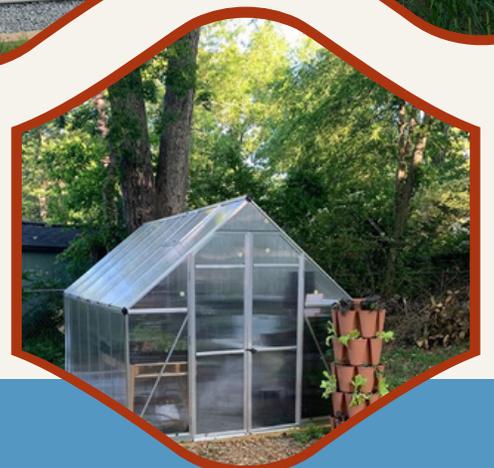
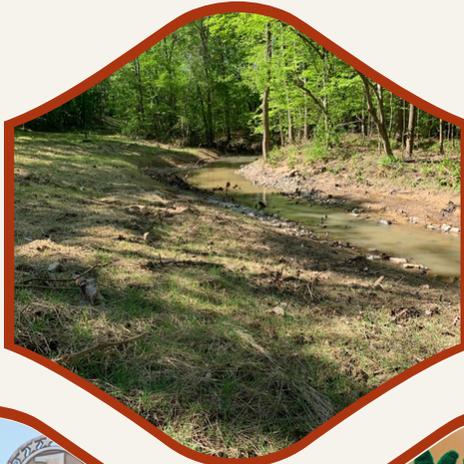


ANNUAL REPORT

FY2022-2023



THE SOIL IS THE SOURCE OF LIFE, CREATIVITY,
CULTURE, AND REAL INDEPENDENCE.

MEET OUR BOARD SUPERVISORS



Talmage Layton
Chair
(Appointed)



Anjali Boyd
Vice Chair
(Elected)



David Harris
Financial Officer
(Elected)



Ken Browning
Secretary/Treasurer
(Appointed)



Mark Waller
Supervisor
(Elected)

The Durham Soil & Water Conservation District Board meets the first Monday of each month at 5:30 pm. Any date changes will be posted on our website.

Meeting location: Durham Farm Bureau- 1901 Hillandale Rd
Durham, NC 27705

MEET OUR TEAM

Eddie Culberson

Director

Lisa Marochak

Senior Administrative Officer/Education Coordinator

Sherry Scully

Ag Development Coordinator

Saad Masood

Marketing Strategist
Agri-business and Environmental Services Manager

Dustin Brewer

Market
Natural Resources Coordinator

Elicia Senff

Market
Education/Technical Contractor

Durham Soil and Water Conservation District

VISION

To address all natural resources on every acre in Durham County in a way that will benefit the environment, wildlife, its people, and the natural resources themselves, plus produce an environmentally conscious group of citizens who will set a trend of conserving, enhancing and promoting our natural resource base.

MISSION

To conserve, enhance, and promote the natural resources of Durham County by providing technical assistance, environmental education, and economic incentives to County citizens through a diversified program to meet the County's changing needs.

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MESSAGE FROM THE DIRECTOR



Hugh Hammond Bennett once said: "Out of the long list of nature's gifts to man, none is perhaps so utterly essential to human life as soil." Mr. Bennett led the soil conservation movement in the United States in the 1920s and 1930s by urging the nation to address the "national menace" of soil erosion. Today this mission is still alive throughout over 3000 Soil and Water District Offices across the nation.

The Durham Soil and Water Conservation District's (SWCD) mission is to conserve, enhance and promote the natural resources of Durham County by providing technical assistance, environmental education information, and economic incentives to County citizens and by exhibiting a diversified program to meet its changing needs. The Durham SWCD has provided these services through creating partnerships, leveraging outside grant funds, and providing technical assistance to the citizens of Durham County. Over the past twenty some years alone, the department has averaged over ½ million dollars in outside grants received annually. It has cultivated Federal, State, and local partnerships that have maximized outcomes to the community we serve. Furthermore, our staff continues to do more with less, and it is my belief our department's return on investment is second to none.

As you read this FY 24 Annual Report you can see our professional staff is up to the challenge of the district's mission and our citizen's needs. I continue to be amazed by our dedicated staff and their forward-leaning, collaborative, and customer service-based approach to reaching our goals to conserve, enhance and promote the natural resources for all county citizens. We look forward to continuing our level of excellence in the upcoming year!

Eddie Culberson

Director

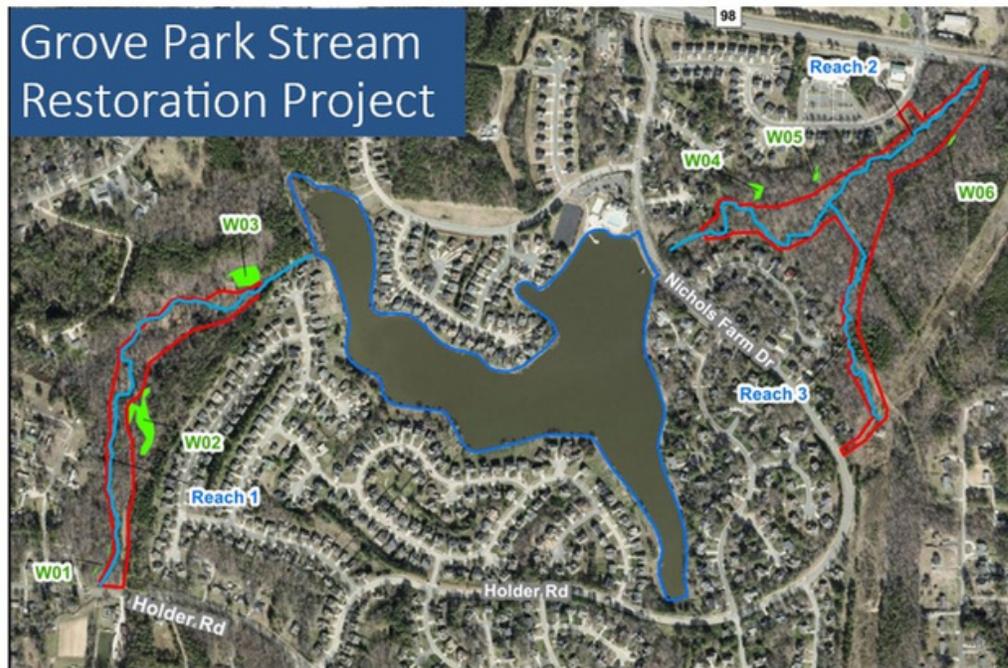
Durham SWCD

STREAM RESTORATION AND STORMWATER PROJECTS

Grove Park Project

The Soil and Water Department has recently completed its largest stream restoration project in the past 25 years. This project restored approximately 6000 linear feet of some unnamed tributaries to Little Lick Creek. These tributaries flow into the impaired 303(d) listed Little Lick Creek and Falls Lake. Falls Lake is a much-utilized reservoir by citizens living in the Triangle Area.

The Grove Park HOA has worked with the Durham SWCD over the years on its huge lake located within the development. The Durham District has also served many of the HOA's residences with conducting erosion and drainage inventory and evaluations. These partnerships spearheaded the conception of this recent restoration project. The funding was conceived from four outside county grants: The Triangle J Council of Governments, now called the Central Pines Regional Council, Clean Water Management Trust Fund, now called The Land and Water Fund, and two Division of Water Resources grants. Additionally, the Grove Park HOA contributed a portion of the \$1.4 million dollar project. Furthermore, the Piedmont Conservation Council (PCC) assisted with the project by sponsoring one of the grants. *(Continued on page 7)*



Before pictures

STREAM RESTORATION AND STORMWATER PROJECTS

Grove Park Project (*continued from page 6*)

The project's environmental benefits include:

- 1) Create geomorphic stable conditions through the project area.
- 2) Improve habitat quality in a riffle dominated stream by adding pool/riffle sequences.
- 3) Expand the floodplain while improving overall ecosystem functionality.
- 4) Improve water quality within the project area through reduction of bank erosion and reductions in nutrient and sediment loads.
- 5) Improve groundwater infiltration.
- 6) Stabilize streambanks through installation of in-stream structures and establish a riparian buffer consisting of native plant species.
- 7) Improve aquatic and terrestrial habitat through increased substrate, stream shading, and placement of additional woody debris. These lead to reduced water temperature.
- 8) Establish a 13.5-acre conservation easement around the project. Part of the buffer was established with the help of Southern High School of Energy & Sustainability whose students grew and planted a variety of trees.

This District project installed 118 Best Management Practices (BMP's) within the stream. The results produced a reduction in nitrogen, phosphorus and sediment footprints in the following amounts: Nitrogen: 336.05 lbs./yr., Phosphorus: 27.85 lbs./yr. and Sediment: 1306 tons/yr. Land and Water Solutions of Raleigh served as the engineer for the project. The construction was performed by North State Environmental, Inc.



Completed project



Southern High students grew and planted trees as part of the buffer

STREAM RESTORATION AND STORMWATER PROJECTS

Riverside High Project

Construction on the Riverside High School Stormwater Project got underway in July of this year. This District project will restore two old pre-regulation sediment basins that have been failing for years. The objective is to maintain the smaller pond as a typical stormwater pond, just making necessary maintenance and repairs (e.g. remove trees from the embankment, change the trash rack out so it doesn't clog with debris, etc.), and to convert the larger pond to a stormwater wetland. The wetland will be converted to a forested stormwater wetland with bald cypress, river birch, and other trees that can take wet conditions rather than an herbaceous plant dominated wetland.

One of the District's partners in this project is NCSU. They are conducting a research project to determine if there is a water quality benefit to converting existing dilapidated ponds to wetlands. This is a relevant project given the hundreds, if not thousands, of stormwater ponds in N.C. and beyond that are in or near the same situation as these two ponds. They will be leading a water monitoring effort in this research project. Water quality monitoring stations (M1 and M2 in photos on pg. 9) will be installed at the outlets of both ponds at the start of the project. After about a one-year calibration period of monitoring, the sediment pond with the breached dam (P1- see map below) will be repaired and enhanced/retrofitted. After the enhancement, monitoring will restart and continue for 12-18 months to assess the effectiveness of the enhancement. Concurrent with the monitoring at M1 and M2, a monitoring station will be installed and maintained at M3, which will be used in conjunction with data from M2 to assess the effectiveness of the traditional/original sediment pond (P2). This sediment pond (P2) will also be used to irrigate the school's nearby greenhouse.



Map showing P1, P2, and M3

STREAM RESTORATION AND STORMWATER PROJECTS

Riverside High Project *(continued from page 8)*

This project is funded from outside of Durham County Government. Two grants were received: one from The Land and Water Fund (\$392,000) and one from Division of Water Resources (\$200,000). Durham Public Schools donated an easement which the District will monitor. Additionally, Riverside High School students will grow some of the plant material for the project and increase their knowledge through the overall project.



Monitor 1 at pond 1 (**M1**)



Monitor 2 at pond 2 (**M2**)



Before picture

AG COST SHARE

The Agriculture Cost Share Assistance Program



The Agriculture Cost Share Assistance Program (ACSP) is a voluntary program for qualifying farmers and agricultural landowners to address natural resource concerns on the land and nonpoint source pollution from agricultural activities. The program provides technical, educational, and financial assistance for the installation of conservation best management practices to address water quality issues found on the farm. The ACSP has been putting conservation on the ground across NC since 1984. Here in Durham County, it is administered by the Durham Soil and Water Conservation District. The program is 100% voluntary on the part of the producer/landowner to help them improve natural resources – air, soil, plant, animal, and water – on their property by utilizing/installing conservation BMPs. Participants can be reimbursed up to 75% of a predetermined average cost for each BMP installed. The applicant is responsible for the remaining 25% of the costs. In some situations, new or limited resource farmers can be eligible for up to 90% cost share.

Continued on Page 11

AG COST SHARE

The Agriculture Cost Share Assistance Program (*continued*)

The Durham County Agriculture Cost Share Assistance Program (ACSP) received \$45,657 from state appropriations for the conservation best management practices (BMPs) in fiscal year 2023. Of the state appropriated funds, 100% were allocated to local Durham County producers/landowners for the following conservation BMPs: livestock exclusions, waste management systems, and streambank stabilization. The BMPs will mitigate or prevent future losses of nutrients and soil from the farms & nearby streams, thereby improving overall water quality in Durham County. Estimated reductions expected once the BMPs are installed are over 113.9 tons per year of soil saved.

The District Staff will be working closely with their producers over the next couple of years to provide technical assistance during the installation of the BMPs. Once, completed, the District will monitor the BMPs for 10 years to ensure their function and continued use.

On April 18, 2023, three supervisors and four district staff visited eight ACSP sites. During the spot check, it was observed that seven contracts were in compliance and one contract was out of compliance. The contract that was out of compliance was rechecked and is now in compliance.



FY23 Ag Cost Share
and AgWRAP Spot
Check pictures

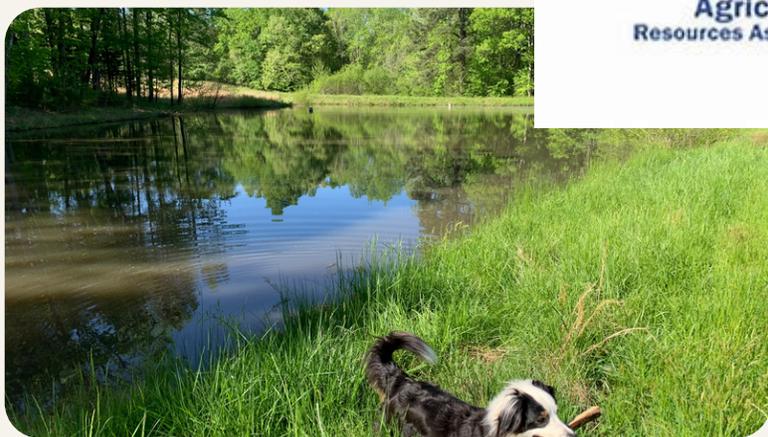
AG COST SHARE

The Agricultural Water Resources Assistance Program- AgWRAP

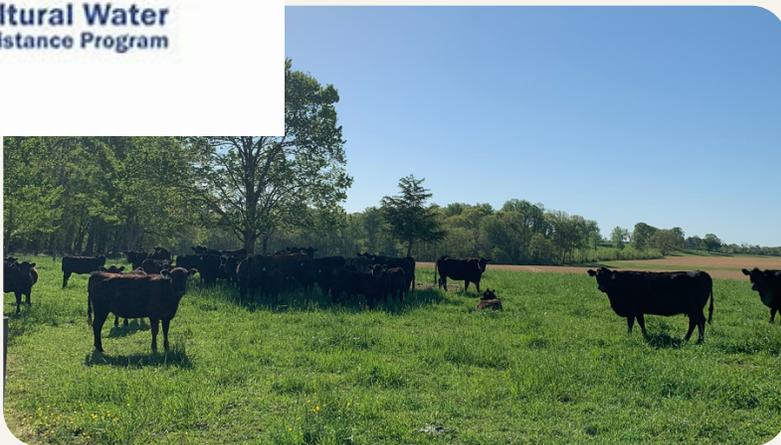
Established in 2012, the NC Agricultural Water Resources Assistance Program (AgWRAP) is available to assist the Durham County agriculture community with water resource needs. Instead of being water quality driven like ACSP, the AgWRAP program is strictly water quantity based to help address water resource concerns/needs on farms. AgWRAP is intended to: identify opportunities to increase water use efficiency, availability, and storage, implement best management practices (BMPs) to conserve and protect water resources, increase water use efficiency, and increase water storage and availability for agricultural purposes.

The state legislated appropriation for AgWRAP is considerably smaller than ACSP. Therefore, the District allocation is much smaller than the ACSP. In FY 2023, the Durham District received \$16,000 that was used for a water supply well and a water storage tank. One contract was allocated to a new/beginning farmer to provide safe irrigation water to his livestock. The other was also allocated to new/beginning farmer to provide additional water storage for his 3+ acres of produce.

Similar to the NC Ag Cost Share Program, once an AgWRAP contract has been signed and approved the producer has two to three years to complete the installation of all BMPs. On April 18, 2023, three supervisors and four district staff visited three AgWRAP sites. During the spot check it was observed that all three contracts were in compliance.



AgWRAP Pond Spot Check



Cost Share- safe irrigation water for livestock

COMMUNITY CONSERVATION ASSISTANCE PROGRAM (CCAP)

FY23 CCAP Measurable Achievements	
Technical Assistance	182
Applications Received	13
Stormwater BMPs Installed	13
Acres Treated by BMP's	17
Tons of Soil Saved (over 10 years)	148,812
Pounds of Phosphorus removed (over 10 years)	2.62
Pounds of Nitrogen removed (over 10 years)	4.08
Cost Share Reimbursed	\$63,142

The Community Conservation Assistance Program (CCAP) is a voluntary program that provides landowners with technical assistance and cost-share reimbursement to install best management practices (BMPs) on urban and suburban land. On-site consultations are provided to residents to address erosion, drainage, and water quality concerns along with evaluating those BMPs suitable for a site. Staff also hosts community outreach meetings with homeowner's associations and local groups to discuss water quality improvement. BMPs available through CCAP include rain gardens, grass swales, cisterns, critical area plantings, impervious surface conversion, and streambank stabilization. The primary mission of CCAP is to reduce the amount of sediment and nutrients from reaching our streams to improve water quality and aquatic habitat.

Durham Soil and Water District secured \$90,000 from the City of Durham and \$94,000 from the EPA to implement these BMPs. During FY23, Durham Soil and Water staff were pleased to conduct outreach efforts and site visits to encumber and expend these funds. The majority of the BMPs installed were in designated priority areas, with the goal of assisting historically underserved communities in Durham. City of Durham and Durham Soil and Water District's collaboration effort is a renewal of the partnership that began with the City of Durham funds in FY14. Such funds are vital to the success of the Community Conservation Assistance Program in Durham!



FY22-23 CCAP SPOT CHECKS

On April 25th, 2023, Durham Soil and Water District Board conducted its annual spot check for the Community Conservation Assistance Program (CCAP). The spots checks are a mandatory compliance measure to ensure Best Management Practices installed using CCAP funds are still meeting the requirements of the program and are being maintained. District Supervisors and staff visited five CCAP sites. All sites visited were found in compliance and passed the spot check.



IMPAIRED STREAM IMPROVEMENT PROGRAM (ISIP)

The Impaired Stream Improvement Program (ISIP) seeks to implement conservation best management practices on impaired streams in low-income areas. The selected projects target stream sites where the amount of sediment and/or nutrients entering the stream can be reduced using best management practices (BMPs). Several different conservation BMPs can be utilized in Durham County to improve the health of these urban streams including streambank stabilization, critical area planting, rain gardens, and riparian buffers.

ISIP provides landowners who self-certify as low income with 100% cost-share for BMP installations on their property in cases where water quality concerns are identified. A 'Limited Resource Self-Certification' form has been created and updated for use with this program based on the FY 2019 Income Limits for Durham-Chapel Hill and NC HUD Metro FMR Area (U.S. Department of Housing and Urban Development).

During fiscal year 2023, the district used the funding to repair a streambank in extreme despair and install riprap. The contracts have a 5-year maintenance requirement that the landowners must abide by for all installed practices, beginning once construction is completed. The Durham District contracted with K&E Environmental, LLC - a certified, insured environmental contractor - to implement the best management practices designed by Durham SWCD staff for a total cost of \$20,000. Additionally, two downspout disconnect workshops were provided for citizen groups.

BIONOMIC EDUCATION TRAINING CENTERS (BETC)

The BETC Program was created in 2010 as a pilot program by Durham SWCD to teach students about the growing needs, demands and technological developments in agri-science, green industries, and green infrastructure. The Program enhances middle and high school education by actively engaging students in hands-on implementation, activities, and research, as well as the development of critical thinking skills. The Program seeks to improve STEM literacy for students by providing teachers with curriculum and training as well as advance responsible student behaviors toward the environment by engaging them in water quality projects (e.g., rain gardens) that address how to mitigate urban storm water runoff that threatens our water quality.

In FY23, with the help of students and teachers from Durham Public Schools, five stormwater BMPs were installed in Durham County residential areas. Four teachers and 65 students participated in the installation of these practices. Each participant received a stipend that was funded by a grant.



TRI-COUNTY PASTURE FIELD DAY

Durham Soil & Water hosted the FY23 Tri-County Pasture Field Day

This year Durham hosted the 4th Annual Tri-County Livestock and Pasture Field Day in collaboration with Orange and Person County. This event was held on September 22nd, 2022 at the Van and Edna Ellis farm in Rougemont, NC with 76 people in attendance. This event is an opportunity for agriculture and livestock professionals from across the Piedmont to learn about pasture and livestock management techniques. The topics consisted of pasture management, equipment (sprayer, no-till drill, etc.), weed identification, forage and pasture analysis, grazing sticks, hay quality, and more. A video recap of the day can be found on Durham County Soil and Water Conservation District's YouTube channel. There were many sponsors including Durham, Orange, and Person Soil and Water Conservation Districts, NC Cooperative Extension, Smokey Dave's BBQ, Firsthand Foods, Durham Farm Bureau, Orange Farm Bureau, Person Farm Bureau, Carolina Farm Credit, Barenbrug, Southeast AgriSeeds, South States Cooperative, Tractor Supply and Pasture Management Systems Inc.



Tri-County Livestock & Pasture Management Field Day

SPONSORS



Soil & Water



2022 FARMER APPRECIATION DINNER



On October 27, 2022, the Durham Soil and Water Conservation District (SWCD) hosted their Annual Farmers Appreciation Dinner at Matthew and Brittany Eagle's beautiful cattle farm in Durham, North Carolina. The evening commenced with the Northern High Schools' Future Farmers of America (FFA) students leading the group in the Pledge of Allegiance followed by dinner that was sponsored by Durham Farm Bureau.

The Keynote Speaker at the dinner was Durham County Board of County Commissioner, Nimasheena Burns. Durham SWCD Director, Eddie Culberson, presented the 2022 Durham County Conservation Farm Family of the Year Award to Bull City Farm (see page 20 for more details). Phillip Ellis, a member of the Durham County Heritage Hall of Fame Committee, presented the 2022 Durham County Farm Heritage Hall of Fame Award to the family of the late A.M. Hall, Jr. (see page 19 for more details). The event was well attended by 72 local farmers and other guests.



Pictured left:
FFA Officers
from Northern High



Pictured right :
Durham County Farm
Heritage Hall of Fame
Committee Member and
farmer, Phillip Ellis



Pictured right:
Commissioner
Nimasheena Burns



FARMER APPRECIATION DINNER

2022 Durham County Farm Heritage Hall of Fame

Each year the Durham County Farm Heritage Hall of Fame Award recognizes an individual of the past or present who, through agriculture, has made or continues to make our county and state a better place to live and work.



Annual awards will honor people who have been instrumental to the success and excellence of agriculture, either as a farmer or in an agriculturally related field. Durham County residents who have exemplary records for superior contributions and outstanding leadership in promoting agriculture and natural resource conservation in our community may be nominated by their peers or themselves.

Farmers, growers, ranchers, owners/employees of agribusiness firms, agricultural education, government, or other individuals who have contributed to the success of agriculture in Durham County are all eligible for nomination as either individuals or families. Recipients must have made their major contributions in Durham County and/or North Carolina and should have had long tenure in their field of endeavor, preferably over 25 years, and shall have a solid Durham County connection. Selections each year will be made by the Durham County Farm Heritage Hall of Fame Committee which is made up of representatives from Farm Bureau, Soil and Water Conservation District Board and Soil and Water Department. Persons selected for recognition are honored and formally inducted into the Durham County Farm Heritage Hall of Fame during the Durham SWCD's Farmer Appreciation Dinner.

Mr. A.M. Hall was selected as the Durham County Farm Heritage Hall of Fame Award winner in 2022. Growing up in Durham County, A.M. Hall had strong ties to the agriculture world. He was a tobacco farmer in the Northern part of the county, Bahama and a strong leader in his community and church. We were proud to present his family with the award at our Farmer Appreciation Dinner in October 2022.



FARMER APPRECIATION DINNER

2023 Farm Family of the Year



Pictured left: Soil & Water Director Eddie Culberson, with owners of Bull City Farm, Samantha Gasson and Scott Stirrup

Each year Durham Soil and Water Conservation District selects a Farm Family of the Year within the county that shows great conservation techniques. This year Bull City Farm in Rougemont was chosen as our Farm Family of the Year in Durham County. They have also won the Area IV Farm Family of the Year award which includes 11 counties (Durham, Edgecombe, Fishing Creek, Franklin, Granville, Johnston, Nash, Vance, Wake, Warren, and Wilson). From there, they are moving on to compete in a regional competition where judges select a farm from the Piedmont, Mountain, and Coastal Plain region. If they win the Piedmont, they will compete for the State! Bull City Farm is owned and operated by Mrs. Samantha Gasson and Mr. Scott Stirrup; they have an extraordinary operation with a successful future ahead. We choose a farm that practices great conservation methods, educates our communities through events/programs, and exemplifies great stewardship. Bull City Farm has lots of animals including hogs, dairy cows, sheep, horses, chickens, turkeys and more! They have also participated in various programs through Durham Soil and Water and have planned more for the future! Soil health and water quality, along with other conservation methods, are one of Samantha and Scott's top priorities on their farm.

FY2023 WATERSHED REPORT

The Durham Local Advisory Committee annual review of crop data discussed the Local Nutrient Control Strategy as outlined by the Neuse Nutrient Management Strategy. Durham farmers reported 284 acres of corn, 1,041 acres of soybeans, 872 acres of tall fescue, 51 acres orchard grass, 422 acres of wheat, 4.5 acres of cigar tobacco, 22 acres of flue-cured tobacco, 8.8 acres of millet, 582 acres of idle/fallow land, as well as other crops and produce totaling more than 3,287 acres of crop land in crop year 2022. The Nitrogen Loss Estimate Worksheet (NLEW) that was compiled has indicated an 84% nitrogen loss reduction.

AGRICULTURAL ECONOMIC DEVELOPMENT GRANT (AED)

For the FY 2023, the Board of County Commissioners allocated \$150,000 to support the Ag Economic Development Grant Program. This program began in 2018 and was designed to provide financial support for projects that aid in the economic value of farms or ag development in schools of Durham County. In particular, the program weighs the need of farmers who qualify as New & Beginning and/or as Minority or Women Based Enterprises more heavily. Thirty-six applications were received and reviewed by the Ag Economic Development Committee, a nine-member committee made up of members from the farming community and ag related agencies.. Twenty-four projects were selected for funding. The pictures below show a few of the projects funded and completed within the first year following approval.

Project Types	FY 23
Number of farm operations that raise livestock only	3
Number of operations that raise livestock & produce	10
Number of farms that grow produce only	8
Other agriculture commodities produced	5
Projects that improved access/equity/non-profits with direct sales	4
Schools supporting Agricultural Education	3



Specialized Equipment- (mulch layer)



Catch System

Program Impact & Data	FY 23
Funding level	\$ 150,00
Request for funding from applicants	\$ 200,39
Number of applications	36
Number of farm applications	33
Number of M/WBE applications (farms)	19
Number of farm projects funded	24
Percentage of M/WBE contracts awarded	79%
Number of farms funded for food safety compliance	2
Number of schools funded	3



Hand washing station for a u-pick operation



Irrigation



Barn

FARMLAND PROTECTION ADVISORY BOARD (FPAB)



Farmer Breakfast Series

Each winter the FPAB hosts a monthly breakfast and information session for farmers and landowners. This year during three hybrid sessions, 71 Durham participants joined us in locations across the county to learn about interesting topics from partner agencies on Present Use Value, the Wildlife Conservation Land Program, and Licensed Applicator Responsibilities. This breakfast series also offers an opportunity for Durham County farmers to connect and network with one another and meet professionals they may like to learn more from. Call 919-560-0558 or email sscully@dconc.gov to receive information of our events or to be added to our email or mailing list.

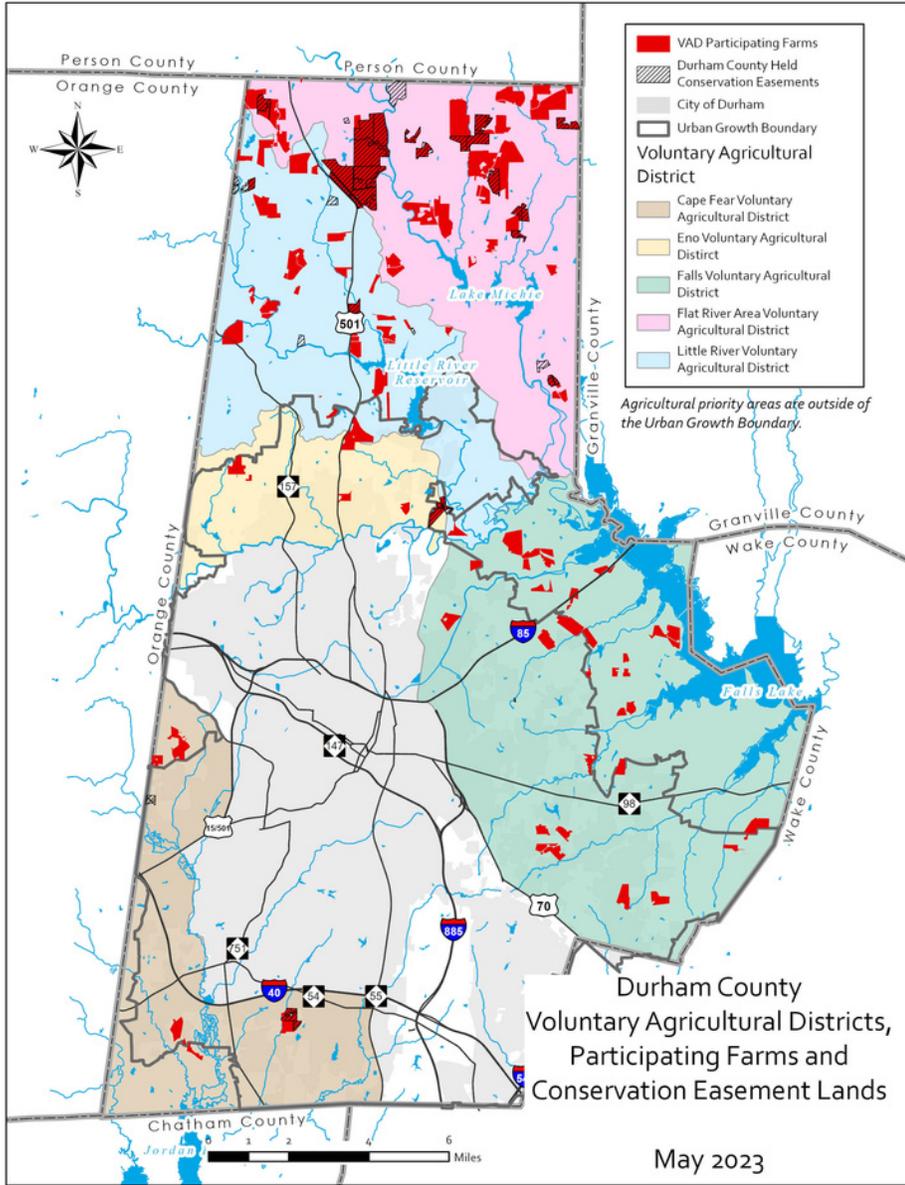


FARMLAND PROTECTION ADVISORY BOARD MEMBERS

<u>Chair</u>	<u>Vice Chair</u>
Nicole Connelly, Little River VAD	Mark Waller, Durham Farm Bureau Representative
2nd Vice Chair Kenny Browning, Eno River VAD	
<u>Board Members</u>	
Heidi Carter, County Commissioner	Nancy Hemdon, Cape Fear VAD
Talmage Layton, Falls/Lick Creek VAD	Douglas Daye, Flat River VAD
Shakira Campbell, Open Space & Trails Representative	David Harris, Durham SWCD Representative
Chris Young, Business Representative	David Heeks, At Large (Farmland Board Appointed)
Matthew Eagle, At Large (Farmland Board Appointed)	Lindsay White, At Large (Farmland Board Appointed)
Neil Frank, At Large (Farmland Board Appointed)	
Samantha Gasson, At Large (Farmland Board Appointed)	

The Farmland Protection Advisory Board meets the third Thursday of each month at 6:00 pm.
at Durham Farm Bureau- 1901 Hillendale Rd Durham, NC 27705

VOLUNTARY AGRICULTURAL DISTRICTS (VAD)



101 VAD participants
227 land parcels
8,679 acres



New acreage enrolled in FY 23
655.7 acres

Renewed acreage in FY 23
300.1 acres

2023 CONSERVATION AWARDS CELEBRATION

The Annual Awards Celebration was held on May 2, 2023 at Durham Technical Community College. We honored educators and students who promoted conservation education in the classroom and/or who put conservation on the ground. This year's theme for the poster, essay, and slideshow was "WATER...THE CYCLE OF Life". The theme for the bookmark contest was "THINGS FOUND ON A FARM". Below is a list of the awards presented by the Durham Soil and Water Conservation District.

BOOKMARK CONTEST (K-2 nd grade)		
Kindergarten	First	Second
<u>1st place</u> SALOME JACKSON	<u>1st place</u> ALEXANDRA SALAZAR	<u>1st place</u> JOSHUA RIZZO-COOK
<u>2nd place</u> LEIA HALLET	<u>2nd place</u> TYLER JUNKER	<u>2nd place</u> BRYSON EVANS
POSTER CONTEST (3 rd -5 th grade)		
Third	Fourth	Fifth
<u>1st place</u> SALOME JACKSON	<u>1st place</u> SALOME JACKSON	<u>1st place</u> SALOME JACKSON
<u>2nd place</u> LEIA HALLET	<u>2nd place</u> LEIA HALLET	<u>2nd place</u> LEIA HALLET
ESSAY CONTEST (6 th grade)		
<u>1st place</u> INSOO SHIN	<u>2nd place</u> MADELINE POWELL	
SLIDE SHOW CONTEST (6 th grade)		
<u>1st place</u> EVELYN PEDERSEN	<u>2nd place</u> NAOMI ALEM	



First Grade Bookmark- 1st place winner



ELEMENTARY CONSERVATION TEACHER OF THE YEAR (K-6 grade)
MONICA UNGER RN Harris Elementary School
ELEMENTARY CONSERVATION TEACHER OF THE YEAR (7-12 grade)
Jenny Bailey Riverside High School

The 1st place winners received a certificate, yard sign, and \$50. 2nd place winners received a certificate, yard sign, and \$25. Teachers of 1st place winners also received a cash reward of \$30 for their participation. These contests are part of a statewide event sponsored by the NC Association of Soil and Water Conservation Districts. 1st place winners from Durham advanced to an area-level contest. Durham had a number of entries place and take prizes. The "Educators of the Year" recipients received an engraved glass apple and \$100. They will both advance to the state competition.

Durham Soil & Water Conservation District would like to thank all the schools, teachers and students who participated in all of our education programs!



ENVIROTHON



For more information on getting involved with the Envirothon program, please contact your local Soil and Water Conservation District.

On March 16, the Durham Soil and Water Conservation District hosted the Annual Area IV Envirothon competition at the West Point on the Eno. Teams of middle and high school students from across the Triangle and upper Piedmont were tested on their knowledge and understanding of the environment. Teams from 11 counties were eligible to compete in the Area IV Envirothon Competition as follows: Durham, Edgecombe, Franklin, Granville, Halifax, Johnston, Nash, Vance, Wake, Warren, and Wilson.

The 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. The teams, each consisting of three to five students, 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. Three out of the five Durham teams placed in the top 7 high school competition: 3rd-Place: Marvelous Maples from N.C. School of Science and Math - Durham County; 5th Place: Spectacular Spruces from N.C. School of Science and Math - Durham County; 7th Place: Fantastic Furs from N.C. School of Science and Math - Durham County. On March 16, Durham County Commissioner Heidi Carter welcomed 25 teams from several counties across the Triangle. The teams met at West Point on the Eno for their chance to advance to the statewide Envirothon competition on April 28-29th. The top seven high school and middle school teams advance to the statewide event. In addition, the winning high school team at the state competition advances to the National Conservation Envirothon event (NCF).

Sponsors for the 2023 Area IV Envirothon included Bridgestone Americas Inc (Wilson), Smithfield Foods, Inc (Wilson), Durham County Farm Bureau, The West Point on the Eno (City of Durham), The Area 4 Association of Soil & Water Conservation Districts, Durham Coca-Cola Bottling Company, The eleven Area 4 Soil & Water Conservation Districts, Krispy Kreme (Hillsborough Rd, Durham), Duck Doughnuts (Durham), and Marcos Pizza (Durham).

At the 2023 NC Envirothon statewide competition, April 28-29th, three teams from Durham competed against 44 other teams from across NC. The Marvelous Maples placed 4th overall in the high school division and received the 1st place medal in the CEI category. The Spectacular Spruces placed 18th and the Fantastic Furs placed 25th overall in the high school division. Durham District staff and Supervisor David Harris were volunteers at the NC Envirothon event.



Commissioner, Heidi Carter welcomes the Area IV Envirothon guests to Durham County



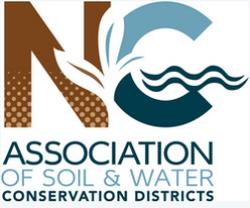
2023 Area IV Envirothon Committee Chair, Lisa Marochak presents awards to the top scoring teams



High School-3rd Place Marvelous Maples Durham County NCSSM



NC ASSOCIATION OF SOIL & WATER CONSERVATION DISTRICTS (NCASWCD)



2023 NCASWCD Supervisor of the Year

Each year the North Carolina Association of Soil and Water Conservation District (NCASWCD) presents the "Supervisor of the Year" award to one of the 492 Soil and Water Conservation District Supervisors across the state. The annual NCASWCD Supervisor of the Year Award recognizes a District Supervisor who has made significant contributions to the conservation and proper management of North Carolina's natural resources. The key qualification is a keen interest in conserving our natural resources and a record of outstanding contributions to the cause of conservation. On January 10, 2023, David Harris with the Durham Soil and Water Conservation District (SWCD) was named the 2023 Supervisor of the Year for North Carolina. Mr. Harris has been involved in the Durham Soil and Water Conservation District since 2014 when he started as an Associate Supervisor. He fulfilled an elected position on the Durham Soil and Water Conservation District Board of Supervisors in 2017. Since becoming a supervisor, David Harris has made it his primary goal to be a strong advocate for the NC Association of Soil and Water Conservation Districts, the Durham Soil and Water Conservation District (Durham SWCD), farmers, and the environment. Mr. Harris is exemplary as a Durham SWCD Supervisor because he doesn't limit himself to county boundaries. He is always the first to volunteer when the board and staff need an extra hand. He always inspires everyone, encouraging staff and board members to explore new opportunities and directions.



pictured above: Commissioner Wendy Jacobs; David Harris, Durham SWCD Supervisor; Chair of the Durham County Board of County Commissioners, Brenda Howerton; Commissioner Heidi Carter.



pictured above: 2022-2023 NCASWCD President Chris Hughes and Supervisor with Durham SWCD Board, David Harris

pictured left to right:
Mark Waller, Supervisor for Durham SWCD Board;
Lisa Marochak, Durham SWCD staff; Eddie Culberson, Durham SWCD Director; David Harris, 2023 NCASWCD Supervisor of the Year; Gayle Harris, spouse of David Harris; Bryan Evans, NCASWCD Executive Director; Talmage Layton, Durham SWCD Board Chair; Sherry Scully, Durham SWCD staff; Dustin Brewer, Durham SWCD staff.



NC ASSOCIATION SOIL & WATER CONSERVATION DISTRICTS (NCASWCD)



Durham Teacher Named NC Outstanding Conservation Education Secondary (7th-12th) Teacher of the Year!

Tyler D'Angelo from Jordan High School received the 2022 Teacher of the Year Award from the Durham Soil and Water Conservation District. His application was submitted for the state award, and on January 9, 2023, Mr. D'Angelo received the NC Outstanding Education Secondary Teacher of the Year award from the NC Association of Soil and Water Conservation Districts for all the Environmental Education work he did with students at his former job with Carrington Middle School (Durham Public Schools). Congratulations Tyler D'Angelo!



pictured left:
Lisa Marochak, Durham SWCD staff; 2022-2023 Teacher of the Year, Tyler D'Angelo; 2022-2023 NCAWSWCD President, Chris Hughes; Eddie Culberson, Durham SWCD Director; Dustin Brewer, Durham SWCD staff; Sherry Scully, Durham SWCD staff, and David Harris, Supervisor for Durham SWCD Board.

2022 NATIONAL ASSOCIATION OF CONSERVATION DISTRICTS (NACD) SUMMER MEETING & SOUTHEAST NACD REGIONAL MEETING (SENACD)



The 2022 Summer NACD & Southeast Regional NACD meeting was held in San Juan, Puerto Rico. Lisa Marochak was one of three panelists presenting in a breakout session July 18, on the National Conservation Foundation (NCF)-Envirothon and Conservation Stewardship and Education. She talked to the audience about the Durham Soil & Water Conservation District's numerous education programs, involvement in and participation with the Envirothon at the local and state levels, and Durham SWCD's experience with the NCF Diversity Grant award.

DURHAM SWCD RECEIVED AN OUTDOOR LEARNING CENTER (OELC) GRANT FOR RN HARRIS ELEMENTARY SCHOOL

On August 2022, Durham SWCD received an OELC grant from the NC Foundation of Soil & Water Conservation for RN Harris Elementary School. The project began on August 2, 2022 with Mrs. Unger, a teacher at R.N. Harris Elementary, preparing and cleaning out old vegetation in the raised garden beds for the new school year. She worked alongside her students teaching them how to grow and maintain the garden beds. The students learned the importance of cleaning out the garden beds at the end of each season, how to properly space seeds, and what depth to plant each seed. They also learned about harvest dates, yields, soil amendments, and they used the garden as a demonstration piece to discuss rainwater collection. The students began planting the turnip, mustard greens, and green bean seeds. Also, the students were able to install collard plants that were donated to the school. A garden shed (43.25 in x 85.5 in x 68.5 in) was installed along with cinder blocks for flooring. With Ms. Unger's guidance, students at R.N. Harris added mulch on top of the seeds and plants in the raised garden beds. The project was completed on 9/15/2022, and signage was installed.



U.S. CAPITAL TREE

Last summer, through Durham SWCD, students and residents in Durham made 167 ornaments to be displayed on the U.S. Capital Tree! The tree was grown in NC, traveled to the U.S. Capital, and was lit at the end of November. You can see some of the beautiful ornaments Durham County Residents made in the pictures to the right. In all, NC residents created 7,500 ornaments for this tree.

Thank you again to Voyager Academy, Durham County Public Library, and all the Durham residents that participated in making ornaments with us!



Ornaments that Durham students and residents made



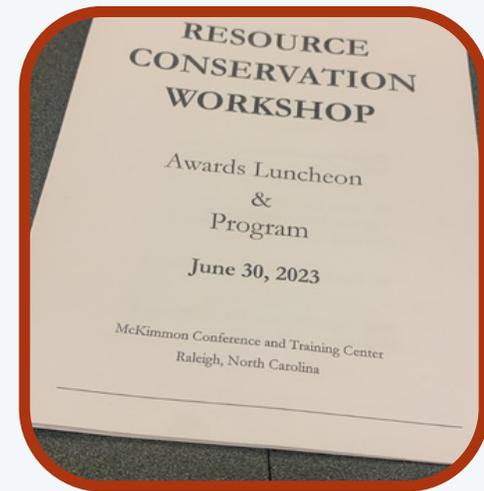
2023 RESOURCE CONSERVATION WORKSHOP (RCW)

This year the Durham Soil and Water Conservation District Board sponsored Dillion Simpson, a Durham County rising senior from Jordan High School, to attend the Resource Conservation Workshop (RCW).

The RCW is a weeklong camp for students interested in conservation, the environment, and our state's natural resources. Held June 25-June 30, 2023, at NC State University, the RCW targeted hopeful future environmental professionals by giving students a first-hand look at a wide array of conservation careers that they may not know about. Dillon heard from research scientists, foresters, biologists, wildlife experts, engineers and others about their experiences in their chosen profession. Students received information and insight into college degrees and careers in natural resource management firsthand from students at NCSU. Study locations for the workshop included N.C. State University and the University's Lake Wheeler Research Farms, Clemmons Educational State Forest and Falls Lake State Recreation Area.



← pictured left (left to right): Tyler D'Angelo (CTE-Agriscience teacher at Jordan High School) and Dillion Simpson (RCW student)



FY2023 EDIBLE TREE SALE

Thank you to all of our customers that purchased from us in FY2023! Our annual edible tree sale took place March 1-2, 2023. We sold 387 blueberry, peach, plum, pecan, pear, apple, blackberry, raspberry, grape, goji berry, elderberry, fig, and pomegranates. We made a profit of \$3,832.23. All proceeds from the tree sale go to support our environmental education programs in Durham. Also, a huge thank you to Waller Family Farm for allowing us to hold the sale at their farm.



NO-TILL DRILL RENTAL AND WILFLOWER SEEDS

No Till-Drill Rental

The rental rate for the drill is \$12 per acre with a \$100 deposit.

In FY22-23 **57.5 acres** were planted.

Interested renters can contact the District today to inquire about renting. 919-560-0558 or email Lmarochak@connc.gov



Wildflower Seeds

\$5.00 each (with tax)

- Bird and Butterfly Wildflower Seed Mix
- Low Growing Wildflower Seed Mix
- Partial Shade Wildflower Seed Mix
- Late Bloomer (Fall Blooming Wildflower Seed Mix)
- North Carolina Wildflower Seed Mix



FY23 Sold 16

2022 DURHAM BIG SWEEP & 2023 CREEK WEEK



Durham Big Sweep is an annual environmental service event targeting litter and improperly disposed of trash. The Durham SWCD has been sponsoring the event for over 23 years. The event's "official" day is the 1st Saturday each October, but groups can participate in the day of their choice throughout the months of September and October to allow for more flexibility with scheduling.

Durham Soil & Water Conservation District organized the 2022 Durham County Employee Cleanup event. It was held on October 18th at Drew Granby Park.

The 2022 Big Sweep had 16 more cleanups and 120 more volunteers who participated compared to 2021.



During the third week of March, Durham celebrated Creek Week, and we were thrilled with the community response! In one of our best years since Creek Week began in 2009, 674 volunteers dedicated their time to remove 20,242 POUNDS of litter from 41 different sites across Durham!

On March 22, Durham County Government employees along with the City of Durham employees cleaned up a stream near Garrett Road. They collected approximately 1,170 lbs. of trash! This clean-up was sponsored by Durham County Soil and Water Conservation District. Follow Keep Durham Beautiful to stay in the loop on upcoming clean-ups and volunteer opportunities.

Thank you to everyone who volunteered with us!



2023 CreekWeek Totals from Durham County/City cleanup:
22 volunteers
2 volunteer hours
1,170 pounds of trash

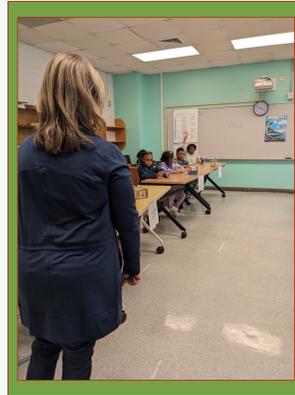
2022 Big Sweep Totals from Durham County cleanup:

8 volunteers
12 bags recycling
16 bags of trash
2 volunteer hours
2 tires
750 pounds of trash



FY23 CLASSROOM TRAINING AND BOOTHS

Throughout the school year, the District staff is asked to present various natural resource topics to schools and children's groups from grade levels pre-K to 12th grade. Classroom presentations range from a variety of topics. Some of the more popular ones from the last school year included: soils, composting, wetlands, animal identification skills, Earth Day lessons, life cycles, insects, etc. Also, Soil & Water staff set up numerous booths at local events throughout the year. The Durham SWCD staff was able to reach 2702 students in FY23.



SAMMY SOIL



Sammy Soil is Durham SWCD's mascot. During FY2023 he made several appearances around Durham County in the classroom, at booths, and during the 2023 Education Awards Celebration. Please contact Durham Soil & Water staff to schedule a visit from Sammy Soil: Lmarochak@dconc.gov or 919-560-0558



(NRCS) NATURAL RESOURCES CONSERVATION SERVICE



The Natural Resources Conservation Service (NRCS) is wrapping up another year of conservation program signups. During FY2023, we received 11 applications for the Environmental Quality Incentive Program (EQIP) (two under the Inflation Reduction Act (EQIP - IRA), and eight under “classic” EQIP), and three for the Conservation Stewardship Program (CSP) (1 CSP - IRA and two “classic” CSP) in Durham County.

For our EQIP applications, one was approved for a High Tunnel System as part of our Urban Ag Initiative fund pool, a new fund pool focused on prioritizing urban farming within the priority project areas identified by the initiative. Our approval process is still ongoing, so hopefully more of these applications will receive approval. With this many applications, NRCS in Durham County requested \$36,000 in total funding and \$9,500 were obligated in FY23!

In addition to the received and funded applications, we also had the opportunity to certify some completed practices. This year we certified three completed High Tunnel Systems. We congratulate and are so happy to see the awesome job these producers have done!

The NRCS Conservation Stewardship Program (CSP) helps our producers build on their existing conservation efforts while strengthening their operations. Whether they want to improve grazing conditions, increase crop resiliency, or develop wildlife habitat, etc. For more information email angel.dobbins@usda.gov.



Olivia Plant
Supervisory Soil Conservationist with Natural Resources Conservation Service



Angela Dobbins
Soil Conservationist with Natural Resources Conservation Service

PIEDMONT CONSERVATION COUNCIL (PCC)



Piedmont Conservation Council (PCC) is a regional nonprofit organization started in 1967 under the Resource Conservation and Development (RC&D) program through the USDA. PCC's mission is to leverage people and resources for innovative projects that promote conservation and sustainable communities. Durham SWCD has representation on the PCC. As District staff, Director Eddie Culberson, and Lisa Marochak, Senior Administrative Officer, and District Board Supervisor David Harris serve as Durham representatives to the PCC Full Council. Lisa and David serve in various committees to support the oversight of operational aspects along with offering guidance and support for area and regional projects.

Having joined the PCC in 2007, Durham County is one of 10 counties in the PCC region. PCC works with and partners with the District to secure additional funding and support. This past year, through the partnership, a 6,000 linear foot stream restoration project was completed for the Grove Park neighborhood. Additionally, PCC was the grant recipient of USDA National Institute of Food and Agriculture (NIFA) funds whereby the District was able to continue to support and expand the Bionomic Education Training Center to engage with additional teachers within the PCC Piedmont region.

In June 2023, PCC onboarded a new Executive Director, Grace Messinger. Some of you might recognize her as she was a Project Manager for PCC from 2016-2021. Grace comes back to lead the PCC having had most of her professional experience in leading and managing Resource Conservation and Development Councils in New Jersey and Virginia. She has a degree in Environmental Science-Chemistry from Kutztown University in PA. Grace has extensive experience in bringing partners together throughout the region to address various water quality, streambank erosion, agriculture sustainability and resiliency focused projects. The PCC has an office space with the District in which Grace works from a few days a week. She is a resident of Guilford County. If you have project ideas or needs within the regional watersheds or counties PCC serves please reach out to Grace at grace@piedmontconservation.org or by cell at 484-554-4076.



Soil & Water

Thank
You



201 E Main St. 5th
floor



919-560-0558



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