



Soil & Water

Durham Soil and Water Conservation
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FY 2017

ANNUAL REPORT

To conserve, enhance, 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.

FY17 DURHAM SOIL AND WATER ANNUAL REPORT

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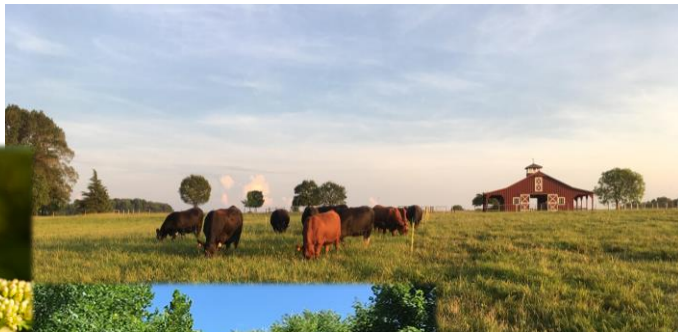
From the Director

Each year, the Soil and Water Department summarizes its accomplishments in a report to the citizens of Durham County. It is through this report we acknowledge our contribution to conserving, enhancing and promoting the county's natural resources; the return on investment from county funding and the partnerships we've entered within the year. The department's goals and objectives are a results of a locally-led conservation program set forth by the District Board and its Associates. These goals and objectives align with many of the county's strategic plan goals, particularly Goal 4, Environmental Stewardship and Community Prosperity.

Durham County has a very diverse community and the Soil and Water Department has accommodated the county's citizens by providing a diversified conservation program. The department's performance has generated many successful stories with results. At this time we present the fruits of our labor in an Annual Report to the community.

Eddie Culberson

Director
Soil and Water Department



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District Board



Talmage Layton
Chairman



Danielle Adams
Vice Chairman



Curtis Richardson
Secretary/Treasurer



Raymond Eurquhart
Supervisor



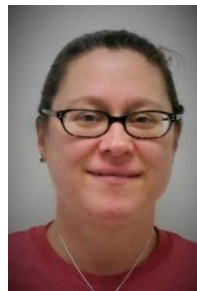
David Harris
Supervisor



Mark Dewitt
Associate Supervisor



Becky Emmons
Associate Supervisor



Melissa Rooney
Associate Supervisor



Kathryn Spann
Associate Supervisor

Staff

Eddie Culberson- Director

Lisa Marochak- Senior Administrative Officer

Jennifer Brooks- Natural Resources Coordinator

Michael Dupree- Agribusiness & Environmental Services Manager

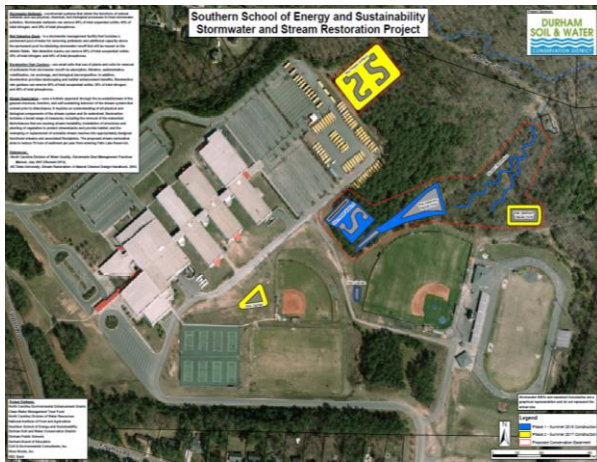
Heather Dutra- Watershed Conservationist

Diana Lewis- District Conservationist, USDA/NRCS

Elizabeth Zander-Project Manager, Piedmont Conservation Council

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Stream Restoration and Stormwater Projects



SOUTHERN PHASE I & II

Phase I of the Southern stream restoration and storm water project was completed in late winter this year. The Phase I project consist of installing a bio-retention cell along with a wetland stormwater cell with a fore bay to treat the nutrient rich runoff from the school's property. Additionally a reuse pond was installed to capture water for irrigating the athletic fields. To further stabilize the site, 950 linear feet of stream was restored with instream best management

practices (BMP's). A portion of the project's plant material was grown and planted by students from Southern High. Their efforts were compensated through the grants. The project was funded with the following grants received by the District; \$325,000 Environmental Enhancement Grant, \$176,500 Clean Water Management Trust Fund Grant and \$20,000 Division of Water Resources Grant. Phase II of the campus' project is scheduled to begin in July of this year. Phase II consist of an additional bio-retention basin, a forebay and wetland stormwater cell and another reuse pond. This phase will be funded with a Environmental Enhancement Grant (\$435,000) and a Division of Water Quality Grant (\$200,000) The District presently is working with the Board of Education on the conservation easement language for Phase II. Once recorded the District will hold and monitor Phase I (4 acres) & Phase II (2 acres) easements. Below are the nutrient reduction numbers from Phase I and Phase II:



Southern PH 1

BMP	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Rain Garden	0.27	0.05	10.45
Wetland	19.34	1.41	1115.54
Wet Detention	45.61	6.47	1946.28
Stream restoration	54.2	4.48	75 tons/year (BEHI)

Southern PH 2

BMP	TN (lbs/year)	TP (lbs/year)	TSS (lbs/year)
Rain Garden	13.78	1.74	682.97
Wetland	46.97	5.31	2,423.53
Wet Detention	13.21	2.46	534.24

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Stream Restoration and Stormwater Projects- *continued*

WARD STREAM RESTORATION

This District project received a second grant through the Upper Neuse Clean Water Initiative funding (\$360,000) last year. These funds along with a Clean Water Management Trust Fund Grant (\$400,000) will allow the District to restore 3,900 linear feet of an unnamed tributary in the head waters of Falls Lake. The surveying and the draft design have been completed and the applications for permits have been submitted. The District has conducted a pre-construction walk through with the

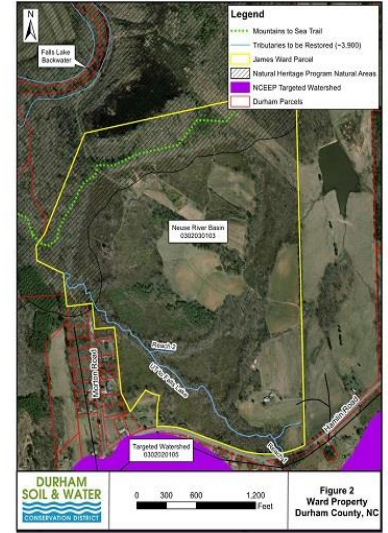


Before picture

landowners and is now working on the easement language. The District will hold and monitor the easement. The project's construction will begin in late summer/early fall. Once completed the nutrient education in the table below will be achieved.

Nutrient	Pounds Per year	Pounds Over 30 years
Nitrogen	681.93	20,457.90
Phosphorus	43.92	1,317.60

Sediment reduction of 976 tons/yr (982 tons/yr to 5.6 tons/yr)



WALKER STREAM RESTORATION

The District has received the funding needed (\$400,000) to restore 2,200 linear feet of an unnamed tributary of Little Lick Creek located in the headwaters of Falls Lake. The funds were received through the Clean Water Management Trust Fund in the fall of last year. The surveying has begun and the District is presently working on the easement language. The permit application will be submitted this fall with the construction to begin in late spring/early summer of 2018. Once



Before picture

completed the nutrient reductions expected are below.

Nutrient	Pounds Per year	Pounds Over 30 years
Nitrogen	383.40	11,501.89
Phosphorus	24.69	740.78

Sediment reduction of 466.5 tons/yr (480 tons/yr to 13.5 tons/yr)



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Stream Restoration and Stormwater Projects

MARBREY/JACKSON STREAM RESTORATION



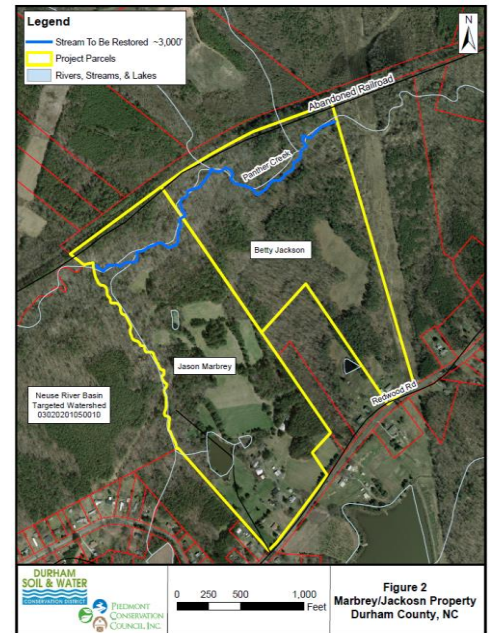
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The District has partnered with the Piedmont Conservation Council to restore a total of 3,300 linear feet in Panther Creek and an unnamed tributary near Falls Lake. A Division of Water Resources grant (\$200,000) and a Clean Water Management Trust Fund grant (\$450,000) was secured in the fall of 2016. Presently the surveying is being conducted and when completed the project will enter the design phase. Plans are to complete design phase and go to

construction phase by next summer (2018). When completed the project will achieve the nutrient reductions listed below.

Nutrient	Pounds Per year	Pounds Over 30 years
Nitrogen	528.87	15,866.24
Phosphorus	34.06	1,021.87

Sediment reduction of 901 tons/yr (928 tons/yr to 27 tons/yr)



Piedmont Conservation Council (PCC)



PCC is a regional nonprofit organization started in 1967 under the Resource Conservation and Development program through the USDA. PCC serves ten counties, including Durham County, implementing projects that further our communities' sustainability. This past fiscal year, PCC has continued its partnership with DSWCD to protect Durham's natural resources and support its local food system.

PCC was awarded a \$450,000 grant from the Clean Water Management Trust Fund to complete a stream restoration project adjacent to Falls Lake on Panther Creek. Survey work for the project has been completed and construction is anticipated to begin this year.

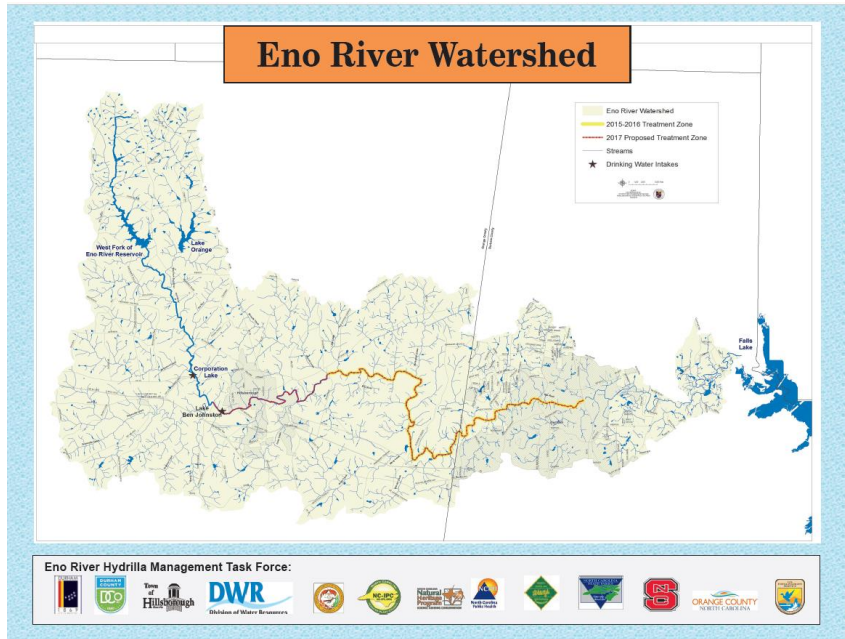
PCC also served as an active project partner in DSWCD's grant from the Urban Agricultural Conservation Initiative program. PCC staff have assisted in organizing seven free workshop events focused on helping Durham County residents to become better stewards of their land. Additionally, PCC staff have continued to assist with completing a full inventory of all agricultural activities within the county.

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Hydrilla

HYDRILLA IN THE ENO

The Durham Soil and Water Department represents Durham County on the Eno River Hydrilla Management Task Force.



This task force once again hired SePRO Corporation to apply the herbicide Sonar Genesis in a 16-mile target zone of the river from Lawrence Road to N.C. Hwy. 501 (Roxboro Road) in Orange and Durham counties. The herbicide is being applied in a concentration well below the limits approved by the U.S. EPA (Environmental Protection Agency) — a concentration that is both safe for swimmers and boaters and non-toxic to fish

and wildlife. This was the second year of the project to treat parts of Eno River for a hydrilla infestation. These treatments began in late spring and last through September of last year. The herbicide worked well on hydrilla in the treatment area the first year and had little to no impact on native, non-target plants. Even so, the public is advised not to use treated water for irrigation without consulting a task force member first.

Hydrilla is a highly invasive, nonnative aquatic plant that originated in Asia and creates nearly impenetrable mats of stems and leaves on the surface of lakes, rivers and other waterways. It crowds out native vegetation, reduces recreational opportunities, and ultimately can harm native populations of fish and other aquatic and bird species. The plant also can clog intakes where rivers and reservoirs are used for drinking water supplies and irrigation.

Hydrilla was first discovered in the Eno River basin in the early 1990s in Lake Orange, which is located upstream of Hillsborough. In 2009, biologists confirmed hydrilla in another upstream reservoir, West Fork Eno Reservoir. The N.C. Division of Water Resources is actively managing hydrilla in both upstream reservoirs.

Members of the task force conducted a survey in fall 2013 and found that about 25 miles of the Eno River contained hydrilla at differing densities. The most infested area was a 15-mile stretch from the N.C. Highway 70 Bridge east of Hillsborough to Guess Road in Durham.

Besides Durham County Government, the Eno River Hydrilla Management Task Force comprises a group of 7 local, state and federal government representatives.

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Agriculture Cost Share 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 the mid-1980s. Here in Durham County it is administered by the Durham Soil and Water Conservation District.



Automatic Waterers- construction

The program is 100% voluntary on the part of the producer/landowner to help them improve the 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.

The Durham County Agriculture Cost Share Assistance Program (ACSP) received \$ 52,530 from state appropriations for the conservation best management practices (BMPs) in fiscal year 2017. Of the state appropriated funds, \$51,169 were allocated to local Durham County producers/landowners for the following conservation BMPs; 3 Livestock Exclusion Systems protecting over 1,500 ft of stream from further impairment, 16 acres of Cropland Conversion to Grass, 1 Ag Pond Sediment Removal and 1 Grassed Waterway with Land Smoothing. The BMPs will mitigate or prevent future losses of nutrients and soil from the farms or streams, thereby improving overall water quality in Durham County. Estimated reductions expected once the BMPs are installed are 157.16 pounds per year of Nitrogen saved, 3.3 pounds per year of Phosphorus saved and 56.8 tons per year of Soil saved.

The District staff will be working closely with these 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.



Grassed Waterway

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THE AGRICULTURE COST SHARE PROGRAM (ACSP) - CONTINUED

Once a contract has been signed and approved the producer has 2 to 3 years to complete the installation of all BMPs. With that being the case, Durham District staff are providing contract management on projects from prior fiscal years, while also signing on new contracts. During FY 2017, District staff worked to assist producers with the construction and completion of 8 ACSP best management practices that were contracted in FY 15 and 16. They are as follows; 1 Grassed waterway and 3 Livestock Exclusion Systems with associated BMPs. Estimated reductions expected once the BMPs are installed are 55.9 lbs per year of Nitrogen saved, 1 lb per year of Phosphorus saved, 25 tons per year of Soil saved and an estimated 1,514 ft of pond or stream shoreline protected from further impairment.

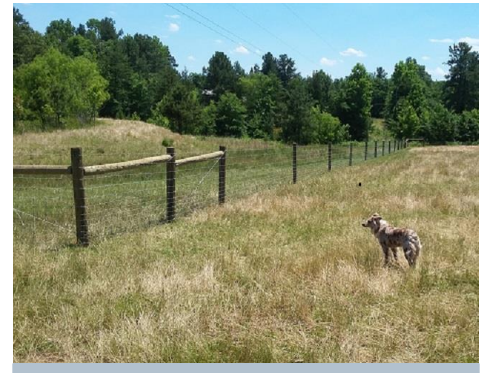
319 LIVESTOCK EXCLUSION SYSTEM GRANT FUNDS

During FY 17, the District was granted \$20,000 from a Clean Water 319 Nonpoint Source Grant for Livestock Exclusion System practices in Durham County. Those funds are available until May 30, 2018 to assist Durham County livestock owners with fencing and alternative watering systems. Cost Shareable items include:

- Exclusion Fencing
- Stream Protection Well
- Stream Crossing
- Watering trough or tank
- Heavy Use Area
- Spring Development



Livestock exclusion



Livestock exclusion

SPOT CHECKS

The Durham District is required to conduct annual spot checks on all Agricultural Cost Share Program (ACSP) and Agriculture Water Resources Assistance Program (AgWRAP) contracts in order to comply with state-mandated cost share program rules. Through a random selection process, 9.5% of ACSP and 40% AgWRAP contracts still under maintenance by the participating applicants or landowners were visited and evaluated on May 1, 2017. District staff were accompanied by District Board Supervisors, Danielle Adams and Talmage Layton. During the spot checks it was determined that all sites were in compliance with the NC ACSP standards.

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Agricultural Water Resources Program



Modeled after the NC ACSP, the NC Agricultural Water Resources Assistance Program (AgWRAP) is available to assist the Durham County agriculture community. However, instead of being water quality driven like ACSP, the AgWRAP program is purely water quantity based to help address water quantity 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.

Because the state legislated appropriation for AgWRAP is considerably smaller than ACSP, the District allocation is also smaller. In FY 2017 the Durham District received \$10,782. Of that amount, \$10,768 was allocated to a Durham County farmer for the installation of a new ag-only well for irrigation purposes.

Due to a higher demand than available local funds, the District submitted grant applications on behalf of 4 local farmers for micro-irrigation projects. 2 applications were submitted and awards by the NC Division of Soil and Water Conservation's Competitive Regional Grant process for a total of \$16,697. An additional 2 applications were submitted and awarded by the NC Foundation of Soil and Water Conservation for a total of \$29,956.27.

The District staff will be working closely with all 5 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.

Similar to the NC Ag Cost Share Program, once an AgWRAP contract has been signed and approved the producer has 2 to 3 years to complete the installation of all BMPs. During FY 2017, District staff worked to assist producers with the construction and completion of 2 AgWRAP best management practices that were contracted in FY 15 and 16. They are as follows; 1 Ag Pond Sediment Removal and 1 new Ag Pond Construction. Together, the projects are providing an increase of over 2.7 million gallons of water for irrigation of vegetable crops.



AgWRAP- pond construction



AgWRAP- pond post construction

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USDA-NRCS Partnership with Durham SWCD FY2017

During Fiscal Year 2016 the following practices were installed through the Environmental Quality Incentive Program (EQIP):

- Conservation Plan to Transition to Organic Production- 1 (\$2,726)
- Fencing for stock trail development- 3,689' (\$8,400)
- Prescribed Grazing implemented- 36.1 acres (\$1,206)

The Natural Resources Conservation Service completed another year of EQIP signup for 2017. Three applications for High Tunnels (hoop houses) were funded for a total of \$24,395. These high tunnels will provide extension of the typical growing season allowing a producer to begin planting earlier while extending production beyond that allowed in a typical growing season. High tunnels provide excellent controlled environments that promote healthier plant growth and yields by regulating air and soil temperatures, maintaining soil moisture levels, reducing pests and pesticide use, and protection from extreme weather.



On June 6, 2017 the Durham SWCD hosted the visit of USDA National Headquarters Director of Public and Private Partnerships Jackie Davis-Slay to the Tahz Walker Tierra Negra Farm in Durham. Mrs. Davis provided ideas for many USDA partnering opportunities for grants and funding for small farms. Below on the left, is landowner Mr. Tahz Walker, Mrs. Ebonie Alexander, Executive Director of Black Family Land Trust standing with Mrs. Davis-Slay (r). Also pictured are Danielle Adams, Vice Chair of Durham SWCD Board, Timothy Beard, NC NRCS State Conservationist speaking with Eddie Culberson Durham SWCD District Director, Jennifer Brooks Durham SWCD Natural Resources Coordinator and Natalie Murdock citizen (sitting).

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Community Conservation Assistance Program (CCAP)

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. These projects treat polluted stormwater runoff before it reaches our local waterways. This fiscal year District staff completed 299 in-person consultations for urban/suburban landowners: 132 initial drainage & erosion evaluations and an additional 167 CCAP-related consultations. In addition to individual site consultations, District staff presented on CCAP and the Voluntary Nutrient Reduction Program (VNRP) at several community meetings and events; including participants from Hope Valley North, Hillandale Commons HOA, Hardscrabble HOA, Lakewood –Tuscaloosa neighborhood, Birchwood Heights

Community, and the Longleaf Collective. This past year, 31 formal Applications for Assistance were received, and the Soil & Water Conservation District Board approved the encumbrance of \$115,471 in cost-share funds for 28 contracts and 37 BMPs:

- Streambank Stabilization: 12
- Bioretention/Rain Garden: 4
- Cistern: 6
- Impervious Conversion: 4
- Grassed Swale: 2
- Critical Area Planting: 4
- Permeable Pavers: 1
- Riparian Buffer: 3
- Structural Stormwater Conveyance: 1



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Community Conservation Assistance Program (CCAP) *continued*

These BMPs are anticipated to reduce sediment and nutrient pollution loads to impaired



Critical Area Planting

waterways by an estimated 12.7 lbs. of nitrogen, 0.83 lbs. of phosphorus, and 422 tons of sediment per year. Funding for these projects came from the following sources: the NC Division of Soil and Water, Environmental Protection Agency (EPA) 319 Program, the Durham County Impaired Stream Improvement Program (ISIP), Duke Energy Water Resources Fund, and the City of Durham Stormwater Services.

District Board Supervisor Ray Eurquhart, along with District staff, conducted the annual spot check on CCAP sites on April 27, 2017. Each year, 5% of sites within active maintenance periods are randomly selected for spot checks. In 2017, six sites were visited to confirm that the previously installed BMPs are in place and functioning as designed to meet CCAP standards. All monitored sites were found to be in compliance.



Rain garden

Over the next year staff will utilize \$100,000 in recently awarded EPA 319 grant funds; \$20,000 in County funds (for ISIP projects); and \$15,000 awarded to Durham via a competitive regional state application for BMP installation cost-share. An additional \$76,500 for 2018 CCAP cost-share has been applied for through proposals to the Environmental Enhancement Grant (EEG) program and the Duke Energy Water Resources Fund.

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Green Infrastructure Educational Events

The District conducted 8 Green Infrastructure-related educational events in the community this fiscal year, with a wide range of participants from preschoolers to professionals!

- 8/31/16 Green Roof Design Considerations – 14 professional staff attended from Durham County, City of Durham, City of Raleigh, and Wake Soil & Water Conservation District.
- 9/30/17 Cistern Tour (Raleigh/Durham) – In cooperation with NC State Extension staff; 6 participants from Durham County, Wake County, and City of Raleigh.
- 12/8/16 – Rain Barrel Presentation & Activities – 25 preschoolers and 6 teachers enjoyed learning about rain barrels.
- 2/15/17 “Out of the Box” Teacher Workshop: Introductions to Rain Garden Curriculum – 21 Durham Public School Teachers attended.
- 2/18/17 Cistern Workshop for Contractors – In cooperation with NC Cooperative Extension; participants included 15 local contractors.
- 4/8/17 Rain Water Harvesting Workshop for Landowners (Ellerbe Creek) – In cooperation with NC Cooperative Extension; 10 landowners participated.
- 6/10 Rain Water Harvesting Workshop – In cooperation with NC Cooperative Extension staff; participants included 16 teachers and students.
- 6/11 Residential Rain Garden Professional Certification Training & Exam- In cooperation with NC Cooperative Extension; 6 participants attended the training and completed the exam.



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Envirothon

The Durham SWCD is very committed and involved in educating the next generation of decision makers and environmentally aware citizens in our community; the youth. One program area that accomplishes this goal is the Envirothon program. The Envirothon program is a hands-on, natural science academic competition 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. The Envirothon consists of a middle school and high school competition level.

During the 2016-2017 school year Durham SWCD staff worked closely with 7 teams of students from Durham County schools or clubs;

- 'Killer Kudzu' team from the NC School of Science and Math
- 'Cypress Knees' team from the NC School of Science and Math
- 'Hellgramites' team from the NC School of Science and Math
- 'Aurora Borealis' team from Northern High School
- 'Bone-aye' team from CE Jordan High School
- 'Snap Dragonettes' middle school team from KOR Home School
- 'Eco-geckos', middle school team from KOR Home School

Aided by the Durham SWCD staff, the teams spent numerous hours during the school year studying and training on forestry management practices, wildlife identification skills, aquatic sampling techniques, soil texture determinations and more. Some other hands-on skills the students learned included how to measure the height of a tree using a Biltmore stick, how to identify and track NC wildlife, how to sample macroinvertebrates and determine a stream's water quality, all skills that resource professionals use in the field each day to perform their jobs.

The first level of competition for the teams was the Area 4 Envirothon competition on March 24, 2017 in Johnston County, where they tested their natural resources knowledge against teams for 10 other counties. District staff and Board members volunteered at this event and were on hand to support Durham's teams. The top 7 scoring teams from each division, high school and middle school, qualify to advance on to the NC Envirothon event. Two teams from Durham achieved this goal; the Killer Kudzu and the Cypress Knees teams from the NC School of Math and Science.

The NC Envirothon statewide competition was held on April 28-29 at Cedar Rock Park in Burlington, NC. There, Durham's teams competed against 48 other teams from across North Carolina. The Cypress Knees team placed 6th overall and took home 1st place medals in the Aquatics station. The Killer Kudzu team placed 11th overall. Durham SWCD staff and Board were on hand at both days of the event to cheer on Durham's teams.



Aurora Borealis-NHS



Cypress Knees- NC School of Math and Science



Killer Kudzu- NC School of Math and Science

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Field Days

Each year the Durham SWCD Board and staff sponsor at Durham County Environmental Field Days event for 3rd graders. Students spend the day learning about the environmental and the world around them from resource professionals and hands-on presentations. Normally held in October of each year at the District's Dr. Roberts Environmental Education Park in Bahama, the 2016 event was moved due to wet weather. Instead the SWCD staff and Board organized mini-field day events at each participating school during the month of October.



CC Spaulding



Merrick Moore

On October 12, 2016, District staff, Supervisors and various presenters went to Merrick-Moore Elementary School and Spring Valley Elementary School to present to their third graders. On October 13th, it was Burton Magnet and CC Spaulding Elementary School students. In all, the Field Days event reached over 300 kids from the 4 schools.

At each school, students were able to meet various resource professionals and participate in hands-on activities on a variety of topics such as soils, climate change, water quality, wildlife, recycling, and the always popular forest ranger demonstration show & tell. Presenters were asked to present 30 minute lessons to each of the five groups of students per day. Presenters at this year's Field Day event included the Durham Soil and Water Conservation District, the City of Durham Water Management, the City of Durham Stormwater Services, Durham Keep Durham Beautiful, the NC Forest Service, the US EPA and the Eno River Association.

Resource Conservation Workshop

The Resource Conservation Workshop (RCW) is a weeklong camp for 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. Held June 25-30, 2017 at NC State University, 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.

The Durham Soil and Water Conservation District Board of Supervisors are committed to sponsoring at least 1 Durham County student delegate each year. The 2017 Durham delegate for the RCW was Miss Aniya Kuhn from CE Jordan High School. Miss Kuhn is a rising senior.

During the week, scientists, foresters, biologists, wetland specialists, wildlife experts and engineers provided classroom instruction and outdoor study in environmental sciences. Students also received information and insight into college degrees and careers in natural resource management. Study locations for the workshop included N.C. State University and the University's Lake Wheeler Research Farm, Clemmons Educational State Forest and Falls Lake State Recreation area.

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Classroom Training

Throughout the school year, the District staff is asked to present various natural resource topics to schools, clubs and preschools from grade levels pre-K to 12th grade. Classroom presentations range from a variety of topics. Some of the more popular topics from the last school year included; Soils, composting, wetlands, animal identification skills, life cycles and NC wildlife. In FY17 staff made presentations to 3,412 students.

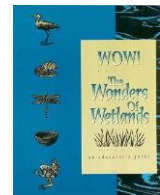
Teacher Workshops

The Durham District, along with the City of Durham (Stormwater Services Division), held a weeklong series of teacher's workshops July 18-21, 2016. The workshops were held at the City Department of Water Management in the North Durham Water Reclamation Facility (1900 East Club Blvd). A total of 39



formal and non-formal educators attend 1 or more of the workshops.

The teacher training workshops offered during the week were; Project Learning Tree (PLT), Project WOW! Wonders of Wetlands (WOW), and Project WET. Facilitators for the week were: Durham Soil and Water staff, Lisa Marochak and Jennifer Brooks; City of Durham employee Laura Webb-Smith and Laine Roberts.



2017 Pond Clinic



On Saturday, May 6, 2017 the Durham & Orange Soil and Water Conservation Districts held a joint pond clinic at the beautiful Blackwood Farm Park in Orange County. Approximately 81 people attended this session to gain more knowledge on pond construction & structural management, aquatic weed management, Hydrilla in the Eno River, fish production and wildlife found around a pond. Those in attendance also learned about the important role ponds play in water quality and how they qualify as a best management practice (BMP). The highlight of the event was the shock boat demonstration analyzed the pond to check the health and population balance of the fish in it. Foster Lake and Pond Management, Biscuitville of Mebane, Hardees of Hillsborough, Walmart of Hillsborough, Southern States of Carrboro, Durham Soil and Water Conservation District, Orange Soil and Water Conservation District and Orange County DEPR (Department of Environment, Agriculture, Park and Recreation) helped sponsor the event. The District staff received positive feedback from everyone in attendance.



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2016 DURHAM BIG SWEEP COLLECTS 12,840 POUNDS OF TRASH

In September and October of 2016, Durham County residents came out in record numbers to participate in the long-running Durham Big Sweep. Durham Big Sweep is an annual environmental service event to clean up our environment and the Durham SWCD has been the coordinating agency for it for over 17 years now. 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.



During the 2016 event, 669 total volunteers worked to clean the trash up at 24 different sites across Durham County. Those volunteers cleaned up an estimated 12,840 pounds of trash. Without clean up events like Big Sweep or others held throughout the year, this trash would either remain on site as an eyesore to the community or be washed downstream during rain events, polluting our streams, rivers, lakes and eventually the ocean.

The 2016 Durham Big Sweep was coordinated by a partnership between the Durham County Soil and Water Conservation District, Keep Durham Beautiful, Inc. and the City of Durham Public Works Department Stormwater and GIS Services Division. Major support for the event was provided by the Durham County Department of General Services and the City of Durham Neighborhood Improvement Services Department, which picked up trash and recyclables at each cleanup site.

By the numbers:

- -24 total sites
- -669 total volunteers
- -1397.5 volunteer hours
- -12,840 lbs of litter



Each year the Durham SWCD honors a volunteer or team with a Big Sweep Special Achievement Award to recognize outstanding service, commitment and participation in Big Sweep, showing their dedication to the beauty and health of our environment. The 2016 recipient of this honor was the Forest Hills Neighborhood Association. The Durham SWCD thanks them for their continued dedication and commitment to our world.

FY17 DURHAM SOIL AND WATER ANNUAL REPORT

Best of Both Worlds Conference



In September 2016, the Durham SWCD staff were invited to participate in the 8th annual Best of Both Worlds international conference on Environmental Education and Education for Sustainable Development. This conference was sponsored by the GO3 Project and was located at the Estes Park Environmental Center in Estes Park, Colorado, September 26-28, 2016.

Best of Both Worlds (BoBW) was established by the University of South Africa in 1998 and later joined by the Forest Research Institute of Malaysia, Brazil, and now the US. BoBW promotes collaboration across all of the “worlds” that make up our global environmental community. The 8th BoBW conference focused on current international trends in Environmental Education and Education for Sustainable Development. Conference workshops focused on STEM and the use of technology in environmental monitoring, including air pollution monitoring, aerial mapping, wildlife monitoring, and greening schools. The goal of the conference each year is to establish cross collaboration and networking among participants from different countries to identify local solutions to global problems.

District staff, Jennifer Brooks, Lisa Marochak and Mike Dupree attended the conference and participated as workshop presenters. Their presentation, titled ‘Empowering the Next Generation of Civic and Environmental Stewards through Curricula, Career Development and Community Service; Bionomic Education Training Center (BETC)’ highlighted Durham County, the Durham SWCD and the award winning BETC program. Workshop participants represented 7 international countries and multiple states from across the US. The presentation was well received and participants were encouraged to follow up with the Durham staff for information on how to incorporate BETC in their home country or state.

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2017 Annual Awards Banquet



The awards below were honored at our 2017 Annual Awards Banquet on June 1, 2017. We honored educators, students, and landowners who promoted conservation education in the classroom and landowners who put conservation on the ground. This year's theme for the poster, essay, public speaking, slideshow and computer designed poster was "Soil and Water...Yours for life". The theme for the bookmark contest was "NC Wildlife".

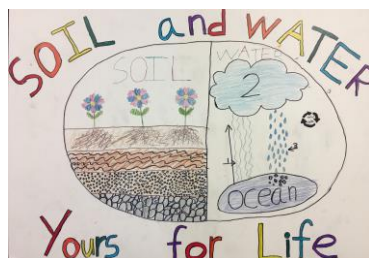
3 rd Grade Poster	4 th Grade Poster	5 th Grade Poster	6 th Grade Poster
1st place – Eliana Mah School: Homeschool Teacher: Kim Mah	1st place – Addy Taylor School: Mangum Elem. Teacher: Kim Carpenter	1st place – Jeslynn Jacob School: Mangum Elem. Teacher: Kim Carpenter	1st place – Bryze Sanchez School: Carpe Diem Academy Teacher: Leanne Sanchez
2nd place - Leilani Hendricks School: Spring Valley Elem. Teacher: Supriya Vasudevan	2nd place - Koby Owens School: Mangum Elem. Teacher: Kim Carpenter	2nd place - Yoselin Ramos-Casia School: Forest View Elem Teacher: Ashley Weinard	

6 th Grade Essay	6 th Grade Slideshow	9 th Grade Computer Designed Poster
1st place – Nisha Polk School: Githens Middle Teacher: Jonathon Nero	1st place – Bryze Sanchez School: Carpe Diem Academy Teacher: Leanne Sanchez	1st place – Sarah Tolman School: Jordan High Teacher: Mary Ellen Corr

Kindergarten Bookmark	1 st Grade Bookmark	2 nd Grade Bookmark
1st place –Yui Kuratani School: Creekside Elem. Teacher: Tya Tyrrell	1st place – Walter Isard School: Morehead Montessori Teacher: Lea Best	1st place – Eden Livingston School: Morehead Montessori Teacher: Lea Best



2nd grade
Bookmark



1st place-3rd grade poster

The 1st place winners received a plaque and \$50. 2nd place winners received a certificate and \$25. Teachers of the 1st place winners also received a cash reward 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, where we had a number of Durham entries place and take prizes.

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

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2017 Teacher of the Year



Each year the District Board recognizes outstanding conservation education efforts of Durham County's teachers by awarding a Conservation Education Teacher of the Year award to deserving teachers in Elementary, Middle and High School. Teachers, or teams of teachers who have utilizing a conservation education program in their class may be recognized.

The 2017 Outstanding Teacher of the Year Award went to North High School Agriculture-CTE teacher Demikia Taylor. Ms. Taylor has been at Northern for several years now in the Agriculture-CTE program, leading students through understanding soil health, plant propagation, garden design and construction, stormwater education, conservation best management practices and more. Currently she teaches classes in Agriscience Applications, Animal Science I&II and Veterinary Assisting. In 2014-2015, Ms. Taylor was instrumental in working with District staff and students to create Northern High's Outdoor Learning Center and Culinary Garden. Her students and others created a Pizza Garden, Bramble Garden, Tea Garden and raised garden beds that are handicap accessible. The courtyard provides an opportunity for students at Northern to gain work experience in horticulture and help them connect with the natural world.

This award is part of a state-wide award program sponsored by the NC Association of Soil and Water Conservation Districts. The District will be submitting Ms. Taylor for consideration for the NC Outstanding Conservation Teacher of the Year. If awarded, Ms. Taylor will be presented the award at the Associations Annual Meeting in January of 2018.

2017 Urban Conservation Award

This year's Urban Conservation Award was presented to the Durham Public Schools Maintenance Division for its invaluable collaboration on District-led stormwater project installations on school properties. Over the past several years, the District has worked with DPS Maintenance Director Kenneth Barnes and his team to install and maintain innovative large-scale stream restoration and stormwater projects at Southern High School and RN Harris, as well as smaller BMPs like rain gardens, critical area plantings, and cisterns at Jordan High School, Lowes Grove Middle School, Morehead Montessori, Northern High School, and more. DPS Maintenance staff has assisted the District in identifying schools with stormwater management needs, coordinated the use and maintenance of these projects, and had a hands-on role in using heavy equipment to excavate and prepare sites to make it possible for teachers, students, and volunteers to install projects as part of the BETC Summer Green Infrastructure Program. Thank you DPS Maintenance for being an excellent partner in conservation over the years and into the future!



DPS Maintenance Director
Kenneth Barnes accepting the
2017 Urban Conservation
Award presented by Durham
SWCD Board Supervisor
Ray Eurquhart

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2017 Farm Family of the Year

Each year the Durham Soil and Water Conservation Districts gives out an Outstanding Conservation Farm Family award recognizing a farmer and/or farm family who is actively taking the initiative to implement sound, innovative and cost-effective conservation techniques, and are actively involved in conservation education. The 2017 recipient of this award is Caywood Farms from Rougemont, NC.

Caywood Farm has been owned and operated by Neil and Catherine Frank since the early 2000's. It is a 329 ac farm in northern Durham County, bordered by almost a mile of the Flat River (which flows into Lake Michie and then Falls Lake). There are 114.91 acres of cropland that has, over the years, grown tobacco, wheat, corn and soybeans. All crops that can result in major losses of top soil that eventually wash into nearby bodies of water, negatively impacting water quality. However, in 2006, the Franks converted over 47 acres under production in a conventional tillage system to a conservation tillage system, utilizing No-Till, with funding from the NC Ag Cost Share Program.



Pictured left to right: Durham SWCD Supervisor, David Harris, Catherine Frank and Neil Frank

Furthermore, beginning in 2008 the farm began to transition out of row crop production and into beef cattle production, converting a total of 62.71 acres into permanent grassed pastures and hayland using NC Ag Cost Share Program funds. The remaining field acreage was eventually planting in trees, wildlife plots and grassland.

In 2011 with assistance from the NC Ag Cost Share Assistance Program, the Franks' installed 214 ft of livestock exclusion fencing to prevent cattle from accessing bodies of water on the farm, preventing eroded soil and excess nutrients (animal waste) from reaching the Flat River. They also installed an alternate watering system which consisted of a well and automated drinkers to provide clean water to cows.

The Franks' committed to promoting the future of Durham County Agriculture has seen them rent out 3 acres of cropland to a new/beginning farmer without access to land to farm. The Franks have also played host to a Farmer Training Breakfast event aimed at beef cattle producers in Durham County.

As an ultimate sign of commitment to agriculture, the Franks placed a permanent conservation easement on Caywood Farm, protecting it from development for future generations to come.

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2017 Durham County Farm Heritage Hall of Fame Award



Picture above: Larry Wooten, NC Farm Bureau President and Talmage Layton, Durham SWCD Chairman

The Durham County Farm Heritage Hall of Fame Award recognizes those individuals of the past and present, who through agriculture have made and continuing to make our county and state a better place to live and work. Annual awards will honor men or women who have been instrumental to the success and excellence of agriculture, either as a farmer or in an agriculturally related field. We desire to honor and give public recognition to those who have brought distinction to themselves, have made outstanding contributions to their professions, and whose community involvement has served as stimulus to others.

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, and owners/employees of agribusiness firms are all eligible for nomination as either individuals and/or families. Persons selected for recognition will be honored and formally inducted into the Durham County Farm Heritage Hall of Fame during the Durham SWCD's Annual Awards Banquet.

The 2017 recipient and inaugural inductee for this honor was Mr. Talmage Layton for his lifetime of support and dedication to agriculture in Durham County and North Carolina. Larry Wooten, NC Farm Bureau President was on hand to present the award to Mr. Layton at the Durham County Soil and Water Conservation District's Annual Awards Banquet on June 1, 2017. Mr. Layton has been a farmer in Durham County for over 60 years, first in tobacco and more recently farming over 200 acres in hay. He is a long-time member of the Durham County Farm Bureau Board and has served as its chair for several years. Mr. Layton also serves on the Durham Soil & Water Conservation District Board of Supervisors and is active in several county agriculture boards. Mr. Layton has served on the NC Farm Bureau State Board and several state committees. Mr. Layton is a tireless advocate for farming, agriculture and our state's natural resources. His dedication and promotion of Ag makes him an ideal inaugural candidate of this honor. The Durham County Farm Heritage Hall of Fame Award is sponsored by the Durham County Farm Bureau and the Durham County Soil & Water Conservation District.



Pictured above: Sandra and Talmage Layton

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Agricultural Development

2017 FARMLAND TOUR

On May 18, 2017: A Farmland tour for elected officials and



interested citizens was organized in conjunction with the Durham County



Farmland Board. During this

tour, discussion topics included: 1) the need for continued county funding to solicit federal and state farmland

preservation funds; 2) the watershed rules and how they affect farmers and their operations; 3) how to better engage our youth in agricultural activities, and; 4) creative ways to assist the farming community with grants and institutional food policy.

The tour began at the DPS Hub Farm, a 30-acre farm, woodland, and aquatic habitat where students, teachers and the community engage in experiential learning about agriculture, food systems, and natural science. Tour participants learned about the Hub Farm while enjoying breakfast prepared by the Northern High Culinary Arts students. Other highlights included farm visits at Southwind Farm, Prodigal Farm, Larry Ricks Farm & Durham Greens.



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FARMLAND BREAKFAST & THE NACD URBAN AGRICULTURE GRANT

The Durham Farmland Protection Advisory Board (FPAB) developed a series of informal community breakfast to show their appreciation for Durham farmers and to offer opportunities for farmers to learn more about topics that impact their operations. The District received \$50,000 from the National Association of Conservation Districts (NACD) to host this year's breakfast series. Guest speakers and topics were selected by the FPAB resulting in eight workshops:

Thursday, October 20th: Rain Water Harvesting & Conservation Irrigation
8am to 10am, Bull City Cool Food Hub & Geer Street Garden. Led by: Mitch Woodard, North Carolina State University Cooperative Extension Service.

Thursday, November 10th: Nutrient Management, Buffers & Filter Strips
8am to 10am, Durham Public Schools Hub Farm. Led by Matthew Kinane, Natural Resource Conservation Service.

Thursday, January 26th: Beginning or Transitioning to a Produce Operation
8am to 10am, Northern High School. Two local Durham vegetable producers shared their experience transitioning to produce production.

Thursday, February 9th: Local Buyer Discussion Panel & Mixer
8am to 10am, Bull City Cool Food Hub. This event had 10 produce buyers that discussed the product that they are willing to purchase from local growers.

Thursday, March 16th: Pollinators & Native Species
8am to 10am, Durham Public School Hub Farm. Led by Chris Liloia, NC Botanical Gardens, and Chelsea Thoumsin from the Pollinator Project.

Thursday, May 18th: Farmland & DPS Hub Farm Tours
8am to 10am, Durham Public School Hub Farm. A short tour of the Durham Public Schools Hub Farm was led by the DPS Hub Farm staff.

Thursday, June 29th: Backyard Rain Gardens & Wetlands
9am to 1pm, Durham Public School Hub Farm. Led by Mitch Woodard, North Carolina State University Cooperative Extension Service.

Thursday, March 2nd: A Post-Harvest Handling and Produce Grading workshop was conducted at Bull City Cool. Workshop participants included 13 farmers and three buyers for local and national food chains. The group learned how to grade and package produce to ensure safe delivery to wholesalers and direct retail markets. Farmers were able to network with potential buyers and discuss product pricing and future contracts.



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Bionomic Educational Training Center (BETC) Program

BETC is a workforce development training program with curriculum that addresses water quality via stormwater retrofit design and implementation.

Two units of curricula were developed for the BETC program: a 30-day unit on engineering rain gardens and cisterns for water quality improvements and an 11-day unit on soil and water



analysis. The curriculum provides students an opportunity to obtain hands-on work experience in E-STEM, and encourages them to pursue careers in Green Infrastructure Technology and develop entrepreneurial skills.

The program seeks to link at risk youth with jobs that pay a livable wage in Durham while developing environmental literacy. This program is possible because of the partnership developed between Durham Public Schools (DPS), the Durham District Board of Supervisors, the Executive Director of Maintenance Kenneth Barnes and his staff, Rick Sheldahl

Director of Career & Technical Education working in conjunction with Durham County Soil and Water staff.

BETC RESEARCH PROJECT & SUMMER GREEN INFRASTRUCTURE PROGRAM

This year the District received \$50,000 from The Smith Richardson Foundation and \$18,500 from the Longleaf Collective. These funds were used to provide six weeks of extended employment for six teachers; to purchase materials for the installation of Best Management Practices in the community, and; to conduct a research project with Durham Public Schools to provide initial metrics to gauge the effectiveness of the BETC curriculum for both students and teachers.



BETC RESEARCH PROJECT

Mr. Rob Matheson (Principal Investigator) and Mr. Kevin Curry (NC State doctoral candidate, Agriscience Education) were hired to develop, submit, implement, and analyze the DPS research project. The research questions posed were:

- Describe the environmental literacy of secondary students as evidenced by their content knowledge, affect, cognitive skills, and behavior.
- Describe the self-efficacy of preservice teachers as related to teaching in general and teaching environmental science content knowledge.
- Identify relationships that exist between the elements of environmental literacy and teaching efficacy of teachers.

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As part of the research project, five rain garden-related lessons (to be taught as a 5-day unit) were developed and taught during 90-minute classes at three Durham County high schools.

Lessons included:

- Identifying Water Quality Concerns
- Introduction to Rain Gardens
- Rain Garden Design
- Rain Garden Sizing
- Rain Garden Installation

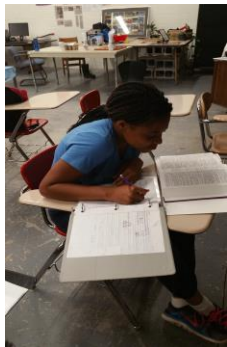


Teacher training was also included as part of the research project. A professional development workshop in February 2017 introduced the 5 day rain garden unit to DPS sixteen teachers. Follow-up to the workshop included individualized, 1-3-hour trainings for select teachers at their respective schools.

Mr. Matheson and District staff, with co-teaching assistance from classroom teachers, taught the 5 day rain garden unit to 60 students enrolled in the following courses: Agri-Science, Applied Science, Earth Science, and Horticulture. Pre- and post-surveys and tests were administered to all students for data analysis.

BETC SUMMER GREEN INFRASTRUCTURE PROGRAM

This summer, 16 students and teachers led by District staff worked to improve and protect Durham streams and rivers through the installation and maintenance of stormwater best management practices (BMPs). A total of 6 BMPs were installed this summer: a structural stormwater conveyance, rain garden, grass swale, riparian buffer, and 2 critical area plantings.



While BMP installation and maintenance was the focus of most of the physical work this summer, the students and teachers also spent time in the classroom. It was important to learn the vocabulary and theory behind the BMPs, in addition to creating opportunities to develop financial and time management skills.

Every afternoon, the students recorded a reflection on the morning's activities in their journal. The students learned and used vocabulary words they had learned from previous days such as "aeration," "BMPs," "cisterns," and "sediment." The journaling helped students understand the importance of their work, practice writing skills, as well as provide some fun memorabilia of the summer.

Time in the classroom also allowed students to track the spending during the summer to practice budgeting skills. They maintained personal check registers and updated it each day to reflect the daily costs of bus transportation and supplies used on each site. Students also learned how to use google maps to calculate the bus mileage each day.

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Students also gained a broader understanding of the importance of their work by discussing global water quality. Students calculated their own water footprint, watched a documentary on water access in other parts of the world, and completed labs to analyze the water quality of local streams. Students even virtually visited wastewater and drinking water treatment centers to learn how water is cleaned for human use.

Finally, field trips were included in the summer program to introduce students to potential career opportunities in horticulture, agriculture, and stormwater management. The team visited a large-scale nursery, an organic farm that grows hydroponic produce, traditional agricultural farms with produce and animals, and the NC Botanical Garden.



National Association of Conservation Districts (NACD)

2017 Presentation

The NACD held its annual meeting in Denver, Colorado from January 29th to February 2nd, 2017. NACD offers a number of informational sessions during the meeting, focusing on the work of districts across the country. Sessions address natural resource issues as well as operations, funding, new technologies, and partnerships. This year the Durham District was invited to present at the Urban Agriculture breakout sessions.



The Durham District Urban Ag Program was highlighted on Tuesday, January 29th at 1:30 pm, with Mike Dupree, District staff, and Amy Jenkins, OCS Teacher from Southern High, presenting on the BETC program to 42 members of the conservation community. The two shared the development of the BETC program- a Durham County Strategic Plan Initiative- and the progress that it has made over the past three years. The program's primary goals are to increase student performance and interest in the agricultural sciences; to encourage them to enter the agricultural workforce, and; to introduce

students to an agribusiness model that specializes in commodities for Green Infrastructure. The program addresses urban non-point source pollution, inspires young leadership, and has encouraged participation by community members, funders, and community development corporations in the program. Several members of the audience contacted staff after the presentation requesting additional information about BETC.

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Impaired Stream Improvement Program (ISIP)



The ISIP program seeks to implement conservation best management practices on impaired streams in low income neighborhoods. The projects target streams with low performance scores on the state 303d list. Several different conservation best management practices 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 for use with this program based on the 2014 Income Limits for Durham-Chapel Hill, NC HUD Metro FMR Area (U.S. Department of Housing and Urban Development).

This year the District entered into two contracts with qualifying landowners. The contracts specify 5-year maintenance requirements that landowners must abide by for all installed practices, beginning once construction is completed. The Durham District contracted with CFB Contracting, LLC -a certified, insured environmental contractor- to implement the BMPs designed by Durham SWCD staff for a total cost of \$20,000.

The projects were installed at the following locations:

1. Rollingwood Dr., Third Fork Creek, Jordan Lake/Cape Fear watershed
2. Shrewsbury Dr., Third Fork Creek, Jordan Lake/Cape Fear watershed

The two projects stabilized 210' of streambank and enhanced the streams with 3000-square feet of riparian buffer. These BMPs reduce nutrient and sediment delivery to the impaired waterway of Third Fork Creek. Reductions are listed in the table below.

Category	Reductions
Total Soil Loss (tons/year)	51.85
Nitrogen Reduced (pounds/year)	12.4
Phosphorus reduced (pounds/year)	3.4
Impervious Area Treated (acres)	1.3

In addition to the water quality reduction benefits, significant green infrastructure job training skills were provided to at-risk youth in the Durham community. Sixteen students from Southern School of Energy & Sustainability (SSES) gained service hours to graduate, as well as valuable work experience, installing the riparian buffer. In addition to planting the buffer, the students in the SSES Occupational Course of Study (OCS) Department also grew the riparian buffer plants as part of their Agribusiness and received \$645 in income for the plant material from CFB Contracting LLC.

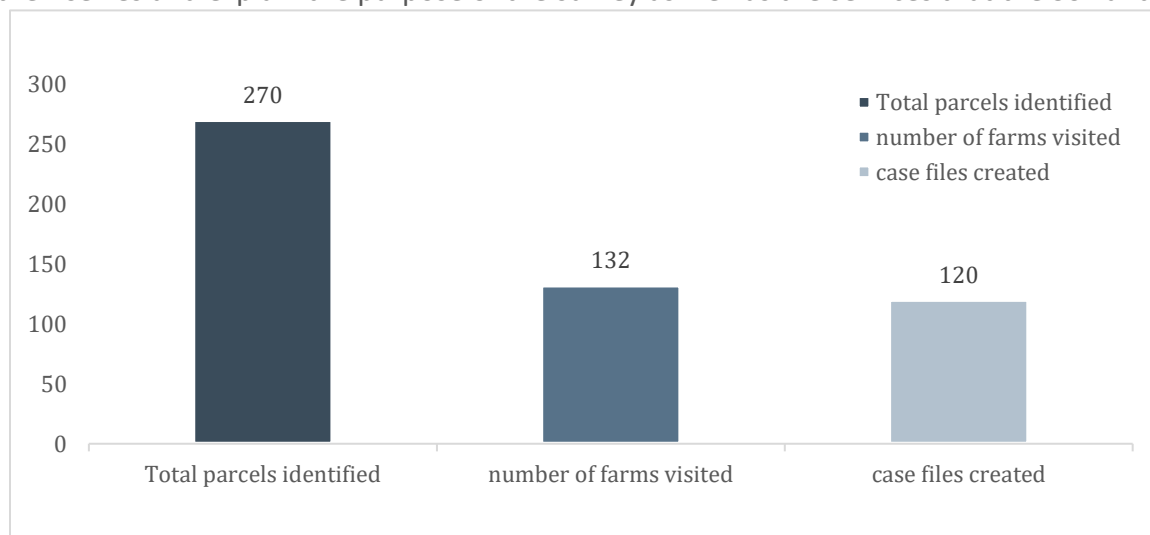
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Watershed

The Durham Local Advisory Committee met on April 20, 2017 for the annual review of crop data and discussed the Local Nutrient Control Strategy as outlined by Falls Lake Reservoir Nutrient Management Strategies. Durham farmers reported 2,116 acres of crop land in crop year 2016. The Nitrogen Loss Estimate Worksheet (NLEW) that was compiled has indicated that the nitrogen losses from Durham farmers exceeds the 20 percent reduction according to the Phase I mandate. Also, according to the tax records, Durham County lost 360 acres of farmland to development in 2016.

Ag Surveys (by contracted services workers)

Farm inventory survey locations are identified through the Durham County Go-Maps interface. Each parcel is selected through aerial imagery then surveyed in person. The in-person aspect includes creating routes within each watershed and visiting sites individually. If the land owner is present, a Durham County Soil and Water Conservation District representative will identify themselves and explain the purpose of the survey as well as the services that the Soil and Water



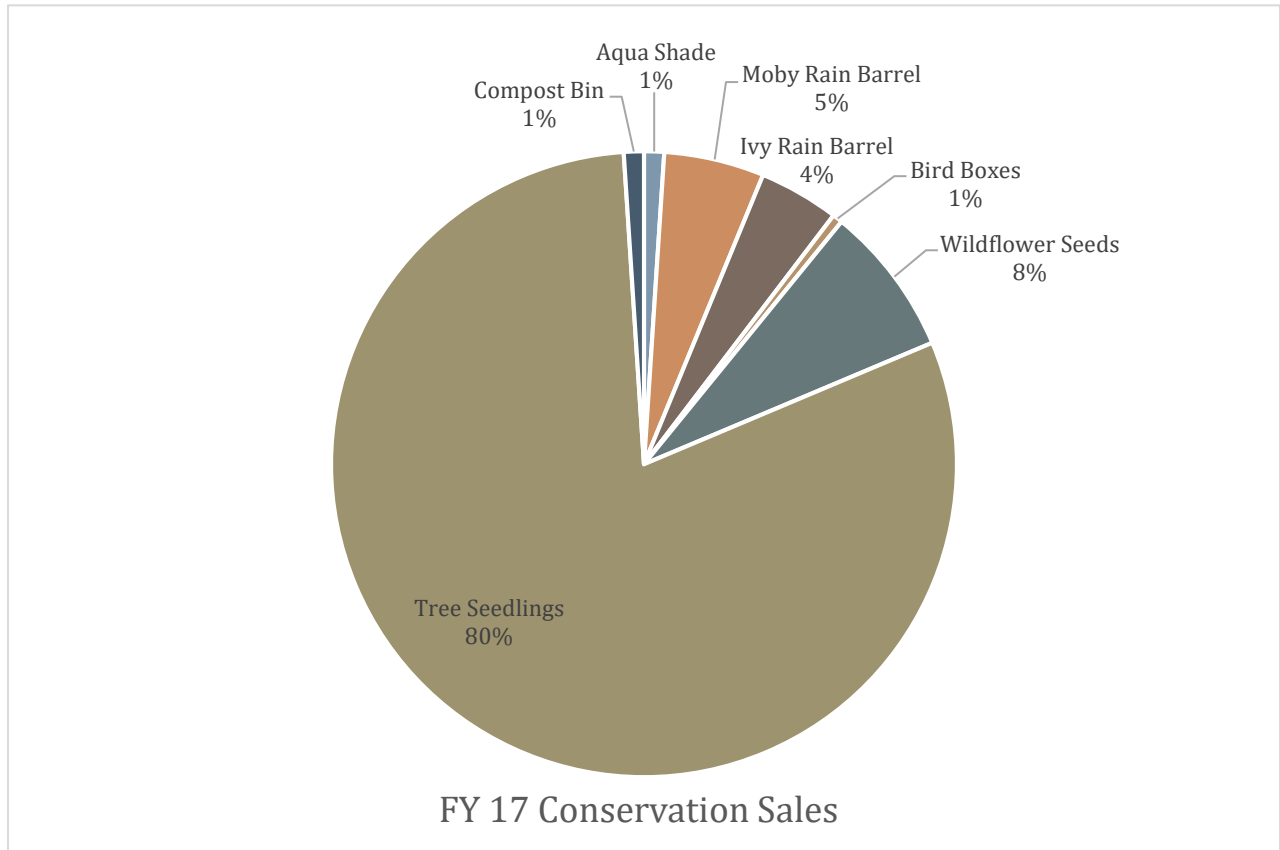
Conservation District provides. The land owner is then asked to complete the survey or to take the survey to complete at a later date if they are short on time. If a land owner is absent, then a survey and brochures are left at their front door. To date, there have been 270 parcels identified as possible farmland through aerial imagery. Of these 270 parcels, 132 farms have been visited and 120 case files have been created from site visits. Sixteen of the total sub-watersheds in Durham County have been completed through surveys and visits. These 16 watersheds are: Third Fork Creek Watershed, Brier Creek Watershed, Sandy Creek Watershed, Mud Creek Watershed, Flat Creek Watershed, Little River Creek Watershed, South Fork Creek Watershed, Little River (upper) Watershed, Camp Creek Watershed, Morgan Creek Watershed, Ellerbe Creek Watershed; Lick Creek Watershed, Panther Creek Watershed, Little Lick Creek Watershed, Little Creek Watershed and Eno River Watershed.

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Conservation Sales/Rentals

All proceeds go toward Environmental Education.

FY2017– the district sold the following items:



Durham Soil and Water Conservation
721 Foster St Durham, NC 27701
Tel 919-560-0558



Soil & Water

We're on the web at:

<http://dconc.gov/swc>

EMAIL LIST

Email (LMAROCHAK@dconc.gov) to have your name added to our email list



No Till-Drill Rental



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

Interested renters can contact the District today to inquire about renting.