



Winter Storm



The winter storm on Sunday, December 9th had a devastating impact on two Durham farmers. The accumulation of 12 inches of snow and ice collapsed three high tunnel houses that were being used to grow lettuce. One grower was converting to a hydroponic operation.

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Both farms are owned by socially disadvantaged farmers that had received grant funding to expand their operations to become GAP certified. They both plan to rebuild and continue their path toward GAP certification to sell produce to Durham Public schools.

Hurricane Agricultural Disaster Program

Durham county farmers and landowners alike felt the effects of both Hurricane Florence and Hurricane Michael. The intense rainfall and wind gusts caused several types of damage to field erosion, fences, barns, crops, farm roads, and stream blockages. To help, mitigate the damage, several emergency programs were funded through Federal, State, and Private sources.

- North Carolina Department of Agriculture and Consumer Services' Hurricane Florence Agricultural Disaster Program of 2018 was funded by the North Carolina General Assembly with \$240 million to provide direct payments to farmers that reported crop loss.
- North Carolina Division of Soil and Water awarded Durham Soil and Water Conservation District \$22,500 out of a requested \$43,500 to provide cost-share assistance with farm road repairs.



Durham County farm road crossing damaged by hurricane Florence and Michael



Stream Restoration Project

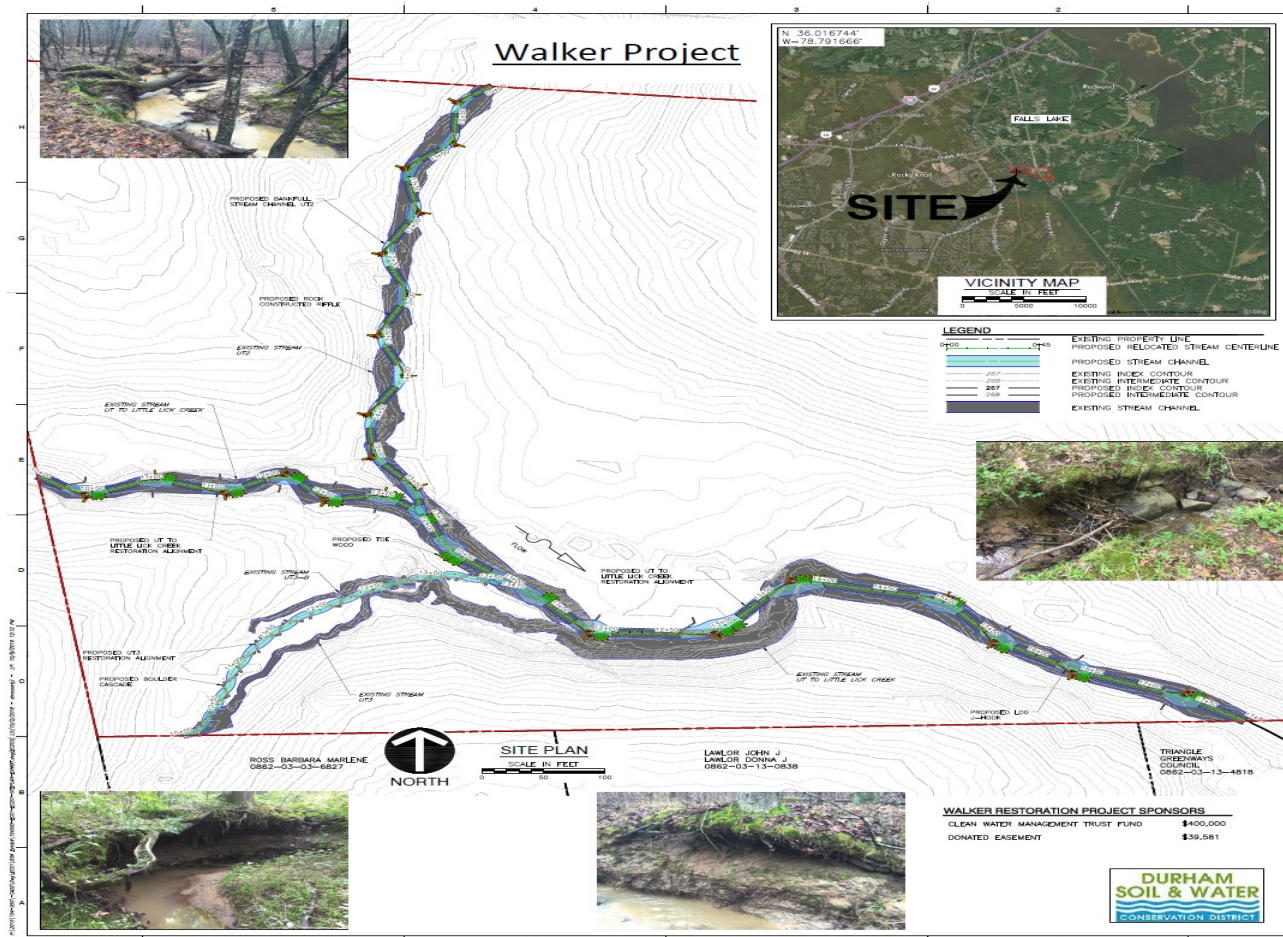
Walker Project

On January 16, 2019 the District began construction on a 2,218 linear foot reach of stream located on a sediment-impaired unnamed tributary to Little Lick Creek near the headwaters of Falls Lake. Aaron and Emily Walker are the property owners and their 52 acre farm consist of a cattle operation located off Patterson Road in Durham County. This project is being funded through a Clean Water Management Trust Fund Grant (\$400,000). The Walkers donated a 5.29 acre easement towards the project and the Durham District will hold and monitor the easement in perpetuity.

The District will be working with Land Mechanics Design Construction Company out of Johnston County on this project. Civil Engineering Consultants out of Ohio will be providing the engineering services.

When constructed the project will reduce 467 tons of sediment, 383 pounds of total Nitrogen and 25 pounds of total Phosphorus from entering Falls Lake each year.

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Agricultural Cost-Share Programs



Durham Soil and Water Conservation District received \$53,277 after requesting \$159,652 for local led conservation through the North Carolina Agriculture Cost Share Program and Agriculture Water Resources Assistance Program. These programs are meant to financially assist operators and landowners with identifying opportunities to increase water use efficiency, increase availability/storage for agricultural use, implement best management practices (BMPs) to conserve and protect water resources, prevent nutrient runoff, install best waste management practices, and conserve soil. In addition to financial assistance, Soil & Water staff assisted operators with conservation BMP technical assistance on over 160 acres in the past 6 months.

If you are a landowner or renter of an existing agricultural operation, including horse farms, and have been operating for more than three years, you may be eligible to participate in the North Carolina Agriculture Cost Share Program. Qualified participants can be reimbursed up to 75% of a predetermined average cost for each BMP installed. To qualify for cost-share, there must be an existing water quality concern present on site. Cost-share cannot be used for anticipated water quality problems that are not currently present on the farm, but may be in the future.

The Durham Soil and Water Conservation District is accepting applications for assistance. Interested farmers and landowners should contact the District for more information.

Hurricane Agricultural Disaster Program-*continued* from front page

- Natural Resource Conservation Service received funding through FEMA to provide cost share assistance with stream debris removal.
- Pasture Renovation and Cover crop seed initiative, which provided Durham County farmers with 1000 pounds of free seed for reseeding pastures or winter cover on crop fields. The initiative was made possible with funding from state Farm Bureaus around the country and Duke Energy.
- Farm Service Agency's Emergency Conservation Program provided cost share to reshape fields, restore fences, and restore conservation structures damaged or destroyed during the hurricanes.



Durham County agriculture pond dam damaged by hurricane Florence and Michael



Durham County farm road crossing damaged by hurricane Florence and Michael

Stormwater BMPs



The Durham Soil & Water Conservation District was recently awarded \$100,000 by the EPA 319 grant program to install stormwater best management practices (BMP) through the Community Conservation Assistance Program (CCAP). Stormwater BMPs reduce pollution in



Cistern and rain garden



Critical area planting

our local waterways and often improve drainage and erosion

issues on private properties. Stormwater BMPs include streambank stabilization projects, rain gardens, riparian buffers, cisterns, critical area plantings, grass swales, and more. The grant funds will be used to provide landowners in impaired watersheds – Third Fork Creek, Northeast Creek, Ellerbe Creek, and Little Lick Creek – with reimbursement for up to 75% of the cost of these projects. Interested landowners should contact Jessica Perrin (jperrin@dconc.gov; 919-560-0558) to schedule a free site consultation to determine eligibility for project cost-share. A summary report and/or comprehensive conservation plan for your property will be provided as part of the site consultation.

Farmland Protection Advisory Board (FPAB)

Each winter the FPAB hosts a monthly breakfast and information session for famers. This winter the topics included:

On November 14, 2018 Durham County Tax office staff discussed the reporting requirements for Present Use Taxation and filing Business Personal Use Tax forms.



On December 6, 2018 the guest speaker was April Bauder with the Plant Industry Section of the NCDA & CS. She updated the group on Fire Ants and the Quarantine requirements for hay growers. State regulations require the inspection of hay that is being transported out of the fire quarantine zone. Also, there are new rules for storing hay that is intended to be sold and transported out of the quarantine zone.

On January 10, 2019 Sarah Blacklin with NC Choices and Chris Hirni with the NC Forest Service discussed silviculture and beef cattle production and forest management.



Agricultural Economic Development

2018-2019 Agricultural Economic Grant Program

The Durham County Board of County Commissioners Agricultural Economic Development Grant Program has allocated \$50,000 for the fiscal year. The program's purpose is to offer cost share and financial support to farms, new and beginning entrepreneurs and to support agriculture education in schools. In FY 2019, thirteen farmers submitted requests for a total of \$58,325 and four schools submitted request for a total of \$4,000.



The Agricultural Economic Development Grant Subcommittee is made up of seven (7) members from the farming community and government agencies. Each year they evaluate each application using the approved criteria and make recommendations for funding to the Durham Soil & Water Conservation District Board.

This year four schools were funded to install the following projects. WG Pearson Elementary School requested funding to start a poultry operation on the campus. The DPS Hub Farm requested funding for supplies to expand the livestock operation. Northern High School requested funding for equipment and supplies for an animal judging project. Jordan High School requested funding for fencing supplies for the lamb project.

Cost share contracts for eleven farms will help expand the businesses and will allow producers to expand market opportunities including wholesale readiness. Below are examples of a few projects that were funded.

Carolina Farmhouse Dairy requested funding for marketing and a trailer to haul milk safely.

Dandies Farm requested funding to upgrade a kitchen in order to obtain health department certification for their value-added products.

Farmshare CSA requested funding to transport a donated high tunnel house and to purchase greenhouse supplies to make the high tunnel operational.

Raelene Teasley requested funding to install concrete in their hay barn in order to comply with new state rules for hay storage.

The Microgreenery requested funding to expand the number of growing tables and install automated irrigation.



Bionomic Education Training Center (BETC)

The BETC Summer Green Infrastructure program is scheduled for June 17, 2019 through July 26, 2019. Each year a team of Durham Public Schools teachers, interns from the Youth Work Internship Program, Durham Public School Maintenance staff and Soil & Water staff collaborate to install Best Management Practices to improve water quality. These projects are funded by a variety of community partners. This summer, the BETC team will be installing practices with funding from the Community Conservation Assistance Program (CCAP), a Duke Energy STEM grant that was received by Durham Public Schools that provides funding for teachers, community cash match and a USDA NIFA grant received by the Piedmont Conservation Council through The Durham Soil and Water Conservation Department.



While best management practice (BMP) installation and maintenance is the focus of most of work each summer, the student interns and teachers also spend time working with farmers in the community. A typical week will include two mornings working on the Durham Public Schools Hub Farm and at local livestock and produce operations. The program also has a classroom component. Due to the nature of the summer program design, program staff teach the skills, knowledge, and theory behind the BMPs, then have the students and teachers implement their learning during the field work component. Finally,

students learn about how “real-world” financial and time management skills are used to solve storm water runoff challenges.

Each afternoon the students are required to record a reflection on the morning’s activities in their journal. The students learn and used vocabulary words they had learned from previous days such as “aeration,” “BMPs,” “cisterns,” and “sediment.” The students’ reflections help them understand the importance of their work, and give them time to practice their writing skills, provided them with some fun memorabilia of their summer experiences.



BETC Curriculum Workshops

A STEM training workshop was conducted on August 22, 2018 for 21 teachers from Durham Public Schools. The workshop focused on the BETC program stormwater curriculum that was created for the State of North Carolina Department of Public Instruction. The curriculum introduces the engineering principles of designing and installing rain gardens and cistern as a mechanism for strengthening science literacy.

The BETC program curriculum was shared at the 2018 National Science Teachers Association meeting in Charlotte, NC on Friday November 30, 2018. The program was selected out of the hundreds of case studies received and was identified as meeting the highest criteria and highest overall ratings for the conference.

EDUCATION

Nominate Someone for the 2019 Urban Conservationist Award

Recognizing outstanding leadership and achievement in conservation. Open to any individual, organization or corporation responsible for a conservation project in an urban setting. Nominations are open to the public and the winner will be chosen by the District's awards committee and judges. Applications can be downloaded from the link below:

[2019 Urban Conservationist Application](#)

Nominate Someone for the 2019 Teacher of the Year Award



In recognition of outstanding conservation education in Durham County. Open to all Elementary, Middle and High school teachers in Durham County who have incorporated conservation and environmental education into their classroom curriculum. Nominate yourself or an outstanding teacher you know. Applications are due to the Durham SWCD by 5pm on April 8, 2019. For Complete rules and application please click the below link.

[2019 Teacher of The Year Rules/application](#)

2019 Resource Conservation Workshop (RCW)

The Resource Conservation Workshop (RCW) is a weeklong camp for high school students who are interested in conservation, the environment &/or our state's natural resources. The camp is sponsored by the NC Division of Soil and Water Conservation and the NC Association of Soil and Water Conservation Districts.

The RCW targets hopeful future environmental professionals by giving students a first-hand look at a wide array of conservation careers that they may not know about. Since the camp is housed on the campus of NC State University, it also gives students a chance to explore college life.

If you have an interest in nature, the environment, natural resource conservation or are thinking about pursuing a college education in any of these areas then this camp is for you.

The Durham Soil and Water Conservation District sponsors 1 Durham County student delegate per year to attend the workshop. The Durham SWCD will pay all camp registration fees. All the student will be responsible for is a few meals on their own and transportation to and from NCSU at the start and end of camp.

This year, the RCW will be June 23 – 28. Priority will be given to rising seniors, but rising sophomores and juniors may apply. Interested students should fill out an official application and return to the Durham SWCD office by 5pm Friday, May 3, 2019. Click here to download the [application](#), [RCW brochure](#), [RCW video](#) or by emailing Imarochak@dconc.gov



2019 Bookmark Contest

Theme: **THINGS FOUND
ON A FARM**

DEADLINE: Friday, April 26, 2019

2019 Durham SWCD Bookmark



Durham County kids in K - 2nd grade are invited to participate in the annual Spring Bookmark Contest sponsored by the Durham Soil & Water Conservation District. This year's theme is:

Things Found On A Farm

Winners from each grade level will have copies of their bookmark given to their whole class! The contest is open to any public, private or homeschool K-2nd grader in Durham County from March 1 - April 26, 2019. Contact Lisa Marochak at 919-560-0558 for full rules and the official entry form.

**Durham Soil & Water
Conservation District**
201 E Main St, floor 5
Durham, NC 27701

919-560-0558 or

Email Lisa Marochak at
Lmarochak@dcnc.gov

<http://dcnc.gov/swcd>



Soil & Water



Novel Endophyte Fescue Field Day

Novel Endophyte Fescue Field Day

Thursday, April 25, 2019
4pm to 6pm

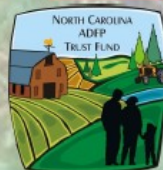
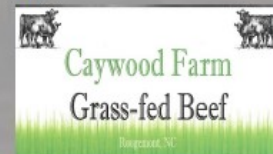


Caywood Farm
2306 Moores Mill Rd, Rougemont, NC 27572

Come learn about the latest in establishing novel endophyte fescue, renovating pastures, grazing management, and weed control.

R.S.V.P to 919-560-0558 or Lmarochak@dconc.gov by April 17

FREE event will include a walking tour of the pasture & light refreshments



Welcome new employees

Welcome Jessica Perrin, Watershed Conservationist



Jessica Perrin joined Durham Soil & Water as a Watershed Conservationist on November 5, 2018. Jessica has a BS in Natural Resources Policy and Administration, a BA in International Studies and a double minor in Forest Management and Agroecology that she completed at North Carolina State University. Also, she has a Masters degree in Natural Resources Policy and Administration from North Carolina State University. Jessica is responsible for assisting citizens with erosion and drainage issues, designing stormwater best management practices (BMPs), and administering the cost-share for BMP installation through the Community Conservation Assistance Program (CCAP) and Impaired and Impacted Streams (ISIP). Please help us welcome Jessica to Durham SWCD. Her email is jperrin@dconc.gov.

Welcome Kyle Gentry, Natural Resources Conservationist



Kyle Gentry joined the Durham Soil & Water Conservation District as a Natural Resources Conservationist on January 2, 2019. He is responsible for administering the Ag Cost Share and AgWRAP Programs. He previously served as the Soil Conservationist for Person Soil and Water. Kyle received his Bachelor's degree in Forest Resources and Environmental Conservation and Major in Environmental Resource Management from Virginia Polytechnic Institute and State University (Virginia Tech). Please help us welcome Kyle to Durham SWCD. His email is jkgentry@dconc.gov.

Farwell to Jennifer Brooks and Heather Dutra



Farewell Jennifer Brooks

On November 25, 2018, Durham Soil and Water Conservation District said farewell to Jennifer Brooks, but not goodbye. Jennifer worked with the Durham District for almost 13 years as the Natural Resources Coordinator/Education Coordinator. Jennifer is now the Envirothon Program Manager for the National Conservation Foundation (NCF). Her employment with Durham Soil and Water may have finished, but the sweet memories of working with her will never diminish. Congratulations Jennifer!



Congratulations to Heather Dutra

Heather Dutra worked with the Durham Soil & Water Conservation District as the Watershed Conservationist December 2015-August 2018. While with us she was responsible for administering the Community Conservation Assistance Program (CCAP). In August 2018 Heather accepted a position with the City of Raleigh as the PMP Senior Project Manager, Stormwater Management Water Quality Section. Congratulations Heather!

Mike Dupree and Lisa Marochak Receive Awards



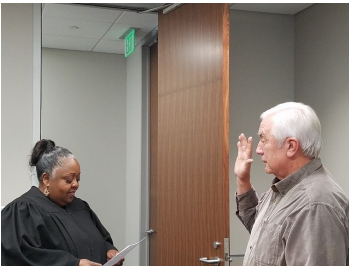
On January 8, 2019, Mike Dupree and Lisa Marochak were recognized for completing a new level toward the Professional District Employees Program (PDEP) from the NC Conservation District Employees Association. They were recognized during a luncheon at the Sheraton Imperial in Durham. Mike Dupree received his Master III level award, and Lisa Marochak received her Master IV and has now completed all of the achievement levels. Congratulations to Mike and Lisa!

Pictured left to right:

Lisa Marochak and Mike Dupree

Durham SWCD Supervisor Election and Reappointment

Talmage Layton Reappointed to the Soil and Water Board



On December 11, 2019, appointed Supervisor, Talmage Layton was sworn into office. The Honorable Doretta L. Walker, District Court Judge 14th Judicial District, administered the Oath of Office to Chairman, Talmage Layton. He has been a Supervisor with Durham Soil and Water Conservation District Board for 17 years. Talmage is now serving as the Chairman. Congratulations to Talmage on his reappointment!

David Harris Re-elected to The Soil and Water Board

On December 3, 2019, elected Supervisor, David Harris was sworn into office. David Harris has been a Supervisor with Durham Soil and Water Conservation District Board since May of 2017. Before serving as an elected Supervisor on the Board, he served as an Associate Supervisor. David is now serving as the Financial Officer. Congratulations!



Pictured left to right:

The Honorable Doretta L. Walker, District Court Judge 14th District; Mrs. Gail Harris (wife of David Harris) and Supervisor, David Harris

Natalie Murdock Elected to The Soil and Water Board



On December 3, 2019, newly elected Supervisor, Natalie Murdock was sworn into office. Natalie served as an Associate Supervisor on the Durham SWCD Board since August of 2017 before being elected. Congratulations Natalie!

Pictured left to right:

Mr. and Mrs. Murdock (Natalie's parent's) and Supervisor, Natalie Murdock

Durham Soil and Water Conservation District

201 E Main Street, floor 5
Durham, NC 27701

Phone: 919-560-0558
Fax: 919-560-0563

We're on the following:

www.dconc.gov/swcd

DISTRICT BOARD

Talmage Layton, Chairman
Danielle Adams, Vice Chairman
Curtis Richardson, Secretary/Treasurer
David Harris, Financial Officer
Natalie Murdock, Supervisor
Kathryn Spann, Associate Supervisor
Mark Dewitt, Associate Supervisor
Becky Emmons, Associate Supervisor
Laura Marie Davis, Associate Supervisor
Melissa Rooney, Associate Supervisor

STAFF

Eddie Culberson, Director
Lisa Marochak, Senior Administrative Officer
Mike Dupree, Agribusiness & Environmental Services Manager
Jessica Perrin, Watershed Conservationist
Kyle Gentry, Natural Resources Conservationist
Cherri Smith, Contractor
Elizabeth Zander- Project Manager, Piedmont Conservation Council
Lauren Parker, USDA/NRCS

Length of Service Awards



Durham SWCD Supervisor, Raymond Eurquhart received his 25 years of service award from the NC Association of Soil & Water Conservation Districts. The award was presented to him during the Area IV Fall meeting on November 15, 2018. Ray Eurquhart is a huge asset to the Durham Soil & Water Conservation District Board and is no longer an elective supervisor, but he is now an associate supervisor. (pictured left: Ray Eurquhart receiving his gift from the Durham SWCD Board and staff)



Durham SWCD Supervisor, Danielle Adams received her 10 years of service award from the NC Association of Soil & Water Conservation Districts. The award was presented to her during the Durham Soil and Water Conservation District Board meeting on December 11, 2018. Thank you Danielle for your years of service!



Durham Soil and Water Director, Eddie Culberson received his 30 years of service award from Durham County Government. The award was presented to Eddie during the Durham County Government Service Recognition Event on December 4, 2018. Thank you Eddie for your years of service!