



**Soil & Water
Conservation District**

ANNUAL REPORT 2021





Soil & Water Conservation District

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Buncombe County, North Carolina - July 2021

The Buncombe County Soil and Water Conservation District's mission is to conserve the soil, water, and related natural resources of Buncombe County by providing education, information, technical assistance, and economic incentives to county citizens and by establishing new programs in concert with other appropriate agencies and organizations to meet changing needs.

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A NOTE FROM THE DIRECTOR

This past year has flown by with many exciting accomplishments and challenges faced. While we continue to navigate the COVID pandemic, our team has been hard at work serving the residents of Buncombe County.

I have made it through my first budget planning season and all-in-all I rate it a success. I am thankful to County Management and the County Commissioners for seeing fit to increase our fiscal year 2022 budget significantly. We have made gains in both the types and expanse of services we will offer as well as to expand our staff.

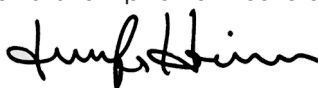
As I look forward to the new year, I also want to take time to reflect on the many achievements the Buncombe County Soil and Water Conservation District realized over the past year. Anthony, Ariel, Jessica and Taira each had shining moments. Anthony shepherded a huge streambank restoration project in Ivy Creek through the long and arduous process of multiple approvals; Ariel was able to bring the Visit NC Farms app to Buncombe County; Jessica has increased our marketing and outreach materials exponentially; and Taira lead the Nesbitt Discovery Academy's Envirothon team to state champions in the soils track! Indeed there is a lot to celebrate. And this team did it all while respecting COVID protocols.

This year also brought Avni Naik to us as a summer intern as part of the MAX internship from the Conservation Trust of North Carolina. Avni is working on her Master's degree in Environmental Studies at the University of Pennsylvania. She joined us to launch the Visit NC Farms app. I can't thank Avni enough for all she did to get the app up and running in ten short weeks. And thankfully Avni will be staying on to work on her Capstone project which will explore creating a GIS layer to identify priority farmland preservation properties and to assess how we can achieve 30% conserved land by 2030 in Buncombe County.

We were also lucky this year to have Addie Ward join us for her Capstone project for her Master's in Public Administration from Western Carolina University. Addie spent nearly five months evaluating potential funding mechanisms for conservation easements. Addie's work was well done and well received. We are grateful for all of her efforts.

Indeed we have had many wonderful achievements this past year. But all was not bright. This year we lost a talented and much loved member of our Soil and Water family and this community. The loss of William Hamilton continues to reverberate. William's friendship and commitment to conservation is to be celebrated! I personally miss him greatly, but thankfully feel his presence continuing through our work.

Finally I want to recognize and thank the BCSWCD Board of Supervisors and all of our partners without which we would not be able to provide such excellent service: the N. C. Division of Soil and Water Conservation; the USDA Natural Resources Conservation Service; the N. C. Foundation for Soil and Water Conservation; the N. C. Association of Soil and Water Conservation Districts; and the Mountain Valleys Resource Conservation and Development Council. Additionally we recognize and appreciate the support we receive from Buncombe County government and the County Commissioners. Together they all make our work possible. I am humbled to have the opportunity to continue to guide this incredible organization and look forward to the many new challenges, rewards and triumphs I am sure are waiting for

— 



Gary Higgins
Chairman



William Hamilton
Vice-Chair



David Snelson
Secretary



Louise Scruggs
Treasurer



Aaron Sarver
Board Member



Jennifer Harrison
District Director



Anthony Dowdle
Soil Conservationist



Taira Lance
Environmental Educator



Ariel Zijp
Farmland Preservationist



Jessica Hughes
Administrative Assistant



As our county continues to grow with changing needs, we are fortunate to have an outstanding staff with both technical knowledge and a passion to conserve our prime soils, water, and farmland. I also appreciate their willingness to try innovative new programs supporting our farmers and our environment; they are leaders in the state.

— Terri Wells, Buncombe County Commissioner

REMEMBERING WILLIAM HAMILTON



William Hamilton

1976-2021

Dedicated father, friend, and conservationist.

To have known William is a tremendous honor. Our Board and Staff worked closely with him over the years and the void in the heart of the Buncombe Soil & Water Conservation District will not be filled. William was a dedicated conservationist who cared deeply about the WNC mountains. When the community overlooks beautiful, open farmland or a non-developed mountain top we can all take a moment to remember that it was likely because of William's dedication to ensuring future generations would be able to explore the WNC Mountains and farms as the long-time locals remember them: open, beautiful, and captivating.

William's career accomplishments cannot be summed up in a paragraph and neither could his character. William was one of the good ones. He was a dedicated father and loved his children more than anything in this world. It was not uncommon for William to clear his schedule to ensure he could cheer on his children at their sporting events.

Indeed, many thought of William as their best friend. William had an uncanny way to make everyone smile. He was charming and kind, arguably the most kind soul you will ever have the pleasure to meet. He cared for everyone, loved everyone, and stepped up as peace maker in a sticky situation. Those who knew William are better people because of it.

At BCSWCD William was our encourager, our friend, and our mentor. Our hearts are heavy but we will continue the good work for William's legacy.



FY21 YEAR IN REVIEW

NEW STUDENT-LED
WATER QUALITY
MONITORING PROGRAM

1,594.6 ACRES
PERMANENTLY
PROTECTED

\$87.8K IN PLANNED
COST-SHARE CONTRACTS

INAUGURAL
BCSWCD BOARD
SCHOLARSHIP

72 REVIEWED EROSION CONTROL
AND STORMWATER PLANS

1ST PLACE IN SOILS
AT THE NC STATE
ENVIROTHON

\$990K IN GRANT
APPLICATIONS

20.9K ACRES IN
VOLUNTARY AG
DISTRICT

1.2K NEWSLETTER
SUBSCRIBERS

2K ACRES IN
ENHANCED VOLUNTARY
AG DISTRICT

NEW BRANDING

VISIT NC FARM
APP LAUNCH

\$7.5K IN SEEDLING
SALE PROFITS

MARKETING & OUTREACH

Despite the ongoing challenges from the COVID-19 pandemic our staff went above and beyond our normal call of duty. We implemented innovative ways to stay connected with the community and help where we could. We took on new projects and reinvented existing programs to better serve our community. Buncombe Soil & Water is dedicated to serving our community and our programs showcase that.

— *Jessica Hughes*

ONLINE PAYMENT PORTALS

In July we launched our first ever equipment rental and camp WILD payment portal. Community members are now able to submit their equipment rental payments and camp WILD fees online with a credit card. The on-going challenges of the COVID-19 pandemic encouraged the staff to re-imagine the Annual Seedling Sale. In February the BCSWCD staff launched their first online seedling sale. Community members were able to order seedlings online and choose a contactless pickup day. This first of its kind seedling sale was a large success and will pave the way for future sales. Indeed the payment portals are another way BCSWCD strives for innovation and providing superior customer service.

NEW DESIGNS FOR FY21

BCSWCD took FY21 to reevaluate all informational brochures, rack cards, and signs. The equipment rack card and all farmland preservation brochures received a new design as well as the Farmland preservation boundary signs. This year BCSWCD was able to design and purchase conservation easement road signs to be placed at the property of each easement. Please see pictures of easement road signs (left).

ORGANIC GROWER'S SCHOOL CONFERENCE SCHOLARSHIP

The Organic Growers School Spring Conference is a one-of-a-kind event that offers regionally specific workshops on organic growing and sustainable living. Due to COVID-19, the spring conference transitioned to a virtual conference. The BCSWCD has been a partner in years past in providing scholarships for farmers and students. In FY21 the BCSWCD Board donated \$1,500 for scholarships to the conference.



PROMOTIONAL MATERIALS

Last year BCSWCD purchased 100 hats to be given as promotional items to the community. The hats were a huge hit so BCSWCD purchased an additional 100 hats for \$750 in 2021. In addition BCSWCD added an additional style that is tailored for our female farmers. BCSWCD also funded 100 neck gaiters as an additional promotional item. Neck gaiters are versatile as they can be worn as a headband, hair tie, neck covering, mask, and more. This new promotional item was a huge hit. BCSWCD looks forward to bringing the neck gaiters back in 2022!

FARM HERITAGE TRAIL SOCIAL MEDIA

When the COVID-19 pandemic hit it forced our community to think of innovative ways to spend time outside while adhering to local and state regulations. We took to social media to give families a safe place to explore Buncombe County by taking a drive along the trail. We increased our social media interactions by 84% and gained 323 followers. BCSWCD sought the Gen Z and Millennial generation by making reels and utilizing the story feature on Instagram. With our community seeking new ways to explore Buncombe County, the Farm Heritage Trail does just that.

VISIT NC FARMS APP LAUNCH

The Visit NC Farms Phone App, developed by the N.C. Department of Agriculture and Consumer Services, connects millions of North Carolina residents and visitors to farmers and local food - one community at a time. Residents and visitors can find farms closest to them with products and activities that interest them. The app explores farms, farmers markets and local restaurants that are off the beaten path and unique to each community. Beginning June 1, 2021 Buncombe County Soil & Water District will be accepting applications for listings on the Visit NC Farms app. The app will launch in July 2021.



Soil & Water
Conservation District

Marketing & Outreach Highlights

FY 21 marked a significant upgrade in marketing materials and programs. BCSWCD continues to lead the State with new innovative ways to reach and serve our community.

ACCOMPLISHMENTS FOR FY21

- Online payment portal for equipment rentals and seedling sale
- New Branding for BCSWCD
- 1,192 Newsletter Subscribers
- Funded and Launched the Visit NC Farms App
- New Farmland Preservation Road Signs
- Over 100 promotional items given to the community



84%

Increase in social media interactions for the Farm Heritage Trail



323

New followers on social media for the Farm Heritage Trail



Conservation Conversations is absolutely excellent, extremely informative, and "uplifting" GOOD NEWS! So much exciting news to share from Buncombe County Soil & Water. You all do an amazing job informing our citizens about your great work!

- Carol Peterson



For more information on our programs please visit

www.buncombecounty.org

VISIT NC BUNCOMBE COUNTY FARMS



BCSWCD HOSTS FIRST CONSERVATION TRUST FOR NORTH CAROLINA'S MAX INTERN

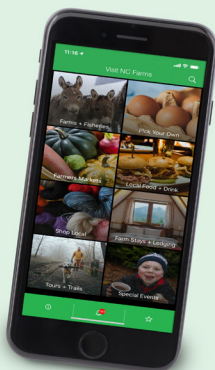
Avni Naik joined us this summer to spearhead the Visit NC Farms program. Avni started her internship in May 21 and it ran until July 31 as part of the Conservation Trust for North Carolina's Max Internship program. The internship seeks to engage young people from communities historically underrepresented in conservation – particularly of Asian, Black, Latinx, multiracial, and Native American descent. Avni successfully recruited 63 local farms and/or local businesses to join which allowed for BCSWCD to launch the app two months earlier than expected.

Avni Naik is a graduate student at the University of Pennsylvania working toward a master's degree in Environmental Studies. Her focus is on the urban environment, and she hopes to work with nonprofits or local governments dealing with sustainability and land use. Avni's interest in the environment began in high school while studying biology and ecology. This interest was furthered by frequent hiking trips to state parks and visits to the Smoky Mountains. She believes that human well-being is intricately tied to the environment that we live in, and protecting the planet's natural resources is critical for future generations.

Although Avni's great work with the Visit NC Farms app is coming to a close her work here is not done with BCSWCD. She has proposed to stay on and continue her good work through her capstone project this fall for graduate school.

Connect with local agriculture by downloading
the Visit NC Farms app today!

Point your phone's
camera to download
the app



“**Avni was an absolute pleasure to work with and made the summer fly by without a worry! Her determination, dedication and persistence helped us surpass our goal of number of listings and we were able to launch even earlier than planned! It was fantastic to have her as part of our team and luckily we get to continue to work with her as she completes her Master's capstone research project with GIS to create a plan for land conservation in Buncombe County.**”

— *Anil Zija*





ENVIRONMENTAL EDUCATION

Environmental and outdoor learning boasts an array of scientifically proven benefits for students, from increased environmental stewardship and awareness, to improved social, academic, physical and psychological health. The challenge for FY21 was to administer environmental education safely, following all guidance of Strong Schools NC. We embraced the challenge with a very successful year of innovative programming. We offered campus environmental field days and a wide range of outdoor classes to students and citizens of Buncombe County. Buncombe SWCD was awarded \$10,000.00 in grant funding from the Pigeon River Fund to administer a winning year of Envirothon and Camp Wild. Finally, we sold 9620 plants/seedlings making a net profit of \$7528.05 during the SWCD Seedling & Plant Sale. This annual event not only benefits the community with economically priced plants but also raises money for environmental education.

— *Taira Lance*

ENVIRONMENTAL EDUCATION FIELD DAYS

During FY21 Buncombe SWCD staff was challenged to design a new way of learning that complied with local and state COVID-19 protocols. Three environmental education field days for Pisgah Elementary, Mount Pisgah Academy and Reynolds Middle School were hosted outdoors at different locations. Buncombe County Schools were unable to travel for field trips so we brought Environmental Field Days to them. Mount Pisgah Academy is a private school and was able to transport students to the Big Ivy Community Center for a special day of stream exploration. Students rotate through stations such as stream ecology, wildlife, soils, forestry, reptile ecology, team building, recycling and current environmental issues. Field days offer students hands on experiential learning in the natural environment. A total of 800 students and teachers participated in our Environmental Field Days.

AREA 1 ENVIROTHON

On March 24, five teams from Nesbitt Discovery Academy High School competed in the Area 1 Envirothon. Our teams did well with team E.N.V.I.R.O.T.H.O.N. placing 2nd in the competition. The Area 1 Competition prepares students to compete at the state level. When the scores for the competition were tallied, Buncombe County held four of the top five places and were moving on to states!



ENVIROTHON SOILS TRACK WINNER

Buncombe County is home to the state winners of the Soils track at the 30th annual NC State Envirothon! Congratulations team E.N.V.I.R.O.T.H.O.N.! The 30th annual NC State Envirothon was held virtually on April 16, 2021. Due to COVID restrictions, this year's competition saw teams competing in their home counties and submitting their test responses for each testing track. For the first time ever at the state competition, Buncombe County won the soils track! Members of team E.N.V.I.R.O.T.H.O.N. are: Jackson Hall (team captain), Natasha Luchinina, Madeline Oakes, Sarita Schneider and Isabella Field. Each student received a medal and a cash award of \$100!

ENVIROTHON COMMUNITY SERVICE PROJECT WINNER

Students from Nesbitt Discovery Academy, a top-ranked STEM school, snags 1st place at the NC Envirothon Community Service Learning Project competition for their water quality monitoring project. The pioneering initiative allows students to independently monitor water quality for potential issues while collaboratively identifying and implementing solutions.

STUDENT-LED WATER QUALITY MONITORING

A first-of-its-kind program has local students keeping an eye on Buncombe County water quality while getting hands-on learning experience. Our partnership with Martin L. Nesbitt Discovery Academy is creating North Carolina's first student-led water quality monitoring and improvement project. The pioneering initiative allows students to independently monitor water quality for potential issues while collaboratively identifying and implementing solutions.

INAUGURAL BCSWCD COLLEGE SCHOLARSHIP

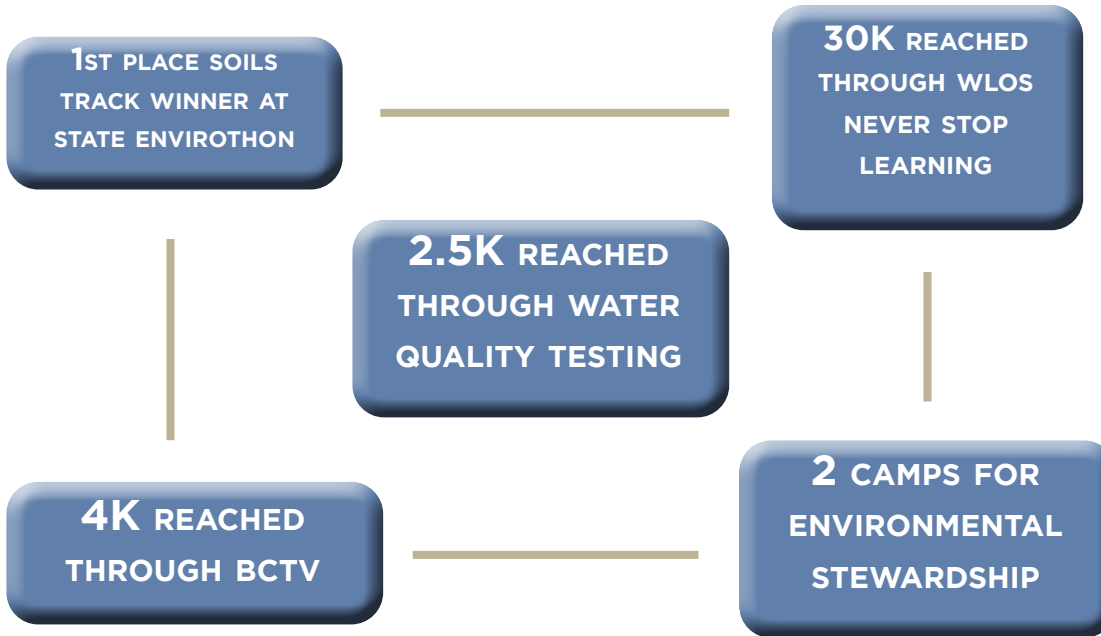
In FY21 the BCSWCD Board of Supervisors approved a new college scholarship program for one student pursuing a degree in environmental studies. One student will be selected by the BCSWCD Board to be awarded \$1,000 to go towards tuition and fees. Eve Currens was announced as this year's scholarship recipient. Currens has participated in Envirothon since 7th grade and looks forward to pursuing a degree in environmental studies at Kenyon College starting this fall.

SEEDLING SALE

With the on-going COVID-19 pandemic the odds were stacked against the seedling sale, but the BCSWCD staff was determined to bring the seedling and plant sale back in 2021. The BCSWCD worked tirelessly together with state and federal guidance on how to offer the sale. In February the staff launched their first ever online ordering website where community members could place their order and reserve a pick-up time on March 4th or 5th. The District ordered 9,620 plants of which they sold them all, The District made a net profit of \$7,528.05 which was higher than years past. All profits will go towards environmental education programming.

Thanks to the innovative BCSWCD staff and the community for their on-going support in our educational programs. We look forward to seeing you again next year.

EDUCATION RECAP



FARMLAND PRESERVATION

FY21 has been a wild and record breaking year for Buncombe Farmland Preservation! We submitted more grant applications than ever before, totaling nearly million dollars in grant requests. We funded and launched the Visit NC Farms app with our first intern and we started a GIS Prioritization Farm Region Project and advised a Master's student's research project exploring funding mechanisms for conservation easements. We started monitoring our easements with a drone pilot and organized all county easement records in the LANDSCAPE software. This year we grew leaps and bounds and I am so proud of our hard work!

— *Anil Zija*

Our Farmland Preservation Program continues to grow through offering conservation easements to County farmland owners. At the end of FY21, there were 17 farms and 3 streams totaling 1,594.6 acres preserved in conservation easements.

Congratulations to Charles Fortune Farm on closing their donation conservation easement in December 2020 conserving 46.14 acres in the broad river community in Black Mountain.

NEW PROJECT

We applied for \$990,000 in grant funds from NCDA ADFP and USDA ACEP ALE easement programs to protect 164 acres on Randall Sluder Farm, Joe Ramsey Farm and Splendor Valley LLC Farm. Transaction costs for 3 easements totaling \$120,000 were funded by County Commissioners in FY21 for 2 grant funded easements for 65 acres, and one donation easement for 29 acres.

PROJECT WAIT LIST

Currently 10 easement projects are in the works and 40 farms, totaling 3,299.76 acres of farmland waiting to be conserved with BCSWCD. The limitations include staff time, transaction cost funding and easement purchase funding, thus, limiting the Farmland Preservation Program to 3-4 projects a year.

FARM FINDER

Farm Finder launched in July 2020. The purpose of this resource is to alert potential buyers to the realities of agricultural production, such as flies, sounds, odors and dust. Our goal is to transparently represent the agricultural realities to potential property buyers in an effort to both educate and to lessen the potential for nuisance lawsuits with our local producers.



Preserving our land means protecting our future.

\$990K IN GRANT APPLICATIONS

1,594.6 ACRES PERMANENTLY PROTECTED

20 FARMS PERMANENTLY PROTECTED

\$120K IN TRANSACTION COSTS

3,299.76 ACRES WAITING TO BE CONSERVED

20.9K ACRES IN VOLUNTARY AG DISTRICT

2K ACRES IN ENHANCED VOLUNTARY AG DISTRICT

299 ACTIVE IN VOLUNTARY AG PROGRAMS

For more information on farmland preservation in Buncombe County please visit www.buncombecounty.org/soil



TECHNICAL ASSISTANCE

This year had it's challenges but that did not deter the on-going support and interest in our programs. In FY21 we continued to offer timely technical assistance for the wide range of challenges landowners face while AgWRAP and Cost-share programs remained in high demand. As development pressure increases in Buncombe so has the need for our advisory review of erosion control and stormwater plans. This year we also launched a new online payment portal for our equipment rentals to better serve our community. I am encouraged by the continued support of our programs.

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In addition to providing County landowners access to cost-share programs and BMP implementation, the BCSWCD provides citizens with technical assistance to address general resource concerns. Technical assistance varies greatly depending on the issue and can be anything from a telephone consultation to a site visit. In the 2021 fiscal year, the BCSWCD responded to approximately 300 inquiries for technical assistance.

The BCSWCD also provides advisory reviews for all Erosion Control and Storm Water Plans for the Buncombe County Planning Department. In the past year we reviewed and provided feedback on 72 Erosion Control and Stormwater plans.

ANNUAL SPOT CHECKS

All cost-share projects installed through the BCSWCD are state mandated to be reviewed/inspected annually while the project is in its maintenance period. Maintenance periods vary with the program, but generally are 10 years . Each year 5% of the active contracts are selected at random for review.

Due to the COVID-19 crisis, board participation was limited to only Board Vice-Chair, William Hamilton, Board Member, Aaron Sarver, and Soil Conservationist, Anthony Dowdle. The 2021 spot checks were conducted on June 11, 2021 and all practices were functioning as designed.

AGWRAP

The Agricultural Water Resource Assistance Program (AgWRAP) was established to assist landowners with water use efficiency, availability and storage. This year AgWRAP initiated one contract totalling \$8,540 for a livestock well.

COST SHARE PROGRAMS

The North Carolina Agricultural Cost Share Program (NCACSP) is a program designed to help landowners install water quality improving best management practices (BMP's) on farmlands. The program provides cost-share assistance at 75% to 90% of the average cost to install the practices. Contracts remain active for up to three years. This year 7 contracts were installed totalling \$40,483 and 9 new contracts were planned totalling \$79,325.

EQUIPMENT RENTAL

In addition to providing technical assistance to local farmers, the BCSWCD has three pieces of agricultural equipment that are available to rent. Currently we have Truax Flex II seed drill, a GrassWorks weed wiper and Shaver post driver. This equipment is made available due to the generous support from the N. C. Foundation for Soil and Water and WNC Communities through a grant from the TVA Agriculture and Forestry Funds. In FY21 an online payment portal was launched to allow for renters to pay their invoice online with a credit card.

During FY21 the seed drill was used on 14 occasions to seed approximately 145 acres. The weed wiper was rented 3 times. In total the equipment rentals brought in \$1,700 to BCSWCD.



Soil & Water
Conservation District

Technical Assistance Recap

The COVID-19 pandemic didn't stop BCSWCD from helping the community with technical assistance.

ACCOMPLISHMENTS FOR FY21

- Online payment portal for equipment rentals
- 72 Erosion Control and stormwater plans
- 300 phone and in-person site visits
- 9 planned contracts
- \$1,700 in equipment rental income
- \$40,483 in installed contracts



7
installed contracts



\$79,325
in planned contracts



"The equipment rental program has been very beneficial to us and has kept our farm from having to take on that investment. Anthony Dowdle is always more than helpful to make sure we have what we need and that the seed drill is set up for our farm. These equipment rentals are a huge service to our farming community."

- Bart Ramsey



For more information on our programs please visit

www.buncombecounty.org

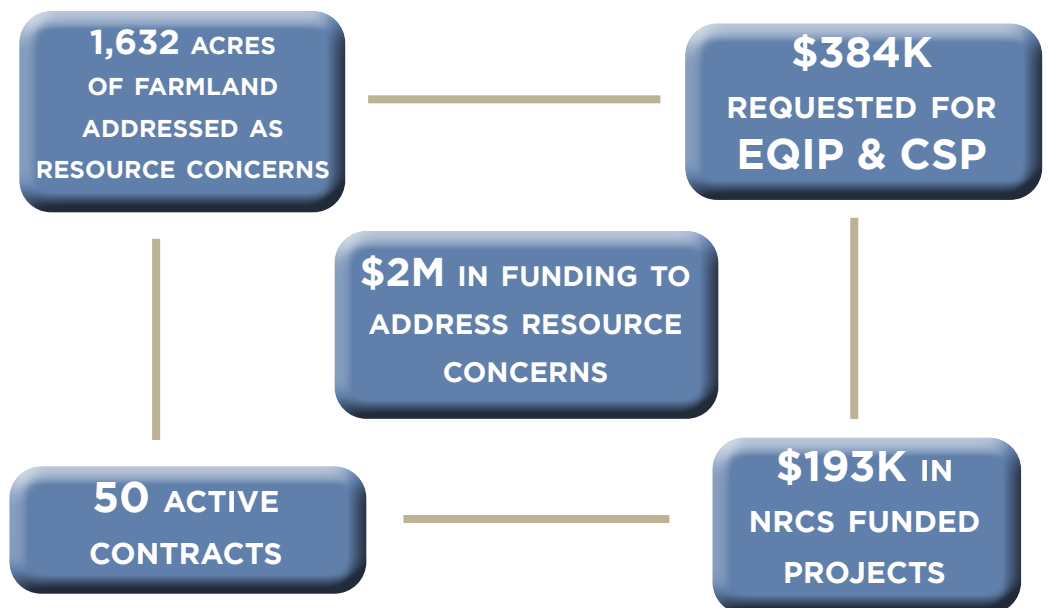


FEDERAL PROGRAMS

The USDA-Natural Resources Conservation Service Field Office in Buncombe County processed 51 applications for their programs, Environmental Quality Incentives Program (EQIP), Regional Conservation Partnership Program (RCPP) and Conservation Stewardship Program (CSP) in FY21 totaling \$384,095. NRCS staff wrote a total of 11 contracts totaling \$193,229. This is a major improvement over the numbers from previous years and will benefit many landowners and agricultural producers in Buncombe County.

— *John Ottinger*

NRCS RECAP



ACTIVE CONTRACTS

The total of “Active” federal contracts on Buncombe County Agricultural operations increased to 50. These contracts contain \$2,017,450.00 in funding to address resource concerns on 1,632 acres of farmland in Buncombe County.

These contracts include conservation Best Management Practices that address soil erosion, water quality, pasture management, soil health, streambank erosion, plant productivity, wildlife habitat, cropland management and forest health resource concerns.

REPORT SUMMARY

In a snapshot FY21 was a great year. BCSWCD learned from FY20 to be on their toes and ready for anything. FY21 is proof of that. FY21 may have thrown some curve balls but the BCSWCD staff navigated the global pandemic with ease. Not only did the staff continue to provide normal programming and assistance but they also stepped up to fight the corona virus head on. The District staff worked countless hours in the EOC, COVID-19 tracing, and the vaccine clinic to ensure community safety. We all know the BCSWCD staff is amazing but they amazed us once again with their dedication and commitment to Buncombe County during the pandemic.

BCSWCD leveraged \$990,000 in funds for agriculture easements and increased our conserved acres to 1,594.6 in Buncombe County. Despite the global pandemic environmental education programs were able to adapt and continue. For the first time ever at the state competition, Buncombe County won the soils track! BCSWCD pioneered a new initiative that allows students to independently monitor water quality for potential issues while collaboratively identifying and implementing solutions.

Our seedling sale was unlike any year. We adapted to local and state COVID-19 protocols and moved our sale to an online order with a contactless pick-up. The seedling sale sold over 9,000 seedlings and plants and profited \$7,528.05.

Our technical assistance programs continued and brought in over \$128,348 in leveraged funds for 17 cost-share and AgWRAP contracts. Our equipment rental program was a success bringing in \$1,700 while also adding a new payment portal to better serve our community. This is only a small portion of the success for BCSWCD.

Thank you to all our partners and Buncombe County Government for your continued support of our programs. Without our partnerships, FY21 would not have been as successful as it was!

For more information regarding BCSWCD programs please visit: www.buncombecounty.org/soil

