods and reels along with a couple of hours of fishing.









Wilson SWCD 2017 Contest "Water...The Cycle of Life"

Wilson County students began working on their posters, essays, slide presentations, and public speaking skills just a few weeks after school started in September. Teachers requested hands on sessions in the classrooms to give their students a better idea of the contest theme. Ricky Hayes and Josh Pate visited most of the elementary schools in Wilson County to present programs related to "Soil and Water".





Students learn about the water cycle while using the Enviroscape at Barnes Elementary School

2017 Awards Banquet December 5, 2017



Pictured are the winners in public speaking, poster, essay, and slide presentation contest.

The Wilson Soil and Water Conservation District held its annual awards banquet December 5, at the Wilson County Agricultural Center. Family, teachers, principals were in attendance to celebrate their student's recognition. Area students received awards for their accomplishments in the annual poster, essay, slide presentation and public speaking contest. The 1st place winners of the local contest move on to compete in the Area IV Contest and the 1st place winners there move on to the State competition. This year's theme was "Water...The Cycle of Life".

Area IV Public Speaking, Poster, and Essay Winners from Wilson County



6th Grade Poster Contest Winner - 1st Place Area IV Isabell Parker – Greenfield School



6th Grade Essay Contest Winner - 1st Place Area IV Asun Pender – Speight Middle School



 3^{rd} Grade Poster Contest Winner – 2^{nd} Place Area IV Allie Miller – Rock Ridge Elementary



7th Grade Public Speaking Contest Winner – 1st Place Area IV

Mesha Strickland – Elm City Middle School



8th Grade Public Speaking Contest Winner 1st Place Area IV 2nd Place State Mary Thomas Watkins – Elm City Middle School

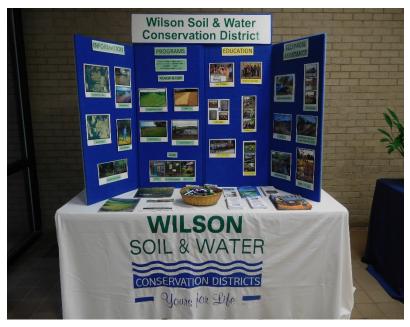
Farmer's Appreciation Dinner January 18, 2017

The Farmer's Appreciation Dinner is a group effort of the following agencies: Wilson Soil and Water Conservation District, Wilson County Cooperative Extension Service, North Carolina Forest Service, USDA Farm Service Agency, and the Natural Resource Conservation Service. The event is held each January to thank the farming community of Wilson County and is totally funded by sponsors from throughout Wilson County.

This year, Farm Service Agency Director, David McBryde, welcomed the group and gave the invocation. Special music was provided by Shannon Baker before dinner, and then Normal Harrell, with the North Carolina Cooperative Extension Service, introduced Mr. Larry Wooten, President of NC Farm Bureau for the program.









Envirothon Training Classes

In December and January, the Wilson Soil & Water Conservation District provided training days for all Wilson County Middle Schools with teams competing in the Area IV Envirothon. Fifty-five students spent each day learning about forestry, aquatics, soils, and wildlife. The N.C. Forest Service and N.C. Wildlife Resources Commission assisted with the training.



Ranger Dillon Howard explains how to use a Biltmore Stick



Wildlife Biologists talk about the life of aquatic insects



Wildlife furs, skulls, and tracks provided by USDA-APHIS



Dave Little, Soil Conservationist, discusses soils

2018 Area IV Envirothon

NCSU Butner Research Farm

Bahama, NC

Three Wilson middle school teams and two Wilson high school team earned the right to compete at the State level. The Middle School teams were "Pollution Police", "H2Bros", and "The StoneCats", from Homeschool and the High School teams were "The Loam Rangers" and "Prairie Dawgs" from Homeschool". All moved on to compete in the State event at Cedarock State Park in Burlington, N.C. on April 27-28, 2018.

Sixteen other teams competed in the area event representing: Darden Middle School, Elm City Middle School, Speight Middle School, Toisnot Middle School, Greenfield, and Fike High School.

The Area IV Envirothon regional competition was held in Durham County at the Butner Research Farm on March 15. Forty middle school teams and thirty-seven high school teams competed representing Wilson, Johnston, Nash, Halifax, Wake, Durham, Edgecombe, Warren, Franklin, Vance, and Granville Counties.

Advisers were Kathryn Thomas, Leigh Anne Howard, Covey Denton, Sara Beamon, Brittany Adam, Silvia Judd, Lisa Johnson, Rebecca Barry, Cheryl Johnson, and Angelique Showman. Bridgestone Americas of Wilson and Smithfield Foods continue to be Platinum sponsors of the regional Area IV Envirothon.

Ricky Hayes and Josh Pate of the District provided hands-on training for all the teams from September until the event in March. The participation of Wilson County is among the best in the State and our teams have dominated the Area IV events for several years.

Wilson County Area IV Team Winners



First Place High School



Third Place High School



First Place Middle School



Second Place Middle School

NC State Envirothon April 27-28, 2018

Cedarock Park, Burlington, NC



Receiving 4th Place in High School, pictured from left to right from team "The Loam Rangers" are: Charity Handley, Eric Barry, Kimberly Johnson, Sam Bittner and Emma Skinner.



Receiving 2nd Place in Middle School, pictured left to right from team "Pollution Police" are: Turner Adams, Lyrica Handley, Ben Wall, Anna Bittner and William Drake.



Receiving 5th Place in Middle School, pictured left to right from team "H2Bros" are: MJ Harris, Carter Adams, Bennett Durham and Landon Beamon

Hundreds of North Carolina's brightest middle and high school students competed at the 2018 North Carolina Envirothon at Cedarock Park near Burlington, April 27-28, 2018. The two-day event is designed to test the knowledge and skills of students that have a strong interest in natural resources conservation.

The North Carolina State Envirothon is a hands-on, natural science academic event that challenges and engages students to think critically about the natural world and their role in it. High school and middle school teams demonstrate their management knowledge and problem-solving skills in a competition centered on five categories: soils/land use, wildlife, forestry, aquatics, and current environmental issues.

There were fifty-two high school teams and fifty middle school teams in the competition. Representing Wilson were three middle school teams and two high school team and three of those teams placed in the top ten. The High School Team "The Loam Rangers" placed fourth with team members Eric Barry, Charity Handley, Emma Skinner, Kimberly Johnson, and Sam Bittner. The Middle School Team "Pollution Police" placed second with team members Lyrica Handley, Ben Wall, Anna Bittner, William Drake, and Turner Adams and the Middle School Team "H2Bros" placed fifth with team members Michael Harris, Carter Adams, Bennett Durham, and Landon Beamon. The advisers for the top ten teams were Rebecca Barry, Brittany Adams, Lisa Johnson, and Sara Beamon. We are proud of all our students that participate in our environmental education programs and contests.

The North Carolina Envirothon is sponsored by the North Carolina Association of Soil and Water Conservation Districts and local Soil and Water Conservation Districts from across the State. The mission is to provide and promote leadership in the knowledge of natural resources by offering a quality education program in soils/land use, forestry, aquatic ecology, and wildlife/habitat for teachers, students and citizens of North Carolina.

Envirothon Team Proclamations



Wilson County Commissioners were pleased to recognize as part of a proclamation, the High School team "The Loam Rangers", the Middle School Teams "Pollution Police" and H2Bros"; their advisers, and the Soil & Water Conservation District for their participation in the NC State Envirothon Competition and placing in the top ten.

