

# 2017-2018

## Annual Report

### Wake Soil & Water Conservation District Wake County Soil & Water Conservation Department



**Mission:** *To protect the natural resources of Wake County through voluntary technical, educational and funding assistance to citizens, businesses, communities, municipalities and partners.*

**Vision:** *Wake County's watersheds provide clean abundant water for its citizens and environment.*



# Wake County's Conservation Team Staff and Leaders

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## **Wake County Soil and Water Conservation Department County Staff**

Emily Bateman, Natural Resource Conservationist  
John Beck, Natural Resource Conservationist  
Teresa Furr, Natural Resource Conservationist  
Sheila Jones, Environmental Educator  
Jessica Perrin, Conservation Specialist  
Dale Threatt-Taylor, District Director

## **NACD Technical Assistance Grant**

Justin Hynicka, Natural Resource Conservationist

## **USDA Natural Resources Conservation Service Raleigh Field Office Staff**

William Byrum, Team 10 Acting Supervisor

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## *Elected and appointed officials*

## **Wake Soil and Water Conservation District Board of Supervisors**

Thomas Dean, Chair  
Jennifer Wadsworth, Vice-Chair  
Marshall Harvey, Treasurer  
David Adams, Secretary  
Patrick Johnson

## **Associate Board of Supervisors**

Quincy Adams, Marilyn Grolitzer, Robin Hammond,  
Sam Laurie, Larry Perry, John Phelps,  
Carlyle Teague, Matthew Whitfield, Donnie Woodlief

## **Voluntary Agricultural District Advisory Board**

Patrick Johnson, Chair



*The demand for technical assistance continues just as sediment continues to carry pollutants to our streams.*

*Our goal is to achieve our mission by delivering excellent customer service through science-based conservation practices to improve water quality.*



# CONSERVATION PLANNING AND INSTALLATION OF BEST MANAGEMENT PRACTICES (BMPs) ON FARMS

Wake Soil and Water Conservation delivered excellent customer service to Wake County's farm community by writing USDA conservation plans for **1,511.91 acres** and implementing BMPs on **4,523.42 acres** which protected water quality and improved soil health.

The Natural Resource Conservationists assisted farmers and landowners by visiting **582 farm tracts**, wrote **29 contracts** for financial assistance and encumbered **\$292,714** in state and federal funding.

The Conservationists designed and installed **47** best management practices, providing **\$295,005** in cost share funds to Wake County farm and farm landowners.



*Request for the Department's technical and financial assistance continues to increase as farmers in Wake County have noticed new problems connected to intense weather-related events.*

# COMMUNITY CONSERVATION ASSISTANCE

## BMPs IMPLEMENTED FOR URBAN AND SUBURBAN NATURAL RESOURCE PROBLEMS

Wake Soil and Water Conservation served the urban/suburban community with specialized technical assistance for unique stormwater and stream restoration projects.

The Conservation Specialist treated **19,450 ft<sup>2</sup>** through state funds provided through the Community Conservation Assistance Program. **\$16,732** in cost share funds was provided to homeowners to repair stormwater issues.

Wake Soil and Water Conservation applied for, and was awarded, **\$100,000** of **Hurricane Matthew Relief Disaster Funds** for a multi-landowner stream restoration project in Wake Forest. Construction is pending for FY2019 while waiting for additional grant funds to expand the scope of the project.

Wake Soil and Water Conservation also applied for and was allocated **\$15,000** of cost-share funds for a stream restoration project in Cary from the state-wide Community Conservation Assistance Program. Funds are encumbered, and construction is pending for FY2019.



**Before:** Pictured is a steeply sloped, eroded area. Landowner was awarded funding through Wake District's application to the state-wide Community Conservation Assistance Program. Funds were used to establish a critical area planting and a grassed swale to control the erosion and protect water quality.



**After:** Pictured is the same area five months later after grading, adding a compost blanket and compost sock, seeding, and installing the grassed swale on the top area to convey water safely from the top of the hill down to the stream buffer below. Instead of bare eroded soil, they now have a stabilized area covered in vegetation!



# SPECIAL GRANT FUNDING

## AWARDED AND IMPLEMENTED

Wake Soil and Water Conservation successfully **completed the \$50,000 Urban Agricultural Grant awarded by the National Association of Conservation Districts**. The part-time, temporary Urban Agricultural Specialists provided outreach and awareness opportunities to Wake County residents - including youth, underserved communities, new and beginning farmers, women, established farmers and landowners. Workshops, trainings and outreach sessions were extremely productive and demand for their services outweighed the funding and time constraints of the grant.



*Lindsey Carver, Urban Agricultural Specialist, worked at one of many outreach events to promote local food and urban agriculture*

In November 2017, Wake Soil and Water Conservation District applied for a **NEW** national grant.

Of the 3,000 Soil and Water Conservation Districts in the nation only four grants were awarded in North Carolina. Wake Soil and Water Conservation District was one of the four awardees!

NACD awarded **\$63,000** in grant funds to increase conservation planning and installation of best management practices by providing technical and financial assistance to Wake County's agricultural community.



*District Supervisor Patrick Johnson's sheep herd. Patrick is assisting Wake SWCD with the implementation of a grant demonstrating various native grasses, including their ability to be resilient in extreme weather conditions.*

The Wake Soil and Water Conservation District also applied for, and was awarded, a **NEW** statewide grant for Pasture Management. The **\$2,000** grant was awarded by the North Carolina Foundation for Soil and Water Conservation.

# AGRICULTURAL LEADERSHIP AND COMMUNITY SUPPORT

Wake Soil and Water Conservation provided support and connectivity to the agricultural community through partnerships and service on various committees, boards, and initiatives.

The District provided representation and leadership by serving on the Wake County Agribusiness Council, Wake County Water Partnership, City of Oaks Foundation, Walnut Hill Advisory Committee, Wake Nature Preserve, Reimagining Nutrient Management Task Force, Land Protection Committee, Conservation Strategies Committee, Piedmont Conservation Council and many others.

Staff spoke at national conferences, participated in environmental discussion panels, contributed to regional and statewide planning for collaborative events, including the North American Envirothon. Staff continue to serve on local, state and national boards, bringing attention to **Wake County** as a destination for future conservation conferences and environmental networking events.

*District Supervisor Jenna Wadsworth attends Wake County Agribusiness Council Spring Tour.*



*Wake Soil and Water Conservation and local agency partners hosted the 13<sup>th</sup> Annual **Keeping the Farm Workshop**. Over **140** Wake County farm and forest landowners attended.*

The staff worked with the **Voluntary Agricultural District** Advisory Board to manage Wake County's VAD Program, enrolling **1,271.42** new acres into this free farmland preservation program in FY2018.



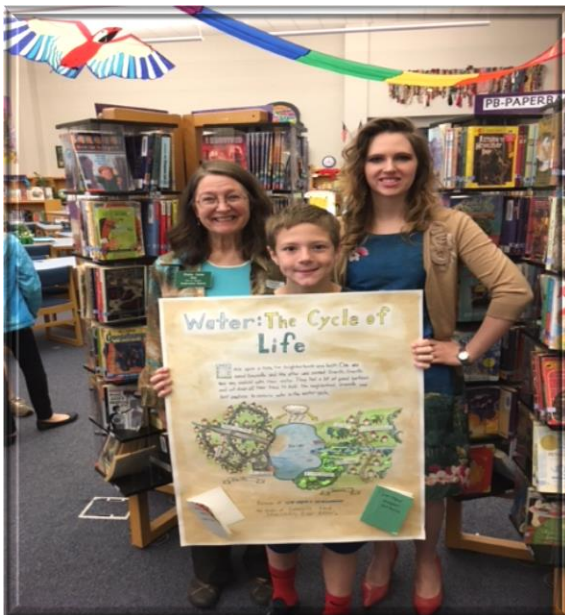


# ENVIRONMENTAL EDUCATION

## YOUTH LEARNING AND ADULT TRAINING



*High School students learn about conservation and best management practices at the annual Resource Conservation Workshop.*



Over **3,000** people participated in some form of **Educational Activity with Soil and Water Conservation staff.**

Wake County engages citizens of all ages in learning about the importance of natural resources and how to protect them. Wake Soil and Water Conservation conduct adult workshops and trainings as well as experiential youth programs.

Wake Soil and Water Conservation provided hands-on learning and educator training to students and teachers of North Carolina's largest school system. Although the Department has only one **Environmental Educator**, the impact was significant – as revealed by regional and **state winners in the Conservation Poster Contest**, selection of **six** students for scholarships to attend the week-long Resource Conservation Workshop at NC State University, support provided to the statewide mobile soils lab, engagement of **11** Wake County teams in the Envirothon competition, and two new Watershed Stewardship Schools.



*Environmental Educator Sheila Jones conducts hands-on activities for adults and youth in Wake County.*

# OUTREACH AND VOLUNTEER SERVICES

## COMMUNITY PARTNERSHIP AND ENGAGEMENT

The Environmental Educator also coordinated the **Wake County Big Sweep** program, engaging **1,122 volunteers** who removed over **13,815 pounds** of trash from streams, creeks and other waterways in the Fall and Spring Big Sweep cleanups.



*Big Sweep volunteers help clean up local waterways*



### **Combined Totals** **Fall Big Sweep 2017** **Spring Big Sweep 2018**

**1,122** Volunteers  
**2,911.5** Hours Donated  
**\$71,145\*** Value of Volunteer Time  
**25** Zone Captains  
**24+** Watershed sites  
**7** Participating Wake County municipalities:  
*Apex, Cary, Garner, Morrisville, Raleigh, Wake Forest, Wake County South – New Hill*  
**96.45** Miles of Shoreline/  
Parkland/Roadway  
**571** Acres of Park/Land Area  
**13,815.2** Pounds of Trash<sup>^</sup> collected and sent to landfill  
**5,260.0** Pounds Recyclables\* collected and diverted from landfill

*\*based on national estimate by Independent Sector +although Cary has numerous sites, it is recorded as "1" site.*

*^Estimated results by Wake County Big Sweep Zone Captains (20 lbs. per full bag)*

*Urban Agriculture Specialist Tonya Taylor(l) talks with Tami Purdue(r) owner of Sweet Peas Urban Gardens. The \$50,000 grant from NACD enabled the District to serve small niche farmers.*



# CONSERVATION INNOVATION

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*Wake Soil and Water Conservation and USDA Natural Resources Conservation Service hosted the Nuffield International Farming Scholars. Farmers from Australia, Ireland, Netherlands, Brazil and United Kingdom traveled to the US to see our conservation work in Wake County.*



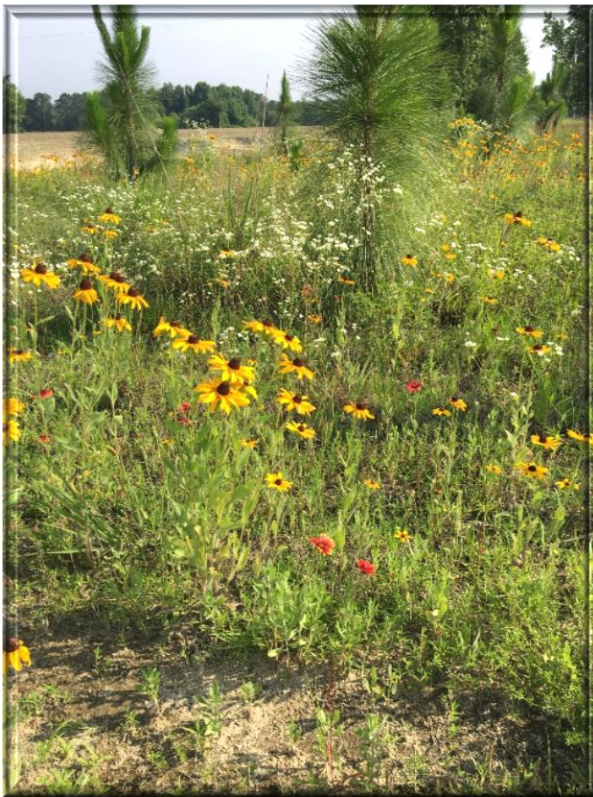
*Wake Soil and Water Conservation and USDA Natural Resources Conservation Service provide technical and financial assistance that promotes innovation in crop production and improvements in soil health. High Tunnels lengthen the growing season allowing farmers to increase production for Wake County's local food market.*



*2018 brought the first licensed industrial hemp operation to Wake County. Wake Soil and Water Conservation staff was contacted immediately and began work with our farmers to protect water quality.*



# GROWING FIELDS AND FORESTS



*Wake Soil and Water Conservation works with landowners to improve forest stands and create beneficial habitat for wildlife and pollinators.*

*This Long Leaf Pine planting, with pollinator habitat and nectar-producing wildflowers, is part of an emerging local trend.*



This year marks the second and final year that the **Wake Soil and Water Conservation District** worked on the Soil Health Grant, awarded to the District by the North Carolina Foundation for Soil and Water Conservation. Staff worked with a producer to implement a demonstration plot with a cover crop and hosted an educational workshop for producers and resource professionals. A total of **\$2,498.11** was awarded for demonstration plot implementation, workshop costs, and technical assistance consultation for this year's program.





# GROWING FARMS AND FRIENDS



**Good Hope Farm** is a cultivator farm in Wake County created to increase access to agricultural career experience. Wake Soil and Water Conservation District assisted Good Hope Farm by applying for a Corona Cares Tool Grant on their behalf.

In June of 2018, Good Hope Farm was awarded **\$1,000** worth of Corona hand tools to use on the farm. Pictured are some of the volunteers using the new hand tools to manage the gourd tunnel area at the farm!



Wake Soil and Water Conservation continues work with Triangle Land Conservancy at Walnut Hill (future agricultural demonstrations and Nature Preserve).

Cover crops, irrigation wells and pond repair are a few of the practices the District is providing technical assistance on the project.

Technical staff work with NRCS partners in the field to assess and design conservation BMPs. Ground truthing conservation practices ensures Wake Soil and Water Conservation provides the best possible service to our citizens.





# CONTINUING NEED FOR CONSERVATION



*This tobacco farm in southern Wake County requires conservation practices to prevent sediment and nutrients from reaching streams.*



Contrary to popular opinion, Tobacco remains the lifeblood of Wake County agriculture and our agribusiness economy. Wake Soil and Water Conservation works with tobacco farmers to **minimize erosion** and ensure productivity of this economically vital crop.

Wake County ranks **12<sup>th</sup> in acres grown** of Flue Cured Tobacco in North Carolina (100 counties) and 16<sup>th</sup> in the US (3,079 counties).

Wake County ranks **10<sup>th</sup>** in market value of sales of Tobacco in North Carolina and 15<sup>th</sup> in the US.

*USDA 2012 Census of Agriculture, County Profiles – Wake County, North Carolina*

