



Anderson County
SOIL & WATER
CONSERVATION DISTRICT



KINDER MORGAN GRANT REPORT

Anderson Soil and Water

Conservation District

- 2022 / 2023 -



Written By
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Education & Outreach
Coordinator

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www.andersonswcd.org

ABOUT OUR GRANT



Anderson County
SOIL & WATER
CONSERVATION DISTRICT



The Goal of Our Grant Project

ASWCD's goal for the 2022- 2023 Kinder Morgan Grant Project was to enhance our efforts in outreach and education to meet our mission of natural resource conservation for the next 3 years in Anderson County by...

- (1) Increasing water quality and land use education within the Broadway Creek Watershed by implementing "water trunks," K-12 & adult programming and a pond management workshop
 - (2) Offer publicly accessible water data and data collection opportunities
 - (3) Support SC AAS by supporting the adoption of 2 new sites, host yearly workshops/trainings, and support the program overall in the county
 - (4) Update access to databases on our public website with maps to support citizen science initiatives like SC AAS and Know Your River.
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ABOUT OUR PROJECT

Our project accomplishes the mission of the Water Council by providing Anderson County schools and community members with 11 new water related education programs, 7 “water trunks” accessible to all citizens and schools, support of citizen science programs such as SC Adopt-A-Stream, CoCoRaHs, and Know Your River Database, growth of online platforms to encourage community engagement with water data collection, and SC AAS site adoption on significant creeks within the Broadway Creek Watershed with a long history of sewer overflows and bacteria within.

INITIAL GOALS

As a group, we plan to hold a total of 3 programs/workshops/tours each month totaling 36 programs/yr ~ 25-30 participants per program. This totals to 900 - 1,080 persons reached/year through the grant with an additional 25+ people through 1 pond management program held by Clemson Extension and ASWCD every year in Broadway Creek Watershed. Digitally reached includes ASWCD website, SC Adopt-A-Stream site, and newsletters ~ 1500 persons. Water Trunks will also be implemented for each school district as well as two located in the ASWCD office.

NUMBER OF PEOPLE/STUDENTS SERVED



Our education and outreach programs reached a large quantity throughout the county and beyond so far this year! We still have two months left in the year to continue implementing these new and improved conservation focused education programs. Below is an overlook of all of the education programs held so far in 2023!

Education Programs and Outreach Records

Date	Program Name	Location	Program Type	Age Group	Hrs	# of Participants
January						
1/28/2023	Seed Swap Anderson Library	Anderson Library	Gardening	All	2	54
1/30/2023	The Incredible Journey	Anderson County Disability Group	Project WET	Adults	3	90
February						
2/15/2023	Homeschool Program Melia Austin	413 Old Georgia Rd. Pelzer, SC 29669	Soils	Ages 5-10	1	16
March						
3/15/2023	Farm Day	Crescent High School	Watersheds	3rd grade	5	183
3/17/2023	Women in Agriculture Program	Anderson Library	Agriculture	Middle School	2	10
3/23/2023	Pop-Up Seed Library Belton Branch	Belton Library Branch	Seed Library	Adults	2	20
3/23/2023	Native Plants Program	Anderson Library	Horticulture	Adults	1	23
3/30/2023	Rain Barrel Program	Pendleton Library	Rain Barrel	Adults	1	4
3/31/2023	Seed Library Program	Belton Girl Scouts Group	Seed Library	Elementary	2	25
April						
4/1/2023	Barrels and Beer	Carolina Baurnhaus	Water	All	3	40
4/6/2023	Iva Pop-Up Seed Library	Iva Library Branch	Seed Library	All	1	19
4/11/2023	Belton Pop-Up	Belton Library	Pop-Up Seed Library	All	1	10
4/13/2023	Honea Path Pop-Up	Honea Path Library	Pop-Up Seed Library	All	1	15
4/13/2023	Citizen Scientist Program	Anderson Library	Citizen Scientist	Adults	1	3
4/20/2023	Williamston/Lander Pop-Up	Williamston Library	Seed Library Pop-Up	All	1	19
4/21/2023	Homeschool Program: PLT Lesson	Anderson Library	PLT	K-12	1	30
4/21/2023	Pendleton FFA Farm Day Booth	Pendleton High School	Water Resources	9 - 12 & 2nd Grade	6	75
4/22/2023	Earth Day Informational Booth	Anderson Library	Seed Library & Water	All	2	57
4/28/2023	SC Envirothon Competition	Sandhill REC Columbia, SC	Natural Resources	High School	4	60

NUMBER OF PEOPLE/STUDENTS SERVED



Education Programs and Outreach Records

Date	Program Name	Location	Program Type	Age Group	Hrs	# of Participants
May						
5/4/2023	Piedmont Pop-Up	Piedmont Library	Pop-Up Seed Library	All	1	15
5/11/2023	Pendleton Pop-Up	Pendleton Library	Pop-Up Seed Library	All	1	25
5/18/2023	Ag and Art Day	Riverside Middle School	Agriculture	Middle School	5	150
5/18/2023	Powdersville Pop-Up	Powdersville Library	Pop-Up Seed Library	All	1	16
5/25/2023	Gardening and Salsa Making	Anderson Library	Gardening	Adults	3	14
June						
6/6/2023	Anderson Farmers Market	Anderson Farmers Market Downtown	Seed Library and Water Resources	All	3	20
6/16/2023	SC AAS Training with Jill Chapman Group	Tri-County Tech	SC AAS	Adults	6	17
6/15/2023	Rain Barrel Program (with sale)	Anderson Library	Rain Barrel	Adults	1	16
6/21/2023	Incredible Journey Lesson on Water Cycle	Anderson Disability Class	Water Cycle	Middle School	1	7
July						
7/11/2023	Soil Composition Lesson with Youth Foundations Home for Children	Youth Foundations Home for Children	Soil Composition	Middle and High	3	40
7/18/2023	SC State Extension 1890 Explorer Camp	Littlejohn Community Center	Water Program	Kids	1	56
7/20/2023	Anderson Regional Joint Water Tour	ARJWS	Water Program	Adults	1	20
August						
8/8/2023	Rain Barrels and Rain Garden Program	Lander Library	Water Program	Adults	1	4
8/25/2023	Pond Management Workshop	JC Park Belton, SC	Water Program	Adults	3	16
September						
9/7/2023	McFalls Landing Family Day - FBL	McFalls Landing	SC AAS	Adults	2.5	40
9/11/2023	SC Adopt-a-Stream Training - FBL	McFalls Landing	SC AAS	Adults	6.5	16

NUMBER OF PEOPLE/STUDENTS SERVED



Education Programs and Outreach Records

Date	Program Name	Location	Program Type	Age Group	Hrs	# of Participants
9/22/2023	BHP Fam Day Booth for Program Promotion	Belton Honea Path High School	Water Programs	Elementary and High	8	150
9/28/2023	Lake Hartwell Association Annual Meeting	Anderson Civic Center	SC AAS and Networking	Adults	2	100
9/30/2023	LHPCW Fall Trash Pick-Up	Lake Hartwell	Clean Up Day	Families	3	165
October						
10/5/2023	Forestry Commission Wood Magic Forest Fair		Forestry	Elementary	4	150
10/6/2023	ASWCD Trash Pick-Up	Centerville Road	Clean Up Day	All	3	15
10/12/2023	Upstate Preppers Group Meeting Presentation	Belton	Rain Barrels	Adults	2	30
10/17/2023	Homeschool Wildlife Lesson	The Barn and Twin Creek Farms	Wildlife and SC AAS	Elementary and Middle	3	20
10/21/2023	West Pelzer Farm Fest Booth	West Pelzer	Water Programs	All	6	100
				TOTALS:	111	1955
					HRS	PARTICIPANTS

NUMBER PEOPLE/STUDENTS SERVED IN ANDERSON COUNTY



OVERVIEW

A significant increase in smaller scale and local education programs with homeschool groups, public schools, classrooms, libraries and community groups has been observed since 2022.

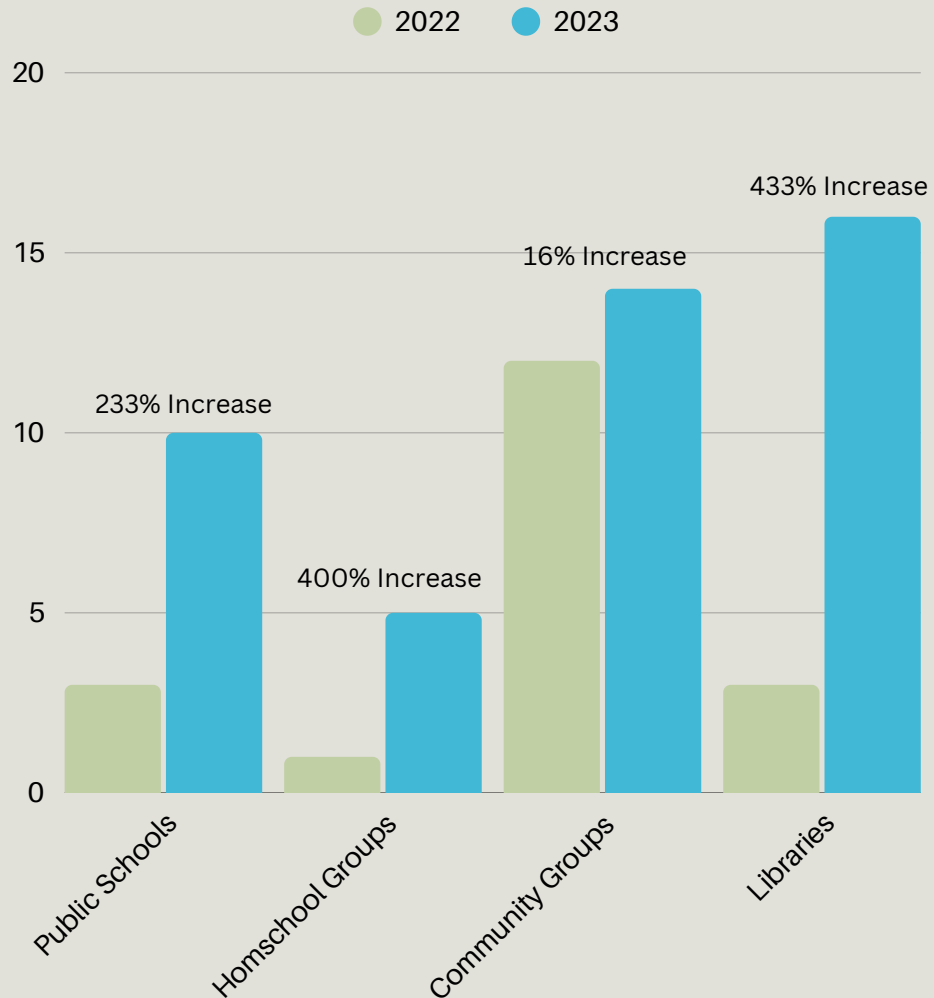
1,955 participants total in education programs

28 newly certified SC AAS volunteers

11 public schools served in Anderson County and beyond

111 total hours of programming

43 education programs and outreach events



PROGRAM TOPICS

The following are program topics focused on throughout the year:

- Water Quality
- Watersheds
- Water Cycle
- Soil Composition
- Raised Bed Gardening
- Food Sustainability through farming
- Seed Harvesting
- Horticulture
- Forestry
- Wildlife
- Rain Barrels & Rain Gardens
- Citizen Scientist Programs like SC AAS, CoCoRaHS, Know Your River, and Frog Watch



GROUPS REACHED AND PARTNERSHIPS MADE



- Anderson County Disabilities and Special Needs Board
- Anderson County Public Schools
- The Barn and Twin Creek Farm Homeschool Group
- SC Extension 1890 Summer Camps
- Tri-County Technical College
- Anderson County Farmers Market
- Anderson County Libraries and Branches
- Carolina Bauernhaus
- Youth Foundations Home for Children
- Littlejohn Community Center
- JC Park in Belton, SC (City of Belton)
- Anderson Civic Center
- Lake Hartwell Partners for Clean Water
- Clemson Extension
- Upstate Forever
- Anderson Regional Joint Water System
- Savannah River Keeper
- Town of West Pelzer

PUBLIC SCHOOLS SERVED

- Wright Elementary
- BHP High School
- Belton Middle School
- Anderson Institute of Technology
- Wren Middle School
- Starr-Iva Middle School
- Crescent High School
- Riverside Middle School
- Pendleton High School
- St. Joseph's Catholic School
- Calhoun Academy of the Arts

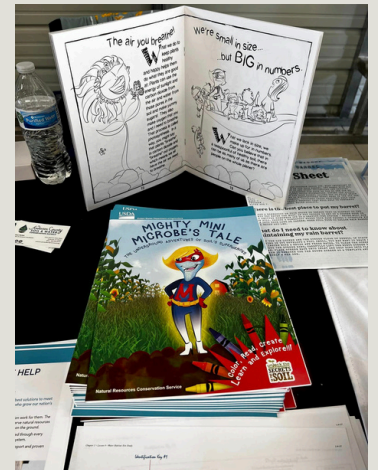
Quote from Anderson County Disabilities and Special Needs Board about our new programs:

"Please share with Kaleigh and Alex! You all were amazing. Thank you again for bringing it to us! It was so good the individuals are already asking when you guys are coming back. Know that you all made a difference in their day today!"

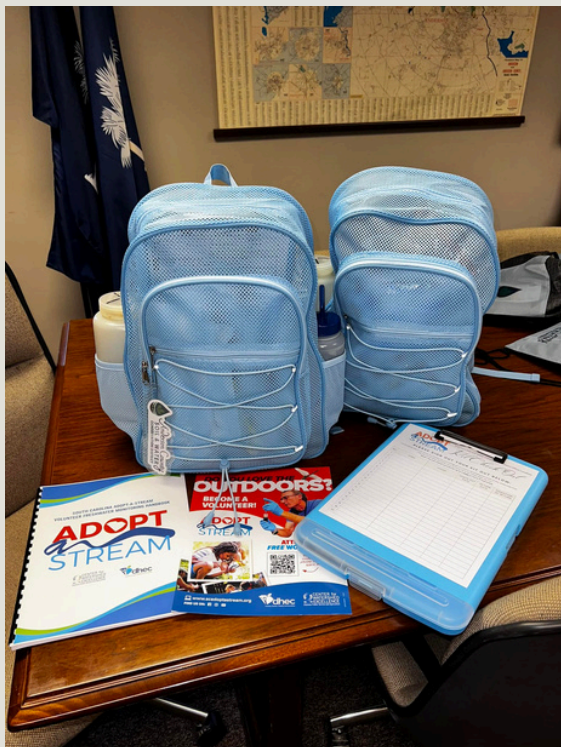
*Thanks again,
Eileen*



PROGRAM PHOTOS



SC ADOPT-A-STREAM PHOTOS



FREE WORKSHOP
Become a certified volunteer water quality monitor!

Monday, September 11th
9 am-3 pm

McFalls Landing
Anderson, SC
29621

[**CLICK HERE TO RSVP**](#)

Be prepared to get your feet wet in a shallow stream (rubber boots recommended) and bring a lunch & water!

TRAINERS
Steven O'Shields
oshiel3@clemsun.edu
Anaston Porter
anaston.porter@andersonsc.org

www.scadoptastream.org

ADOPT a STREAM


VOLUNTEER TRAINING FOR FRESHWATER STREAM MONITORING



You don't need to be an environmentalist, fisherman, or scholar to become a water quality monitor! All are welcome to learn how to collect data that can help protect and restore freshwater streams.

This training will provide classroom and hands-on instruction for volunteer monitors on how to: select a monitoring site, use equipment properly, collect samples, test water quality, enter data, assess stream conditions, and practice safety in the field.

This workshop focuses on physical, chemical, and bacterial monitoring. You will learn about stream habitat and pollution sources, and practice testing pH, dissolved oxygen, water clarity, and E. coli. Certified volunteer water quality monitors can then adopt a stream to sample monthly.

You will be emailed more information after you [sign up](#) for the workshop.



 CENTER FOR WATERSHED EXCELLENCE
 dhec
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



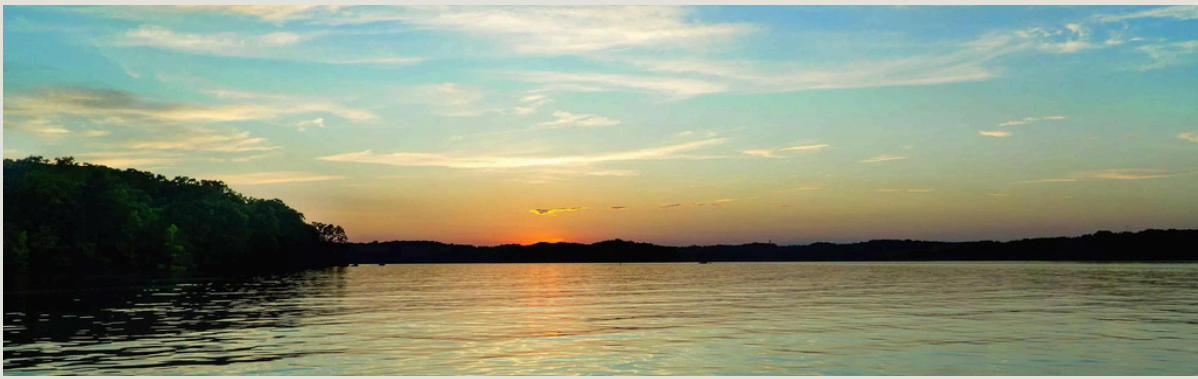
DID THE PROGRAM/PROJECT ACHIEVE THE OBJECTIVES AND OUTCOMES OUTLINED IN YOUR APPLICATION?

Anderson Soil and Water Conservation District worked diligently to implement new education programs throughout the year, host a pond management workshop for the Belton area in partnership with Clemson Extension, become certified to host freshwater training workshops for SC AAS, establish “Water Trunks” throughout the county, and promote water quality databases like SC AAS and Know Your River Database to new volunteers. We were very successful in implementation of 11 new water related education programs that helped teachers in Anderson County meet SC State Education Standards using Project WET, WILD and Project Learning Tree Curriculum. The district utilized funding to help purchase support materials for the programs and outreach materials for booth events at local agriculture fairs and school fairs.

SETBACKS

- Hiring of an intern for fall of 2023 proved to be difficult with the timeline set to change positions. Many students already had internships lined up, or were not interested in fall internships. Low response rates have encouraged us to look into different approaches for promotion of the position in the future.
- Price changes for a small number of items made it difficult to stay within budget. In the future, we hope to have less materialistic items needed for purchasing and more focus on sustainability of the programs we created in year one.
- Mileage fluctuation for district director and intern. We have lowered the asking amount in mileage for 2024.
- We discovered we only needed the ArcGIS Desktop Version to support the map creations we needed for the district. This line item ask has been lowered for 2024.





PROJECT FUTURE

The Anderson Soil and Water Conservation District Citizen Scientist Initiative continues to develop and grow throughout 2024. This upcoming grant year we have applied with the Anderson County Watershed Protection Council to continue the support of:

- Our education and outreach programs through the district
- Improving “Water Trunks” for educators keeping them supplied throughout the years to come
- Support the community with a paid internship available to high school and college students
- Host SC Adopt-a-Stream trainings in Anderson County
- Support the growth of Know Your River Database
- Look at the possibility of offering an application system for streambank repair workshops within the Broadway Creek Watershed

We are working to make our education programs sustainable, even after the funding of the Kinder Morgan Grant has ended after year 3. Many of our materials purchased can be used multiple times and will continue to provide the district with a way to offer programs for years to come. The main focus of longevity will be supporting the paid positions with the district including the Education and Outreach Coordinator Position and the District Director. We plan to accomplish this by attending county council meetings to share the progress made by our district in hopes of increasing funding support. We also apply for several other small and local grants each year that help with our programs.

By the end of the grant funding period, the District hopes to be self sufficient and growing outreach programs in the county. We hope to be a resource for the county where citizens can come learn about water quality initiatives and become a solution that helps keep our waterways clean!



Tangible Results of the Project

The Kinder Morgan Citizen Scientist Initiative Grant helped produce and allow for the following outcomes at ASWCD:

- **District Employee Support:**

- Employee salary support, paid mileage and networking support for 2 district employees to implement water education on the ground in Anderson County
- Conferences and meetings attended in 2023:
 - SE Association of Conservation Districts Conference in Savannah, GA
 - Monthly meetings of Lake Hartwell Partners for Clean Water (a non-profit in Anderson County)
 - Quarterly meetings of Anderson Pickens County Stormwater Partners
 - Friends of Broadway Lake Annual Meeting
 - SC Conservation Districts Employee Training and Networking in Columbia, SC
 - SC Adopt-a-Stream Training for the Education and Outreach Coordinator to become a certified trainer for Anderson
 - Project WET, WILD and Learning Tree Trainings



- **Paid Internship Opportunities in the Natural Resources Field:**

- Tailored towards high school students and college students interested in agriculture, water quality, soils and natural resources in Anderson County, the district was able to support 2 students (one from Anderson University and one from Pendleton High School)
- Each student gave written reports monthly on their accomplishments and what they learned throughout the semester.

- **SC Adopt-a-Stream:**

- 1 new SC AAS kit for Friends of Broadway Lake and a training event for their members
- Replenish of ASWCD's chemicals for the 2 kits in our office
- Purchase of training supplies such as micropipette tips, thermometers, gloves, 30 new training manuals, SC AAS t-shirts for volunteers, 3M petrifilm plates, and snacks/lunch/waters for the 6 hour training events.

Tangible Results of the Project

- **43 Education and Outreach Events/Programs** held in 2023 throughout Anderson County
- **Updated SC Enviroscope** materials for educational programs
- The purchase of a **soil erosion table** with materials needed to show the importance of riparian buffers.
- **Take home kits** for families to learn about SC Adopt-a-Stream and the importance of macroinvertebrates in our streams.
- **Educational prints and giveaways for community events such as**
 - BHP FFA Farm Day
 - Pendleton FFA Farm Day
 - West Pelzer Farm Fest Community Event
 - Water Education programs at libraries across Anderson County
 - Earth Day Informational Booths
 - Riverside Middle School Ag and Art Showcase
 - Anderson Farmers Market
 - Homeschool groups and Co-Ops (The Barn and Twin Creek Farm, SC State Extension 1890 Groups, Anderson County Disabilities and Special Needs Board)
- The purchase of **3 new water quality and agriculture related stand-up-banners** for outreach events
- The support of the **ASWCD Local Work Group Survey** to help prioritize natural resource concerns in the county with local citizens.



Tangible Results of the Project Cont.

SINGLE COPY PRODUCTS PRODUCED

BELOW IS A LIST OF THE SINGLE COPY PRODUCTS PRODUCED WITH THE SUPPORT OF THE KINDER MORGAN GRANT

- International Article IECA on Water Quality and Rain Barrels
- Canva Info Sheets for each education program
- ASWCD Rain Water Harvesting Brochure
- ASWCD District Brochure
- ASWCD Monthly Newsletter - 12 total
- 8 “Water Trunk” binders with lesson plans created by our interns and education coordinator
- SC Adopt-a-Stream brochure prints
- SC Adopt-a-Stream flyer prints
- SC Adopt-a-Stream training manuals
- Purchase of the following worksheets and books for students in Anderson County: Project WET “Water, Agriculture and Food” and USDA’s “Mighty Mini Microbe’s Tail”
- The purchase of 3 new water quality and agriculture related stand-up-banners for outreach events (photos in PowerPoint slides at presentation)



Tangible Results of the Project

EXAMPLE OF SINGLE COPY PRODUCTS PRODUCED

INVERT INVESTIGATORS SUMMER ACTIVITY!



Anderson County
SOIL & WATER
CONSERVATION DISTRICT

LOOKING FOR A COOL WAY TO SPEND YOUR SUMMER DAYS?

How about taking a dip in a stream and learning how to identify macroinvertebrates!! Macroinvertebrates are indicator species which means they let us know how healthy a stream is. Each macro has a different tolerance level of pollution.

- 1 GRAB A MIGHTY MACRO BAG FROM THE ASWCD OFFICE WITH ALL OF YOUR SUPPLIES.
- 2 FIND SOME FRIENDS AND A LOCAL STREAM TO COLLECT SAMPLES FROM
- 3 FILL YOUR TRAY WITH MACROINVERTEBRATES
- 4 FILL OUT YOUR DATA SHEET TO SUBMIT WITH A PHOTO OF YOUR TRAY
- 5 SUBMIT YOUR ENTRY BY JULY 31ST TO ANASTON.PORTER@ANDERSONSWCD.ORG TO BE PUT INTO A DRAWING FOR A \$25 VISA GIFT CARD!



INTERESTED IN PARTICIPATING? VISIT:
[HTTPS://WWW.SURVEYMONKEY.COM/R/X9M3SVL](https://www.surveymonkey.com/r/x9m3svl)

WWW.ANDERSONSWCD.ORG
OR CALL 864-844-8224



PROJECT IMPACT ON CURRENT ISSUES IN THE COUNTY



SC ADOPT-A-STREAM IMPACTS

- SC Adopt-a-Stream Trainings helped certify 28 new volunteers in Anderson County and beyond.
- Several participants are working on adopting sites in the Broadway Creek Watershed in the upcoming months (Cupboard Creek, Broadway Creek)
- The district is planning on continuing to monitor two streams in the county through SC AAS practices

LOCAL WORK GROUP RESULTS (NRCS & DISTRICT PARTNERSHIP)

- Each year the Soil and Water Conservation District gathers input from local citizens to inform our Local Work Group (LWG). The district prioritizes the resource concerns in each county. The decisions made by the group are a significant factor in determining how Federal funds will be distributed to applicants in Anderson County requesting cost share monies under the Environmental Quality Incentives Program (EQIP) through the Natural Resource Conservation Service (NRCS).
- Local Work Groups are made up of various stakeholders, such as farmers, landowners, scientists, and community members that work in conjunction with the Conservation District. The Local Work Group process is a way for people who care about the environment and conservation to come together and help state and federal agencies understand specific, county-level challenges or issues related to natural resources.
- This year we had an outstanding turn out for Local Work Groups including input from 21 members of Anderson County. It ran from 9/21/2023 through 10/9/2023. The results were as follows:
 - Forest:
 - #1 Erosion - sheet and rill erosion
 - #2 Wildlife Habitat - terrestrial habitat for wildlife and invertebrates
 - #3 Wildfire hazard from biomass accumulation
 - Crop:
 - #1 Erosion - sheet and rill erosion
 - #2 Organic matter/soil texture - organic matter depletion
 - #3 Surface water issues - nutrients transported to surface water
 - Pasture:
 - #1 Surface water issues - pathogens and chemicals from manure/biosolids or compost applications transported to surface water
 - #2 Erosion - sheet and rill erosion
 - #3 Livestock issues - inadequate livestock water quantity, quality, and distribution
 - Ag Waste:
 - #1 Pathogens and chemicals from manure, biosolids, or compost applications transported to surface water
 - #2 Energy efficiency of farming/ranching practices and field operations
 - #3 Objectionable odors

PROJECT IMPACT ON CURRENT ISSUES IN THE COUNTY



NRCS PARTNERSHIP AND CONTRACTS

- The grand totals for the 2023 Fiscal Year are 39 new contract/agreements for conservation plans which totals \$2,865,085 in funds committed in Anderson County.
 - EQIP - 21 new contracts \$1,908,806 covering 646 ac.
 - EQIP-IRA - 4 applications totaling \$57,451 covering 238 ac.
 - CSP - 8 new contracts totaling \$74,443 on 286 ac.
 - CSP-IRA - 1 application totaling \$10,185 on 79 ac.
 - ACEP - \$724,200
 - Watersheds - worked with 3 watershed boards this FY to secure funds for completing structural and hydrological assessments. Totaling \$90,000

ENVIRONMENTAL AWARENESS

- Our new education programs helped reach a number of public schools in the area with educational materials related to water quality and environmental awareness. We have seen an increase in requests for programs at local public schools and teachers have become more interested in these topics.

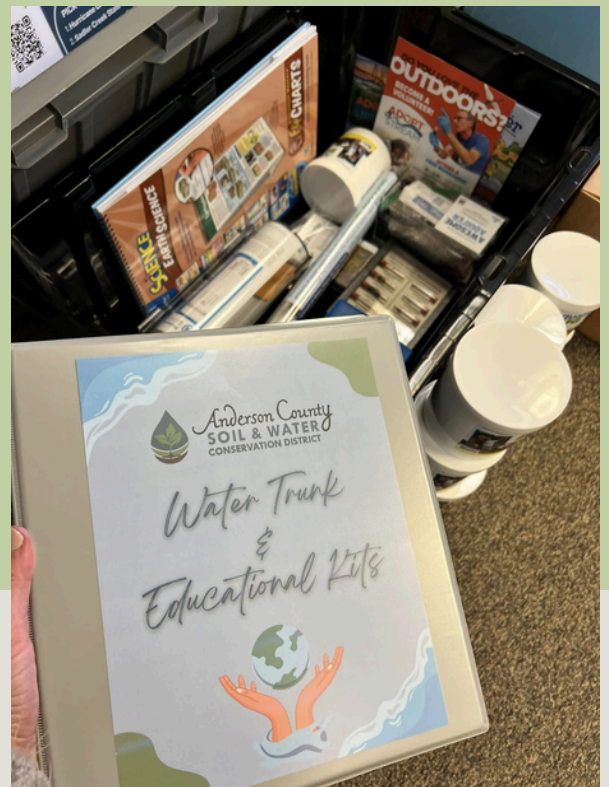
WATERSHED-BASED PLAN SUPPORT

- Our district has agreed to support several watershed based plans through Upstate Forever during the 2023 year.
- Plans include:
 - Rocky River and Big Generostee Creek Watersheds within the greater Savannah River Basin
 - 3&20 Creek Watershed to continue septic repairs, agricultural BMP's, land protection and streambank repair projects over the next 3 years



WATER TRUNKS

- Water Trunks were first **piloted in Anderson School District 2**. Additionally, we have distributed trunks to the following schools which **span across all 5 Anderson County School Districts**:
 - Wright Elementary
 - BHP High School
 - Belton Middle School
 - Anderson Institute of Technology
 - Pendleton High School
 - Wren Middle School
- Teachers have been very receptive of the trunks and are giving great feedback.
- These trunks have increased our district awareness in the community.

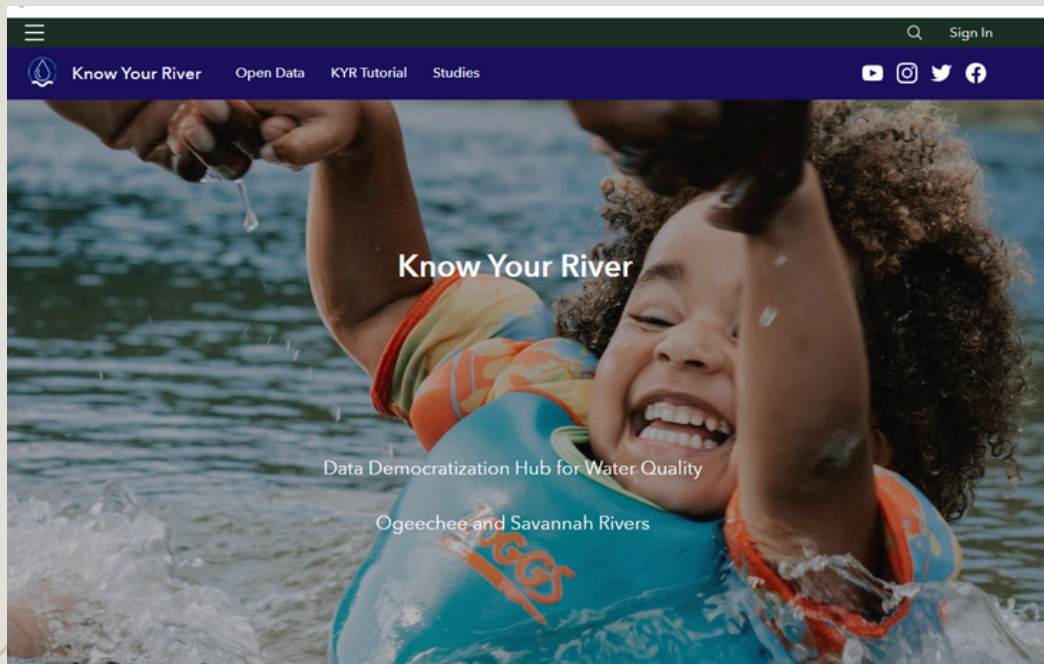
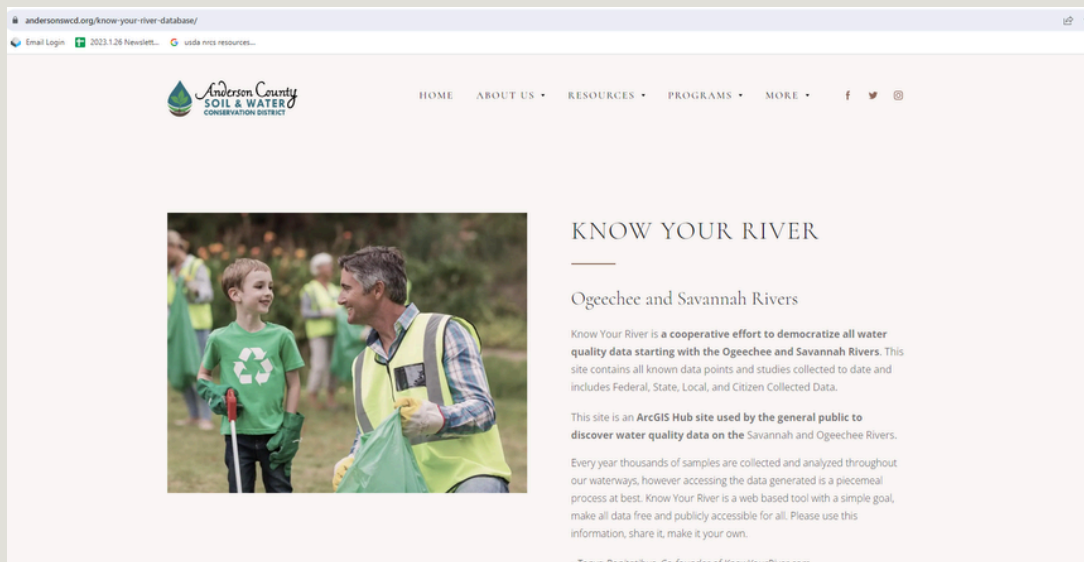


KNOW YOUR RIVER DATABASE INCORPORATION



The Know Your River Database was shared and linked on the Anderson Soil and Water Conservation District Webpage and shared during all of our outreach, programs and events in the County. Information on the database was printed and set out at the district office.

The district is currently seeking ways that we can become involved in contributing to data collection on the online platform.

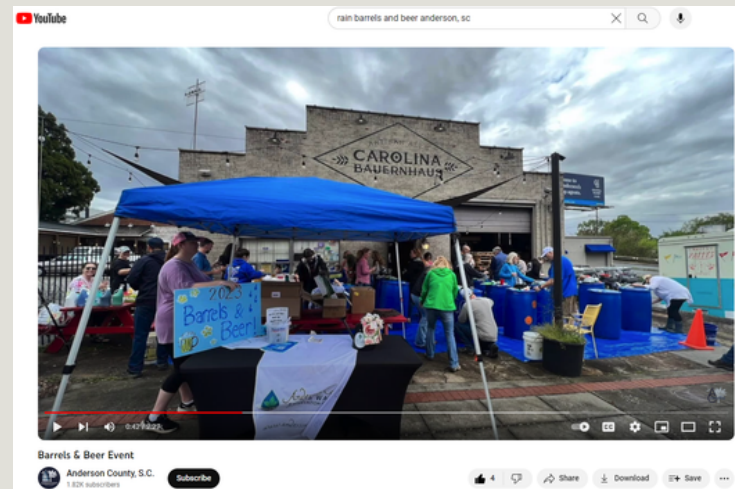


MEDIA & COMMUNICATIONS

ASWCD has been able to gain traction in media and communications to amplify the project's reach in several different ways. The grant has also helped our partners in their growth as well.



- International Erosion Control Article on Annual Barrels and Beer Event (copy attached to report)
- WYFF News Morning Television Segment and Anderson County Segment on our annual Rain Barrels and Beer Event which ties back to district programs.
- News releases and articles with WYFF News 4 and News 7 for Lake Hartwell Partners for Clean Water Bi-Annual Trash Pick-Up, directly helping keep our waterways clean in the upstate.



Upstate nonprofit prepares for large cleanup event on Lake Hartwell

'Lake Hartwell Partners for Clean Water' is in need of volunteers for its third mass cleanup event

Share



Updated: 8:23 AM EDT Sep 5, 2023

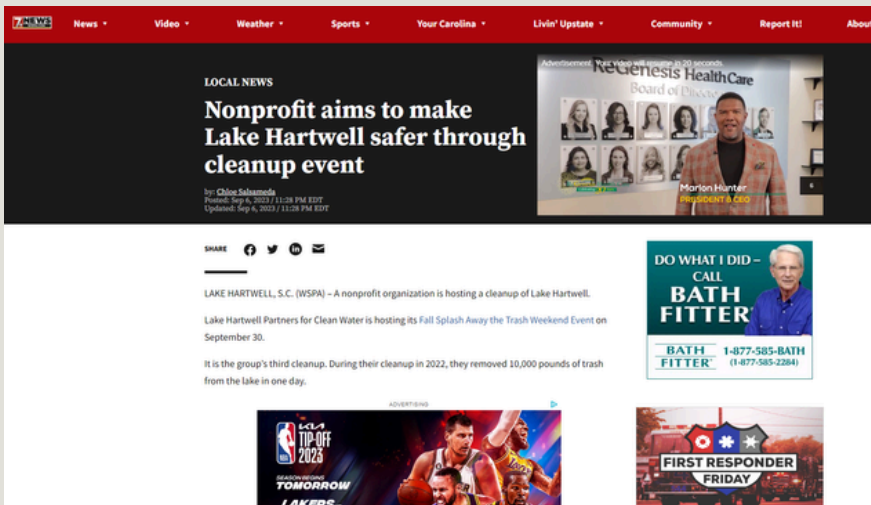
Infinite Scroll Enabled

Rashad Williams
Anchor/Reporter



GET LOCAL BREAKING NEWS ALERTS

The latest breaking updates, delivered straight to your email inbox.





Anderson County
SOIL & WATER
CONSERVATION DISTRICT

THANK YOU!!

From all of us at Anderson Soil and Water
Conservation District!

Thomas E. Bennett

Van James

~~_____~~
Curtis

Glenn R. J-PK