



Annual Report

Cobb County Water System
Communications & Education

2021-2022

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Communications & Education**

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During the
2021-2022 reporting year,
22,618 community members participated
in CCWS Communications & Education programs.

Volunteer Programs:
1,290 participants,
847 training hours,
3,969 volunteer service hours

Community Programs:
6,589 participants, 199.5 hours

School Programs:
14,739 students, 335 instruction hours

This report summarizes Cobb County Water System's efforts to educate the community about issues impacting local water quality & conservation, to foster good habits and responsible behaviors, and to promote an ethic of respect for and a connection to our natural resources.

Cobb County Water System's Communications & Education Division works to support and protect the community by educating residents on practices to improve the quality of life for themselves and future generations. The activities and events facilitated by staff members are designed to fulfill Cobb County Water System's education requirements as outlined by the Metro North Georgia Water Planning District and the Georgia Environmental Protection Division.

Vision

We envision a community in which all residents and businesses value our water resources, upholding with integrity their responsibility for water quality, conservation, and environmental health.

Mission

Our mission is to engage and educate the Cobb community, providing them with the knowledge, opportunities, and resources to implement responsible water practices that protect and conserve our water resources.

Message From Communications & Education Division (CED) Staff

May of 2022 marked the 20th year anniversary of Cobb County Water System's Adopt A Stream Program. It is the longest running program that is currently coordinated by Cobb County Water System's CED Division. For more than two decades, the Adopt A Stream program continues to be a vital hub for both new and experienced community scientists seeking to make a meaningful contribution towards the monitoring and protection of our local streams and creeks. The AAS program and its volunteers in Cobb County continue to be among the most active in the metro-Atlanta area. The celebration of this milestone fills us with a spirit of optimism and resiliency for the incoming year.

After more than two years adapting to the new normal brought by the global pandemic, our team has been recognized for our mastery of new skillsets, having to overcome steep learning curves and fluctuating circumstances. We have been presented with three Education Awards from the Georgia Association of Water Professionals this year: one for our overall education programming, one for our innovative Water Professional Wednesday social campaign, and one for our virtual Sibley Pond Field Trip experience. These awards demonstrate our commitment to fulfilling programming through both online and hybridized platforms, in a manner that best protects the health and safety of our program participants, volunteers and staff. We will continue, as the AAS Program has for over twenty years, to provide the Cobb community with the know-how, the opportunities and the tools needed to protect and conserve our water resources.

Even though we now have a better outlook on COVID-19 than prior years, our time spent updating, planning, and adapting our programs for the pandemic will be built upon and not forgotten. Some of our programs, such as our Lunch-and-Learn series, have become more accessible to Cobb residents through an online format, and so will now be offered in a hybrid approach. On the flip side, our team approaches the year with eager anticipation as we return to in-person programming for our school-based programming and our summer library reading program. After more than two years of promising both students and teachers that we hope to someday return to their classrooms, someday is now just around the corner. We are ready, and we hope to see you in-person soon.

- The Communications & Education Division

SUMMARY OF ACTIVITY BY WATERSHED

	Water Quality Monitoring	Waterway Clean-ups	Storm Drain Marking	Privet Pulls & Other Invasives Removal	Community Education	School Outreach
Chattahoochee	●	●			●	●
Buttermilk						●
Mud	●	●				●
Mulberry	●					
Nickajack	●	●	●	●	●	●
Noses	●	●			●	●
Olley	●	●			●	●
Poplar	●					●
Powder Springs			●			●
Rottenwood	●	●	●	●	●	●
Sewell Mill	●	●	●	●	●	●
Sope	●	●			●	●
Sweetwater						●
Ward	●	●	●			●
Willeo	●	●	●			●
Etowah	●	●	●		●	●
Allatoona	●	●	●	●	●	●
Butler	●	●			●	●
Little Allatoona	●					
Noonday	●	●	●	●	●	●
Pickett's Mill	●					
Proctor	●				●	●
Rubes	●	●	●	●		●

VOLUNTEER PROGRAMS & ACCOMPLISHMENTS

Cobb County Water System facilitates ongoing volunteer opportunities throughout the year including providing the training and tools needed to be a monitoring volunteer. During the 2021-2022 reporting year, 1,290 volunteer participants gave 3,969 hours of volunteer service. We estimate the value of Cobb's volunteer watershed stewards to be \$118,872 **Based on the current estimated value of volunteer time in Georgia (\$29.95 published by Independent Sector).*

Adopt-A-Stream Bacterial Monitoring

93 volunteers trained, 253 monitoring events, 312 service hours

Volunteers learn how to monitor *E. coli* levels in their streams. *E. coli* is an indicator organism that is often used to assess water quality. Monitoring levels of *E. coli* can help identify possible sources of pollution. This workshop focuses on proper collection of a water sample, processing samples for incubation, and interpretation of results. Volunteers must attend a certification workshop and adopt their site for monthly monitoring.

Adopt-A-Stream Chemical Monitoring

149 volunteers trained, 536 monitoring events, 953 service hours

Chemical monitoring consists of collecting water samples and testing for pH, levels of dissolved oxygen, temperature, and conductivity. These chemical tests gather information about the aquatic habitat and its ability to sustain life. Participants are required to attend a certification workshop and adopt their site for monthly monitoring.



Adopt-A-Stream Macroinvertebrate Monitoring

106 volunteers trained, 16 monitoring events, 323 service hours

Participants monitor the population and diversity of benthic macroinvertebrates that act as bioindicators of water quality. Studying the diversity of organisms at a site gives a general picture of water quality. Individuals interested in macroinvertebrate monitoring are required to attend a certification workshop, adopt their waterway site, and commit to monitoring once per quarter.

Adopt-A-Stream Visual & Getting Started Monitoring

18 volunteers trained, 39 monitoring events, 172 service hours

Volunteers learn how to use maps to delineate and assess their watershed. Land use and impervious surface are discussed as it pertains to the watershed survey data forms. The second half of the workshop is spent at a stream conducting the visual stream survey, learning how to do a stream cross-section, and assess habitat.

Amphibian Monitoring

18 volunteers trained, 6 monitoring events, 41 service hours

The Amphibian Monitoring Program continued this season with training workshops and hikes. The program includes frogs, salamanders, and utilizes 5 monitoring stations. Participants can either be casual observers and submit to the "Cobb County Group" on the iNaturalist App or be certified monitoring volunteers, checking on monitoring stations at various Cobb County Parks. Engagement can be improved and staff is looking to amend this program next year.

Clean-ups

573 volunteer participants, 69 events, 1,276 service hours*

Cobb County asks residents to help clean local waterways and raise awareness about water health. Scout groups, church groups, schools, and homeowner associations across the county are provided with gloves, bags, and planning assistance throughout the year to encourage trash removal efforts. *Calculation includes GA AAS's volunteer reporting of cleanup activities during monitoring events. 51 small collection events were recorded via this mechanism.



Internships and Mentorships

3 volunteer participants, 95 service hours

CED hosted three student mentorships, one during the fall of 2021 and two during the spring of 2022; one from Marietta High School and two from Kennesaw Mountain High School. Duties included monitoring multiple sites along the same stream (Allatoona, Noses, and Proctor), conducting stream monitoring, and habitat assessments.



Outreach Volunteers

13 volunteers trained, 27 participants, 6 events, 128 service hours

This year we trained and congratulated the second cohort of volunteers. Each participant completed a total of 9 hours of required training, providing a foundation of understanding on conservation, stewardship, pollution prevention, and the services that Cobb Water provides. Upon graduation, Outreach Volunteers engage and educate fellow residents, extending the reach of our community engagement.

Privet Pulls & Other Invasives Removal

78 participants, 8 events, 186 service hours

The removal of invasive privet is a popular stewardship project, especially with older students seeking community service hours. Volunteers seeking to organize a project are asked to complete a project proposal, identifying the site location and vegetative waste disposal plan. CED assists by providing tools and logistical support. In addition, we are working with GA Native Plant Society and Cobb County Parks to help recruit volunteers for ongoing privet removal efforts at Heritage Park along Nickajack Creek.

Stewardship Demonstration Sites

Wildlife & Rain Garden

64 volunteer participants, 22 events, 124 service hours

Noonday Stream Habitat Site

27 volunteer participants, 2 events, 89 service hours

Community volunteers continue to assist with site maintenance including new plant installations, pruning, seed propagation, weeding, labeling, and leading tours. Participants include local master gardeners, community members seeking service hours, and those interested in gaining practical experience. In the garden, weekly project days, currently on select Thursday mornings, provide a consistent opportunity for those interested in helping. At the stream project, work days are conducted as needed to control kudzu. Participants also learn about stormwater pollution prevention and stewardship practices.



Storm Drain Marking

121 volunteer participants, 15 events, 748 drains marked, 270 service hours

Rain water runs off the landscape from roads, driveways, lawns, rooftops, and parking lots and carries pollution into our water. In addition, any litter on roads will wash into streams through the storm drain system. To emphasize the connection between runoff and water pollution, volunteers are helping mark storm drains around Cobb County. Participants are provided with marking kits including aluminum markers, adhesive, gloves, garbage bags, and education materials.

Volunteer Challenge

*216 volunteer participants, 19 events, 261 service hours**

Our partnership with the National Park Service is intended to incentivize service project participation. The group giving the most community service hours received a guided rafting trip on the Chattahoochee River. The Young Men's Service League won but deferred the prize to the second-place winners, North Cobb High School's Greenhouse Gang, who enjoyed an interpretive hike in the West Palisades Unit of the CRNRA. *This data is reflected in each of the volunteer service programs, so numbers are not included in our summary calculations.

2021 Volunteer Appreciation & Stewardship Fair

40 Participants

The Volunteer Appreciation & Stewardship Fair is typically a data-sharing event that showcases volunteer projects and recognizes our volunteers and partners. Out of caution related to gathering during the waning pandemic, this year volunteers were invited to attend a 'drive-thru' style appreciation event where staff set up stations, offering giveaways, snacks, and awards.

Summary of Volunteer Activities: Chattahoochee Watershed

WATERSHED	GROUP	# SITES	District #	YEAR INITIATED	ACTIVITY TYPE
Chattahoochee River	Rivers Alive	1	2	2021	CL, TB
Mud Creek	Greycoat Bluff	1	1	2019	CH
Mud Creek	Dew Place	1	1	2017	CH, BAC
Mud Creek	McEachern HS	1	1	2007	CL
Mud Creek	Troco5	1	1	2019	CH, BAC, AM
Mulberry Creek	Friends of Mulberry Creek	1	2	2003	CH, BAC
Nickajack Creek	Turkey Feather	2	4	2020	CH, BAC, VS
Nickajack Creek	Keep Smyrna Beautiful	3	4	2010	CH
Nickajack Creek	GA Native Plant Society	1	4	2014	PP
Nickajack Creek	Concord Woolen Mill	1	4	2019	CH, BAC
Nickajack Creek	NobleSix	1	4	2021	CH, BAC, VS
Nickajack Creek	Whitefield Academy	2	4	2020	CH, MAC, CL, VS
Nickajack Creek	Water Stewards	1	4	2018	CL, PP, SD
Nickajack Creek	Collins Lake Estates	1	1	2021	SD
Nickajack Creek	SG5	1	4	2011	CH
Nickajack Creek	Griffin MS Wildcats	1	4	2017	CL
Nickajack Creek	Lesterosa	1	4	2021	CH, CL
Noses Creek	Pic	1	1	2018	CH, CL
Noses Creek	Noses at Silver Comet	1	4	2018	BAC
Noses Creek	Creek Hoppers	2	1	2021	CH, VS
Olley Creek	Children of the Deer	1	1	2021	CH, BAC
Olley Creek	Donna-n-Carmen	1	4	2012	CH
Olley Creek	Riverstone Montessori School	1	4	2018	CH, CL
Olley Creek	Osborne High School	1	4	2017	CH, CL
Olley Creek	Water Stewards	1	4	2016	CL
Poplar Creek	Anne Ledbetter	1	4	2012	CH, BAC
Poplar Creek	Wood Family	1	4	2021	CH
Poplar Creek	Keep Smyrna Beautiful	1	4	2012	CH
Powder Springs Creek	Jeff Price Family	2	1	2021	SD
Rottenwood Creek	Stewardship Program	2	2	2020	CH, BAC, VS, CL
Rottenwood Creek	Rivers Alive	1	2	2014	CL
Rottenwood Creek	Sierra Club Centennial Group	3	2,3	2004	CH, MAC, BAC, CL
Rottenwood Creek	Water Is Life	1	3	2021	CH, PP
Sewell Mill Creek	Pope High School	2	3	2013	CH, CL
Sewell Mill Creek	Hannah Harris	1	3	2020	HC, BAC, VS
Sewell Mill Creek	Bushart	1	3	2012	CH
Sewell Mill Creek	Sebastian Durzynski	1	3	2021	SD
Sewell Mill Creek	Water Stewards	2	3	2012	CL, PP, TB
Sewell Mill Creek	Heather Glazebrook	1	3	2019	CH
Sope Creek	Keaden Hill	1	2	2019	CH
Sope Creek	Water Stewards	1	2	2020	CL
Sope Creek	Team Salty	1	3	2012	CH, CL
Sope Creek	Clean Water Buddies	1	3	2020	CH
Sope Creek	Sedalia Park Elementary School	1	3	2012	CH, CL
Sope Creek	Casa Montessori	1	3	2016	CL
Sope Creek	Venya Gunjal	1	3	2020	CH
Trib of Chattahoochee	Crooked Branch	1	2	2011	CH, BAC, CL
Trib of Chattahoochee	Next Gen Watershed	1	2	2021	CH

Trib of Chattahoochee	Kaeden Hill	1	2	2019	CH
Trib of Chattahoochee	Chatt Stream Stewards	1	2	2019	CH, CL
Ward Creek	Ernstes on Ward Creek	1	1	2020	CH, CL
Ward Creek	DAR	1	1	2015	SD
Willeo Creek	Willeo Watershed Alliance of Loch Highland	1	2	2001	CH, BAC
Willeo Creek	Tritt River Kids	1	2	2004	CH, CL
Willeo Creek	Bishop Lake	6	2	2008	CH, BAC
Willeo Creek	AJ Hampton	1	2	2019	CH
Willeo Creek	Fox Creek	1	2	2020	CH
Willeo Creek	Hannah Harris	2	2	2020	CH, BAC
Willeo Creek	Wonders of Waters Girlscouts	1	1	2021	SD
Willeo Creek	Village North Highlands Subdivision	1	2	2012	CH, BAC
Willeo Creek	YSML Group	2	2	2020	SD
Willeo Creek	Grams Collins Gals	1	2	2019	CH, CL

Summary of Volunteer Activities: Etowah Watershed

WATERSHED	GROUP	# SITES	District	YEAR INITIATED	ACTIVITY TYPE
Allatoona Creek	Kahle	1	1	2010	CL
Allatoona Creek	Richard's Creek	1	1	2014	CH, CL
Allatoona Creek	Michael Marshall	1	1	2020	CH, BAC
Allatoona Creek	Lauren's Thalweg	1	1	2020	CH
Allatoona Creek	John Keiler	1	1	2015	CH
Allatoona Creek	Colin Bell	2	1	2021	CH, BAC, VS, CL
Allatoona Creek	North Cobb HS Greenhouse Gang	3	1	2021	CL, PP
Allatoona Creek	Water Stewards	2	1	2016	CL, PP, SD, TB
Allatoona Lake	Beving on Allatoona	1	1	2018	CH, BAC
Butler Creek	Butler Creek Kennesaw	2	1	2009	CH, BAC, CL
Butler Creek	Water Stewards	1	1	2021	TB
Butler Creek	Cobb PD Community Affairs Unit	1	1	2020	CH
Lake Acworth	Ford Elementary School	1	1	2017	CL
Lake Acworth	George Aycock	2	1	2014	CH
Lake Acworth	Cobb Progressives Earth First	1	1	2017	CH, BAC, CL
Little Allatoona Creek	Keaton's Water Quality Team	1	1	2020	CH
Noonday Creek	Lassiter HS APES	1	1	2021	SD
Noonday Creek	Angie's NE Cobb Streams	1	3	2018	CH, CL
Noonday Creek	Water Stewards	3	3	2017	CL, TB, PP, AM, SD
Noonday Creek	Cobb Progressives Earth First	1	3	2020	CH
Pickett's Mill Creek	Longos	1	1	2020	CH
Proctor Creek	Mighty Mustangs	1	3	2021	CH, BAC, VS
Proctor Creek	Cobb PD Community Affairs Unit	1	1	2020	CH
Proctor Creek	Good Guy Greg	1	1	2020	CH, BAC
Proctor Creek	Butler Creek Kennesaw	1	1	2020	CH, BAC
Rubes Creek	Lassiter HS APES	1	3	2010	CH
Rubes Creek	McCleskey Middle School	1	3	2006	CL
Rubes Creek	Eaglescout Troop 714	1	3	2021	SD
Rubes Creek	Connie Ghosh	1	3	2006	CH, BAC, CL
Rubes Creek	Stockton's Mill Neighborhood	1	1	2021	SD
Rubes Creek	David Zandstra Group	1	3	2008	CH, BAC
Rubes Creek	Water Stewards	1	3	2012	PP

AM Amphibian Monitoring

BAC Adopt-A-Stream Bacteria Monitoring

CH Adopt-A-Stream Chemical Monitoring

CL Cleanup

MAC Adopt-A-Stream Macroinvertebrate Monitoring

PP Privet Pull & Other Invasives Removal

Activity Type Key

SD Storm Drain Marking

TB Tabling Event

VS Adopt-A-Stream Visual Monitoring

COMMUNITY PROGRAMS & ACCOMPLISHMENTS

CCWS develops and teaches free ecological education programs for community members throughout the year, offering lifelong learning opportunities to our residents.

During the 2021-2022 reporting year, CED staff reached 6,589 individuals via 170 events, providing 199.5 contact hours. Displays were paused for the reporting year.

Summary of Community Engagement

	District 1	District 2	District 3	District 4	Water Lab	Online	Totals
# of events	26	21	21	14	63	25	170
# of people	1,310	347	1,017	1,456	2,136	323	6,589

Chattahoochee River National Recreation Area Partnership

75+ tires = \$375

As in previous years, we offer the Chattahoochee National Recreation Area (CRNRA) tire disposal services for all tires removed from the river and contributing tributaries within the Cobb County jurisdiction. National Park Service delivers the tires to our waste transfer station and Cobb County Water System pays the disposal fees for the transaction. We also partner on youth/school programming at both CRNRA and Kennesaw Mountain National Battlefield Park. Engagement will resume when the pandemic subsides.

Community Partners for Healthy Streams

731 listeners

CED continued our widely accessible and engaging podcast series aimed to provide business owners, supervisors, and property managers ideas on cost effective best management practices. Listeners can tune in to 7 popular platforms like YouTube, Spotify, Apple Podcasts, and more. We have the intention to relaunch the CPHS program in person when the pandemic subsides.

Community Programs and Tabling Events

2,060 participants

In addition to facilitating public programs, CED staff accept invitations to speak to community clubs, partner for community program presentations, and table at community events. This year we fulfilled requests for talks on water conservation, snakes, water careers, and Adopt-A-Stream from local clubs and civic organizations. Continuing this year, the Our Stream Stories: Using Photography for Storytelling series partnered with an AAS volunteer to present nature photography lessons and tips. Larger events were back this year, with CED participating in multiple Family Fun Safety Days, including Spanish language and Autism spectrum participant focused events. Other community events included the We Care Fair, targeting area Veterans, the Master Gardner's Plant Sale, and Girl Scout's Wonders of Water Day.

Family and Library Programs

106 participants

Staff continued to offer events for youth and families, maintaining a reduced capacity for in-person events. Six Fairy Habitat events and four Amphibian Hikes were conducted throughout the reporting year. During June, July, and August of 2021, the CED partnered with Cobb County's Library System for their virtual summer reading program themed Tails & Tales. Staff presented a Pet-Themed Storytime & Dog Treat Bake-With-Me program, focusing on the importance of pet owner's responsible pet waste habits. Programs were presented to four libraries, included one Spanish language program.

Fats, Oil and Grease (FOG) Education

1,588 households*

CED continues to promote FOG education as a content area during our Water 101 program and distribute our FOG fact sheet through the storm drain marking program. In addition, we continued our annual holiday FOG campaign in November, reaching community members via Cobb County's *CobbLine* newsletter and on social media. *Data reported as events only.

Household Hazardous Waste (HHW) Reduction, Community Recycling, and Medication Disposal

HHW from 915 households
Medication from 260 households*

Several efforts are implemented to educate Cobb County residents on hazards in the home including disposal events. Organized in partnership with Keep Cobb Beautiful (KCB), over **nine hundred** households participated in Cobb County's HHW Amnesty Day on August 7, 2021. KCB hosted two pharmaceutical disposal events, held in October 2021 and April 2022. Education focused on the importance of removing expired and unused medications from the home and the problems associated with flushing these products into the sewer system.

*Data not included in our participant totals.

Lunch & Learns

132 participants

In response to common questions and concerns about various topics related to water quality, pollution prevention, water conservation, and other relevant topics, CED presents monthly Lunch & Learns. During this reporting year, all Lunch & Learns were presented virtually, usually on the last Friday of the month from 12-12:45pm. Several sessions were successfully recorded and are available on YouTube.

Kennesaw Mountain National Battlefield Partnership

Producing a 3-part video series

Due to Covid-19, Kennesaw Mountain National Battlefield (KEMO) suspended programming. CED and KEMO have been working together to develop pre-recorded educational videos. CED and KEMO are currently partnering to produce a middle and high school age virtual tour of sites throughout KEMO that will include historical and ecological locations and topics. These videos are expected to be available for the coming 2022-2023 school year.

Pet Waste Education Initiatives

66 participants

This reporting year, CED staff promoted the *Pick It Up Pals Pledge Program* through social media campaigns, increasing pet owner awareness of the pollution problems associated with pet waste. We also continue to support volunteer *E. coli* testing, distribute pet waste education materials (approx. 1,550 brochures) during storm drain marking projects, and explicitly discuss proper pet owner stewardship during our *What Is A Watershed?* school outreach programs.

Professional Presentations and Partnerships

200 participants

CED staff routinely provide expertise and support at conferences, professional development meetings, and seminars. In the 2021-2022 reporting year, we presented at several events including the WaterSmart Innovations Annual Conference, SEEA Annual Conference, NAAEE Annual Conference, NPDES Institute, WaterFirst, Cobb County School System's In Service Workshop, The Metro North Georgia Water Planning District Education TCC, and Outdoor Learning Symposium. Classroom teacher-focused event numbers noted on page 14, under professional development for educators, are included in community engagement numbers.

Rain Barrel Make & Takes

103 participants

In this free workshop, participants build their own rain water harvesting barrel (donated by Coca-Cola Bottling) using power tools and provided supplies. This year, due to Covid-19, we reduced participant capacity for each rain barrel workshop, but added a second session each day to lessen that impact. We also required each participant to bring an adult helper with them to the workshop. This resulted in an increased number of workshops and participants, with 17 events facilitated and providing 95 barrels.

Senior Programs

20 participants

Despite Senior Centers being closed for the majority of the reporting year, we were able to present two virtual programs, one focused on winterizing irrigation and one on water conservation.

Septic Tank Education

17 participants*

In conjunction with Metro North Georgia Water Planning District's septic-focused campaign during Pollution Prevention/Septic Smart Week, the third week of September, we included EPA's septic system education materials in our social media postings. We also presented septic maintenance content as a community Lunch & Learn topic that month. *Data included in Lunch & Learn numbers.

Toilet Rebate Program

472 Residential Toilets Replaced

102 Commercial Toilets Replaced

One of the biggest water users in the home is the toilet. Up to 30% of the water used indoors may be flushed down the drain every day. CCWS manages a toilet rebate program for single-family and commercial properties in Cobb County built in 1992 or earlier. Single-family residential customers receive a \$100.00 rebate applied as a credit on the water bill for replacing their high flow toilets with ultra-high efficiency toilets using 1.1 gallons per flush or less. Commercial accounts receive a \$50.00 credit on their water bill for each high flow toilet replaced, up to 100 toilets.

T-shirt Design Contest

7 participants

Since 2002, CCWS has partnered with local graphic design professors to incorporate a real-world project for students into their course curriculum. The design, featured on the 2022-2023 volunteer t-shirt, was inspired by the quote *"If there is magic on this planet, it is contained in water"* by Loren Eiseley. The artist, Kennesaw State University Fine Arts and Graphic Communications graduate Susan Dang, received a \$200 gift card for her artwork.



Video Productions

1,765 views

The CED team continues to produce educational videos including a new Imagine A Day Without Water Professionals video and a new episode of *Eco-Logical: Tips to Reduce Your Footprint* focused on illicit discharge. We created a new series called Water Careers Matter to highlight six water professionals from Cobb Water and educate the public on the diverse workforce in the water industry. We continued publishing videos of our podcast, Community Partners for Healthy Streams, and releasing recorded videos of our live Lunch & Learn webinars. In addition, we published three short instructional videos on checking your toilet for leaks, finding sneaky leaks, and navigating CCWS's new website and online payment system. All are available to view on YouTube.

Water Reclamation Facility Tours

15 participants

Public in-person Water Reclamation Facility tours were suspended again for the reporting year, but three tours were conducted for small groups of CCWS employees. CED is in final production of a Water Reclamation Facility Tour video, allowing those unable to visit the WRF and groups too large for an in-person tour to receive a first-hand experience learning about the wastewater treatment process at one of our Water Reclamation Facilities. Two versions, one designed for middle school and above and one designed for elementary school, will explain the wastewater treatment process from the moment raw wastewater enters the facility to when it eventually exits to a nearby water source.

waterSmart Event Reception

70 participants

Each waterSense Art contest culminated in a celebratory virtual reception honoring the winners and revealing the winning artwork. For our Middle School calendar contest, all entries were displayed online in a virtual gallery. Middle School calendar contest winners and Elementary School coloring book winners were celebrated during a virtual reception, attended with their family, friends, and teachers. During the event winning submissions were unveiled and previously recorded videos of the winners were shown. For our High School photography contest, all submissions were displayed in an online gallery and they were celebrated by their individual schools.

Wildlife & Rain Garden Demo Site/Water Quality Lab Programming/Tours

3 participants*

While the demonstration gardens at Cobb's Water Quality Lab are always open for visitors, we do organize and facilitate guided tours and programs with age appropriate content developed for PreK-Senior adult audiences. The garden is also utilized by the Cobb County Extension Services for their community and professional training



UPDATE ON RESOURCE DEVELOPMENT

Community Newsletter: *Water Matters*

Four issues of the quarterly newsletter, *Water Matters*, were published this year. Approximately 1,530 paper and more than 15,864 electronic issues were distributed to our local contacts.

Internal Communication & Education Efforts

CCWS facilitated the second cohort of our Leadership Development Program. Twelve participants attended the 6 sessions course, providing 24 hours of professional development. We continued to facilitate (15 sessions) of new hire orientation, providing 58 new employees with a simplified version of our Water 101 training. We also published our monthly Operations Update with info from each division. CCWS's administrative specialist network restarted virtually. We continue to publish the quarterly staff newsletter, *The Pipeline*, and post weekly *Water Professional Wednesdays* recognizing the efforts of employees. Our *Employee Relations Committee* continues to support morale efforts for staff including recognition for promotions, milestone anniversaries, awards, and certifications. Suspended during 2020-2021, CCWS restarted monthly WRF plant tours in early 2022 for staff, ensuring all have an opportunity to visit a facility and learn about wastewater treatment.

Monthly Education Campaign

To better communicate focused messaging to our customers and Cobb County residents, the CED team utilizes themed lobby displays aligned with giveaways, posters, social media banners, website highlights, and the county's CobbLine e-newsletter. 500 giveaway items are budgeted each month for distribution via the CCWS lobby, as well as treats for kids and pets in the drive-up payment window.

2021-2022 themes:

June	Dog Days	December	Don't Be Naughty
July	Smart Irrigation	January	Commit to Good Habitats
August	You're the Solution/HHW	February	Luv Your Pipes
September	Be Septic Smart	March	Fix A Leak
October	Imagine A Day Without Water	April	Your Better Yard
November	Stop the FOG	May	Sprinkler Spruce Up



Social Media

The CED manages all social media efforts for CCWS, actively engaging across several platforms including: Facebook, Twitter, Instagram, LinkedIn, Pinterest, YouTube, Eventbrite, and WordPress. We have started using Nextdoor Neighbor to more effectively update customers during unplanned water outages. We implemented FOG and rags messaging, sent to communities where blockages and overflows attributed to FOG and rags are occurring.

Watershed Profiles and Signage

The watershed profile project, creating narratives that provide history, statistics, and points of interest for the major watersheds in Cobb County, remains suspended this year. Our signage program, in cooperation with Cobb County DOT, installs watershed and stream name signage at Adopt-A-Stream locations across the county, is backlogged. Due to cost of materials and supply chain problems, no new signs were installed this year. As of May 2022, supplies are again attainable. We plan to work with DOT to produce and install signs in 2022-2023.

Websites: www.cobbwater.org & www.cobbstreams.org

The CED is responsible for managing the main Water System website, cobbwater.org, with information about the utility, local ordinances, bill pay, and other customer services. cobbwater.org averaged 140,000 hits per month. We completed redesign of the stormwater section this year, modifying the layout and structure to improve user experience. Major updates are currently underway for the water conservation section, housed under cobbstreams.org. The cobbstreams.org website serves as the clearinghouse for all CED activities, providing education and promotional information to the community. cobbstreams.org averaged approximately 2,700 hits per month.

SCHOOL PROGRAMS & ACCOMPLISHMENTS

Program staff visited local schools routinely, offering free water-related education programs to K-12 students in Cobb County, Marietta City, and private schools. In the 2021-2022 school year, our programs directly reached 14,739 students at 90 schools, serving 611 classrooms, and providing 335 instructional hours. We estimate the cost of this service at \$17,977.

Summary of Public School Engagement

	Elementary Schools			Middle Schools			High Schools			Total		
	# served	total #	% served	# served	total #	% served	# served	total #	% served	# served	total #	% served
Cobb County School District	58	68	85	14	25	56	11	16	69	83	109	76
City of Marietta School District	6	8	63	0	2	0	1	1	100	7	11	64
Total Schools	64	76	84	14	27	52	12	17	71	90	120	75

Adopt-A-Stream Bacteria Monitoring Lab

61 participants

This program explores potential presence of pathogens in local waterways, and their impact on environmental health. Students have the opportunity to practice laboratory procedures by monitoring their local environment for *E. coli* and determining what levels exceed a healthy baseline.

Adopt-A-Stream Macroinvertebrate Lab

51 participants

Macroinvertebrates (stream bugs) are excellent indicators of water quality. Students learn to identify and categorize aquatic insects by pollution tolerance levels to determine stream health. Data collected from monitoring is entered into the Georgia Adopt-A-Stream statewide database.

Adopt-A-Stream Water Chemistry Study

457 participants

Students learn how to collect water samples and perform water quality experiments including dissolved oxygen, pH, temperature, and conductivity. This hands-on chemistry activity incorporates the scientific method. Data collected from monitoring is entered into the Georgia Adopt-A-Stream statewide database.

Brooke & Branch Puppet Show

4,958 participants

Brooke is a little girl who goes on a big adventure! Students join her as she learns about water quality and biodiversity from the friends she meets along the way. This program emphasizes ecological concepts and vocabulary in a fun and engaging way while demonstrating how to help the environment.

Career Days & Science Fairs

826 participants

Students learn about the water industry and how Cobb County Water System works with the community. Students observe wildlife specimens, ask questions, and have the opportunity to share their personal experiences about local waterways, providing an opportunity to link positive behavior to water quality.

Children's Water Festival

138 participants*

On May 3rd, Cobb staff, in partnership with Metro N. GA Water Planning District (MNGWPD), assisted Cherokee County Water & Sewage Authority in leading a wildlife station. This year the festival occurred at the Johns Creek Environmental Campus and included 4th grade students from R.M. Moore Elementary School in Cherokee County and Fulton Science Academy. Cobb staff introduced our corn snakes in a presentation alongside staff from the Autrey Nature Center. *These numbers are not reflected in our summary.

Ecoregions of Georgia

112 participants

Georgia ranks sixth in the nation for overall species diversity, particularly due to our five distinctive ecoregions! Students learn the characteristics and natural history facts about each ecoregion by exploring how geographical topography contributes to biological diversity.

Ecosystems & Adaptations

754 participants

Ecosystems are explored by looking at living and nonliving factors affecting interdependency, determining plant and animal adaptations and limitations, following energy as it moves through food chains and food webs, and concludes with how human impacts on the watershed can make a difference. Students examine skulls to determine the -vore type of animals, consider various ecosystems and adaptations, investigate the decomposer box, and apply knowledge with a live corn snake!

Erosion & The Hydrologic Cycle

310 participants

Erosion and Weathering - what's the difference? Students visit lab stations to study the causes and effects of erosion, weathering, and sediment deposition while discovering how these forces change the landscape and aquatic habitats. Using a wetland model, students decide how to mitigate the consequences of human impacts and how natural systems are beneficial to the hydrologic cycle.

Every Kid Outdoors (EKO) at Sibley Pond

295 participants, 5 schools

Virtual Toolkit - Cobb County students

304 participants, 5 schools

Virtual Toolkit - Students from outside Cobb County

48 participants, 2 schools*

With funding from the Chattahoochee National Parks Conservancy (CNPC) and in partnership with the Chattahoochee River National Recreation Area (CRNRA), 5 Title-One schools from Cobb County participated in water quality and stewardship education experiences. Students received multiple lessons (wildlife, decomposers, food web, pond study, and water safety) and paddled rafts on Sibley Pond at the Sope Creek Unit. The sponsorship through CNPC covered transportation costs to bus the students to the park for a day of lessons. We continue to promote the virtual fieldtrip version of EKO developed last year. *These numbers are not reflected in our summary.

Filtration Station / Clean Water lab

1,892 participants

Students explore water treatment by using the engineering design process to experiment with different materials and create their own water filters. Students gain a better understanding of the resources that go into treating water and the importance of conserving.

Green Schools

34 schools, 555 classrooms

Cobb's Green School Initiative continues to draw interest and provide encouragement for teachers to integrate environmental education activities into their classrooms. Those that participate, by documenting five EE activities, are recognized as Green Classrooms. When five teachers in a school participate, the school is recognized as a Green School. In 2021-2022, 21 schools achieved Gold Status (15 or more Green Classrooms). Collectively, this year the Green Teachers logged over 3,088 hours of environmental education lessons for 22,588 students.

Investigating Urban Streams and Ponds

405 participants

Students visit a stream, pond, or wetland to conduct a study about water quality and habitat. Activities may include water quality testing, sampling for aquatic insects, and investigating the physical characteristics of the waterway. The group is responsible for its own transportation to the site.



Monarchs & Butterfly Life Cycle

360 participants

Students explore how a butterfly grows from an egg into an adult, features the annual migration of the Monarch from Canada to Mexico, and discusses habitat needs and conservation efforts to address human impact.

Model Water Tower Competition (MWTC)

307 participants

This annual middle school competition is an interdisciplinary undertaking requiring students to design and build functioning towers. The competition is designed to provide information to youth about water resource engineering, infrastructure, water treatment, and water conservation. 22 student finalists presented 13 towers from 3 schools on March 26, 2022, facilitated in-person at the Georgia Association of Water Professionals facility.

Non-point Source Pollution & Stewardship

Suspended due to COVID

Offered in preparation for a stewardship activity, students participate in a discussion about non-point source pollution typical of local neighborhoods. They are provided training on the purpose of and how to safely engage in stewardship practices such as picking up and educating about pet waste, storm drain marking, rain water harvesting, and waterway cleanups.

Professional Development for Educators

73 participants*

Staff continue to facilitate educational opportunities for teachers including helping organize and present at the Annual Outdoor Learning Symposium (virtual) on November 2, 2021, Life Is A River Teacher Training, and Model Water Tower Teacher Training. *This data is reflected in Professional Presentations and Partnerships on page 9, not school outreach calculations.

Resource Library & Support Services

22 participating schools

CED loans educational resources to teachers for use in their classroom, including water testing kits, nets, curriculum activities, preserved insect specimens, and Enviroscape tabletop models. In addition, staff assist with special events including judging science fairs and sitting on certification panels.

River to River

Suspended due to COVID

Where does our drinking water come from? What happens to our water after we use it? Students explore how drinking water and wastewater treatment facilities function.

Snakes of Georgia & Their Adaptations

690 participants

Some people fear them, some are attracted to them, but almost nobody is indifferent toward snakes. How have snakes adapted to survive in their environment? Which species in Georgia are venomous and how can you tell? Most importantly, how do they benefit our ecosystem? This lab includes the use of live specimens.

Tappy Turtle's Water Cycle Puppets

160 participants

Students learn the basic steps of the water cycle, sing the Water Cycle Song, meet Walter the Water Drop, create stick puppets for each step of the water cycle, and discuss why water is important.

Traveling Treasure Trunk

5 participating schools

A collection of water and nature resources including books, field guides, games, music, and videos. The trunk is loaned to K-5 classrooms for three-week periods.





Tri-State Water Wars

111 participants

Water is a precious resource that everyone needs. This program discusses the various human requirements of our local waters, and why it can be a contentious topic.

Wastewater Treatment Plant Tours

Suspended due to COVID

What happens after the flush? Find out where our water goes by visiting one of Cobb's four wastewater plants. Students experience visually how a wastewater treatment plant works and how cleansed wastewater is recycled back into our rivers and streams. Staff is developing a virtual tour for future use.

Water Around The World

Suspended due to COVID

Students explore local and global water issues such as scarcity, distribution, and water quality, learning how climate, environmental features, and society interact to compound water crises. Students are challenged to develop innovative ways to tackle these growing water issues, explore how Cobb County Water System operates, and learn about the roles of citizens, businesses, and government in maintaining water quality.

waterSmart Photography Contest

33 participants

High school students were invited to participate in the annual waterSmart photography contest. 123 images were received. This photography contest was designed for Cobb County high school students, who not only have a passion for photography, but also a passion for our environment. Students entered photographs in six categories, with the twelve winning entries created into note cards.

waterSmart Tappy Turtle Artist Challenge

406 participants

Fourth and fifth grade students were invited to draw Tappy Turtle, Cobb's water conservation mascot, demonstrating water conservation tips. Winning designs were compiled into a coloring book that is distributed throughout the county.

waterSmart waterArt Calendar Contest

89 participants

Cobb County middle school students merge their artistic talents with their passion for water conservation in this visual 2-D art contest. Students' creativity is encouraged while answering the question "What Water Means to Me." 12 winning entries are created into a calendar each year.

Water/Wastewater 101: What You Need To Know About Your Water System

554 participants

Allatoona Lake and the Chattahoochee River are the sources of drinking water for Cobb residents. Students learn about the distribution and collection processes, our in-home water systems, water careers, and ways we can protect water quality before and after we use it.

What is a Watershed?

1,604 participants

We all live in a watershed - upstream and downstream. During this interactive session, students use a watershed model to demonstrate the impacts of pollution on streams and lakes while learning about local water quality issues. This hands-on program reveals how everyday activities affect our drinking water and wildlife while encouraging discussion about watershed protection and pollution prevention.

COMMUNITY CONNECTIONS

As active practitioners in Georgia's environmental education community, CCWS CED partners with many organizations and our staff members serve on numerous boards and committees. These activities enrich local program offerings and ensure Cobb County remains engaged with other water and environmental professionals.

Boards, Committees, Leadership Roles

- Alliance for Water Efficiency: Education & Outreach Committee
- American Water Works Association: Member
- Council of Outdoor Learning: Steering Committee
- Environmental Education Alliance of Georgia: Executive Committee, Advisory Council Chair
- Georgia Adopt-A-Stream: Community Coordinator, Technical Advisor, Conference Planning Committee
- Georgia Assoc. of Water Professionals: Public Education, H2Opportunity Chair, Diversity, & Water Loss Committees
- Georgia No Child Left Inside Coalition: Member
- Georgia Water Wise Council: Co-Chair
- Metro N. GA Water Planning District: Education and Water Supply & Water Conservation Technical Coordinating Committees
- Master Gardener Volunteers of Cobb County: Project Chair, Grants Committee Member
- Monarchs Across Georgia: Steering Committee Member
- North American Association for Environmental Education: Member
- Residential Energy Services Network (RESNet) Standards Development Committee (SDC): 1100 Tech Sub Com
- Rivers Alive: Advisory Board, Chair
- Southeast Environmental Education Alliance: Leadership Team

Partnerships

- | | |
|---|---|
| • Alliance for Water Efficiency | • Georgia Green Industry Association |
| • Amphibian Foundation | • Georgia Southern University |
| • Chattahoochee National Park Conservancy | • Keep Cobb Beautiful |
| • City of Smyrna | • Keep Marietta Beautiful |
| • Cobb County Community Development | • Keep Smyrna Beautiful |
| • Cobb County DOT | • Kennesaw State University |
| • Cobb County-Marietta Water Authority | • Life University, Human & Ecology Program |
| • Cobb County PARKS | • Marietta City Schools |
| • Cobb County Public Library System | • Marietta Water |
| • Cobb County Public Safety | • Master Gardener Volunteers of Cobb County |
| • Cobb County School District | • Metro North Georgia Water Planning District |
| • Cobb County Senior Services | • National Park Service |
| • Cobb EMC | • Vickery Hardware |
| • Coca-Cola Bottling Company | • Sierra Club Cobb Centennial Group |
| • Emory University | • State Botanical Gardens of Georgia |
| • Environmental Education Alliance of Georgia | • The Irrigation Association |
| • Georgia Association of Water Professionals | • UGA Cooperative Extension |
| • Georgia EPD Outreach Unit | • USEPA WaterSense |

THANK YOU...to our volunteers and supporters:

Ina Allison	Eric Eberly	Amira Johnson	Ailynn Morales	Tammy Shiflett
Dawn Anderson	Tamara Edwards	Matt Johnson	Lois & Nancy Morrison	Annette Simpson
Elora Arnette	Jake Ehrie	Ansley Jones	Maggi Moss	James Simpson
Leslie Atkins	Jackie Encinas	Jadon Jones	Stefan Moss	Brian Skeens
Jessica Awotona	Will England	Judy Jones	Michael Musser	Sarah Skinner
Paul Awtrey	Dick Enzinger	Michael Justice	Brent Mydland	Paul Slovisky
George Aycock	Mike Ernstes	Swapna Kaimal	Cecelia Nachtmann	Dawn Smith
Carsten Bahnsen	Norman Fagge	John Keiler	Gina Nana	Franke Smith
Naazneen Bandukwala	Erin Feichtner	Keith Kellett	Tony & Ruth Narcisse	Karyn Smith
Delon Barfuss	Jenn Fletcher	Fisher Kelly	Tamera Neal	Janelle Speck
John Barlow	Lori Forrester	Jessica Kelly	Steve Nestor	Kevin Spingler
Cathy Barnard	Cynthia Foster	Monica Kilpatrick	Travis Neumuller	Kerry Steen
Jenny Bartee	David Franklin	Catherine Kommer	Frank Newton	Celia Steigerwald
Julie Barwig	Pathenia Freeman	Emily Krajewski	Jack Norton	Heidi Stephens
Brett Bass	Keli Gambrell	William Kreutzmann	Kathy Nguyen	Beth Stewart
Tammy Bates	Jerome J. Garcia	Tyler Lahti	Lucky Ogbuefi	Adam Sukenick
Andres Galindo Batocletti	LaTosha Garvin	Gilles LaMarche	Kristi Ogle	Rishini Suresh
Colin Bell	Sylvia Gerbovaz	John Lamica	Thelma Ogunjiofor	Abby Tackett
Morica Bellotto	Connie Ghosh	Jennifer Lana	Eric Olson	Carla Thomas
Paige Benson	Alicia Giddens	Erin Landers	Janice Overbeck	Dave Thomas
Sally Bethea	Paul Giles	Mary Ann Lane	Luke Owen	Marjorie Thomas
Linda & Steve Beving	Frank Gipson	Laura LaQuaglia	Tamatha Papadeas	Stephen Thomas
JoAnn Birrell	Heather Glazebrook	Donna Leavell	Graham Paquette	Phoebe Torres
Bill Blythe	Keith Godchaux	Jesse LeBoeuf	Julie Pearson-Clarke	Troccoli Family
Samuel Boamah	Reginald Godfrey	Anne Ledbetter	Pic Petelle	Patrick Tu
Yama Bobb	Marlan Goines-Ballard	Eric Lee	Fernando Pharr	Corey Tucker
Joe Boland	Marcus Golston-Thomas	Renae Lemon	Julie Phillips	Marshan Tucker
Jacob Boling	Guy Gray	AikWah Leow	Tim Phillips	Maria Valenzuela
Angie Bolton	Venya Gunjal	Philip Lesh	Mary Plache	Stephanie Wakefield
Roger Boss	Stacey Haire	Susan Lester	Hugo Plaza	Allie Walker
Robert Bourne	Brittany Hallman	Simon & Patti Locke	Brad Plumley	Matthew Waples
David Breaden	David Hammock	Cynthia Longo	Cornelius Pope	Laura Warner
Sally Brooking	Harold Harbert	Richard Longo	Kaitlyn Preyer	Morning Washburn
Lauren Burns	Allison Hardy	Destine Lowery	Jeff Price Family	Lyn Watts
Paige Bushart	Elizabeth Hardy	Cody Mahaffey	Elsa Prince	Robert Weir
Joi Butler	Hallie Harrison	Mark Mandica	John Purcell	Vincent Welnick
Gloria Camacho	Hannah Harris	Melissa Markle	Mark Ray	Anita Wender
Brian Camp	Michael Harrison	Michael Marshall	Mike Reddick	Samara West
JJ Campbell	Michael S. Hartman	Madison Martin	Marvin Richards	Beth Wheeler
Kristina Canoles	Lewis F Hays	Kate Mason	Jerica Richardson	Jack White
Eric Cason	Richard Heying	Lakil Mason	Destinee Rivera	Kim White
Alice Champagne	Kerrie Higginbotham	Linda May	Alexa Robinson	Meagan Whitehead
Uche Chioke	Bill Higgins	Angela Mbagwu	Pamela Robinson	Britini Whittaker
Richard & Nancy Cole	Jerry & Penny Hightower	Ray McClellan	Teresa Roby	Michael Williams
Tom Constanten	Christie Hill	Sherry McClendon	Nestor Rodriguez	Trimanda Williams
Beth Cooper	Kaeden Hill	Ronald McKernan	Mike Roper	Bernard Wilson
Ryan Coover	Kevin Hill	Jason McCoy	Casey Saenz	Kaye Wilson
Nancy Corbett	Jeff Hite	Warren McCoy	Damiano Salgado	Bill Witherspoon
April Cota-Hobbs	Phillip Hodges	Nancy McGregor	Alonda Sanders	Jeff Wix
Annie Couch	Eloise Holland	Dr. Jackie McMorris	Bailey Sauls	Jacob Wood
Cheri Craft	Kim Holland	Alan McPherson	Lauren Schramm	Julie Wood
Stacy Cromer	Kate Horning	Ruth Mead	Justine Schwartz	Karan Wood
Marvin Cruz	Eden Hunt	Amy Meeker-Taylor	Linda Scott	Jason York
Lisa Cupid	Robert Hunter	Jennifer Mercure	Martha Seabrook	Chuck Youmans
Erica & Kai DerMerritt	John Huth	Susan Meyers	Emily Seed	David Zandstra
Cheryl Dix	Kristine Hwang-Kim	Viktoria Mihan	Pradip Shah	Wayne Zhang
Ric Donato	Patty Ingalsbe	Jackie Miller	Monique Sheffield	
Keturah Drake	Maimuna Jammeh	Mike Miskel	Tracy Shehab	
Katrina Dunn	Jonathan Jenkins	Jenna Mobley	Rachel Sheldon	
Sebastian Durzynski	Revian Jennings	Charlie Monroe	Steve Shelton	
Jeremy Eaves	Amaya Johnson	Cara Mooty	Jackie Sherry	

... And to anyone we inadvertently forgot!

HISTORY

2022

- CCWS continued COVID safety by conducting programs virtually and in-person.
- CCWS awarded Education Program of Excellence from GAWP.
- CCWS receives Innovative Initiatives Award for Sibley Pond Experience from GAWP.
- CCWS receives New Media Award for Water Professional Wednesdays from GAWP.
- CED staff recognized by EPD for 10 and 20 years of Trainer service for Adopt A Stream.
- WS Volunteer (Anne Ledbetter) receives Innovation in Adopt-A-Stream Award from EPD.

2021

- Cobb County lifts limited operations with COVID-19 safety protocols in place.
- CCWS receives the WaterSense® Sustained Excellence Award from EPA.
- CCWS awarded Education Program of Excellence from GAWP.
- WS staff receives New Trainer of the Year Award from EPD.
- WS Volunteers (Tritt Elementary) receives Excellence in Education Award.
- WS Volunteers (Lakewood Colony) receives Excellence in Data Collection Award.
- CED recognizes Patty Ingalsbe as Garden Volunteer of the Year, Kennesaw Mountain National Battlefield Park as Education Partner of the Year, Anita Wender as New Volunteer of the Year.

2020

- Cobb County enters limited operations due to COVID-19.
- WE receives 2020 WaterSense® Excellence in Outreach & Promoting Labeled Products Award from EPA.
- CCWS awarded Comprehensive Education Program of Excellence from GAWP.
- WS receives Watershed Award from EPD.
- CED recognizes: Janice Overbeck as Partner of the Year, Tiffany Davidson as Steward of the Year, George Aycock as AAS Volunteer of the Year.

2019

- WE, WS, and Communications join to form Communication & Education Division (CED).
- WE receives 2019 WaterSense® Sustained Excellence Award from EPA.
- CCWS awarded Comprehensive Education Program of Excellence from GAWP.
- WS staff receives Trainer of the Year Award from EPD.
- WS Volunteers (Tritt Elementary) receives Rivers Alive School of the Year Award from EPD.
- WS Volunteer group (Pope High School) receives AAS School of the Year Award from EPD.
- WS recognizes: Cobb Progressives Earth First as Watershed Group of the Year, Osborne High School as School of the Year.

2018

- WE receives 2018 WaterSense® Sustained Excellence Award from EPA.
- CCWS awarded Comprehensive Education Program of Excellence from GAWP.
- WS Volunteers (Tritt Elementary) receive Rivers Alive Clean-up Award.
- WS recognizes: Eddie Richards as Garden Volunteer of the Year, Rosco Peters as New Volunteer of the Year, Richard and Nancy Cole for Excellence in Data Collection.

2017

- WE receives 2017 WaterSense® Sustained Excellence Award from EPA.
- WE receives Outstanding Drought Response STREAM Award from MNGWPD.
- WE receives Cobb EMC Partner of the Year Award.
- CCWS awarded Comprehensive Education Program of Excellence from GAWP.
- WS receives Watershed Award from EPD.
- WS Volunteer (Anne Ledbetter) receives Red Flag Award.
- WS Volunteers (ERM Atlanta) receives Nymph Award.
- WS Volunteers (Ford Elementary) receive Rivers Alive Clean-up Award.
- WS recognizes: Keep Smyrna Beautiful as Group of the Year, Keheley Elementary as School of the Year, Anne Ledbetter with a Stewardship In Action Award.

2016

- WE receives WaterSense Promotional Partner of the Year from EPA.
- WE receives Water Supply & Water Conservation Program of Excellence STREAM Award from MNGWPD.
- WS staff recognized by Cobb County Board of Commissioners for Excellence in Customer Service.
- WS Volunteer (Norm Fagge) receives Excellence in Data Collection Award.
- WS Volunteers (Pope High School) receive Rivers Alive Clean-up Award.
- WS recognizes: Norm Fagge as Volunteer of the Year, GA AAS as Partner of the Year, Sedalia Park as School of the Year, Simon Locke with a Stewardship In Action Award.

2015

- WE receives WaterSense Promotional Partner of the Year from EPA.
- WS staff receives New Trainer of the Year Award from EPD.
- WS Volunteers (Fairfax Consulting Services) receives Excellence in Data Collection Award.
- WS recognizes: Fairfax Consulting Services as Monitoring Group of the Year, Chattahoochee River National Recreation Area as Partner of the Year, Daughters of the American Revolution Fielding Lewis Chapter as the Stewards of the Year.

- 2014**
- WE receives WaterSense Promotional Partner of the Year from EPA.
 - CCWS receives 2014 Best Direct Media Award for *The Thalweg* from GAWP.
 - WS receives Watershed Award from EPD.
 - WS staff receives New Trainer of the Year Award from EPD.
 - WS receives Rivers Alive Club Award from EPD.
 - WS Volunteer (Ina Allison) receives Excellence in Data Collection Award.
 - WS recognizes: Ina Allison as Volunteer of the Year, Kennesaw State University School of Art and Design as Partner of the Year, Pope High as School of the Year.
- 2013**
- WS in partnership with KCB receives a \$2000 grant for our Cigarette Litter Prevention.
 - WS Volunteer (Morning Washburn) receives AAS in Action Award.
 - WSP Volunteer Group (Sierra Club Centennial Group) receives Extraordinary Volunteer Watershed Effort Award.
 - WSP recognizes: Simon Locke as Volunteer of the Year, David Zanstra and Ric & Sharon Donato as Monitoring Group of the Year, Lassiter High as School of the Year.
- 2012**
- CCWS receives 2012 Innovative Initiative Program Award for *Eco-Logical...Tips to Reduce Your Footprint* from GAWP.
 - WS Volunteer (Eric Lee) receives Excellence in Data Collection Award.
 - WS Volunteer (Cheryl Ashley-Serafine – Nicholson Elementary School) receives Adopt-A-Stream in Action Award.
 - WS recognizes: Carla Loosier as Community Organizer of the Year, Eric Lee as AAS Volunteer of the Year, Nicholson Elementary as School of the Year, Diane Powell as Rain and Wildlife Garden Volunteer of the Year.
 - WS staff serves as President of EEA and receives Volunteer Service Award from EEA.
- 2011**
- WE receives WaterSense Promotional Partner of the Year from EPA.
 - WS staff is expanded to include additional part-time Program Assistants to perform the Brooke and Branch Puppet Show.
 - WS receives Watershed Award from GA Environmental Protection Division (EPD).
 - WS Volunteer (Connie Ghosh - McCleskey Middle School) receives Red Flag Award.
 - WS recognizes: Amy Boggs as Community Organizer of the Year, Pam Subalusky AAS Volunteer of the Year, Tritt Elementary as School of the Year.
 - WS staff serves as President of EEA.
 - WS receives \$5000 grant from Royal Bank of Canada for the Demonstration Rain Garden.
- 2010**
- WS receives Adopt-A-Stream in Action Award from EPD for the Brooke & Branch Puppet Show.
 - WS staff receives Georgia Project WET 2009 Facilitator of the Year.
 - WS recognizes: The Donnelly Family as Storm Drain Markers of the Year, Ric and Sharon Donato as Anuran Monitors of the Year, Terri Tornroos as AAS Volunteer of the Year, Walton High as School of the Year.
- 2009**
- Historical flooding in Cobb County.
 - WE receives WaterSense Promotional Partner of the Year from EPA.
 - WS staff recognized by Cobb County Board of Commissioners for Excellence in Customer Service.
 - WS Volunteers (Tim Phillips and Stacey Haire) receives Excellence in Data Collection Award.
 - WS staff receives 2008 Monarch Across GA Service Award.
 - WS recognizes: Girl Scout Troop 21 as Storm Drain Markers of the Year, Connie Ghosh as Anuran Monitor of the Year, Tim Phillips and Stacey Haire as AAS Volunteers of the Year.
- 2008**
- WS receives Watershed Award from EPD.
 - WS Volunteer (Didi Johnson) receives Outstanding Outreach and Partnership Award.
 - WS staff receives Teaching Conservation Facilitator of the Year from GA Conservancy.
 - WS staff recognized by Rivers Alive for Most Cleanups Attended.
 - WS recognizes Didi Johnson as AAS Volunteer of the Year.
- 2007**
- Georgia declares Level 5 Drought.
 - WS & WE staffs are expanded to include part-time Program Assistants.
 - WE receives Fox McCarthy Award from GAWP.
 - AAS changes name to Watershed Stewardship (WS).
 - AAS receives Adopt-A-Stream in Action Award, for Our Color Your Watershed Mural Grant Program from EPD.
 - AAS Volunteer (Judy Cox - Dodgen Middle School) receives Outstanding Outreach Award.
 - WS recognizes Judy Cox as AAS Volunteer of the Year.
- 2006-2001**
- CCWS receives Public Education Award from GAWP (2006).
 - CCWS Demonstration Rain Garden is certified as a Back Yard Wildlife Habitat, a Monarch Waystation, and a Pollinator Garden (2006).
 - CCWS is designated as a WaterFirst Community (2005).
 - Cobb Water Efficiency (WE) Program Coordinator is hired and program is launched (2005).
 - AAS staff is expanded to two full-time employees (2005).
 - AAS receives Rivers Alive: Outstanding Large Cleanup Award (2005).
 - Demonstration Rain Garden is installed (2004).
 - AAS receives Watershed Award from EPD (2004).
 - AAS Volunteer (Greg Linton) receives Excellence in Data Collection Award (2004).
 - Georgia experiences historic drought (2002).
 - AAS receives Outstanding Outreach and Partnership Award from EPD (2002).
 - CCWS receives Public Education Award from GAWP (2002).
 - AAS Program Coordinator is hired and program is launched (2001).

Abbreviation Key

AAS - Cobb County Adopt-A-Stream
 CCWS - Cobb County Water System
 EEA - Environmental Education Alliance of Georgia

EPA - U.S. Environmental Protection Agency
 EPD - GA Environmental Protection Division
 GAWP - GA Assoc of Water Professionals

MNGWPD - Metro N. GA Water Planing District
 WE - CCWS Water Efficiency Program
 WS - CCWS Watershed Stewardship Program

REFLECTIONS



We continue to organize community service projects programs.

Both virtual and in-person programs were facilitated with local schools this year.

What Do We Have to Offer?

Environmental Science <ul style="list-style-type: none"> • Watersheds 101 • Stream Monitoring Training <ul style="list-style-type: none"> • Chemical & Bacterial • Amphibians & Reptiles of GA 	Water & Society <ul style="list-style-type: none"> • Water 101 • Water/Wastewater 101 • Water Careers from GED to PhD
Human-Environmental Interactions <ul style="list-style-type: none"> • Tri-State Water Wars • Water Around the World 	



Mindful of safety, we hosted community events and teacher trainings both virtually and in-person. We also participated in a few tabling events.



We encourage participation in hands-on, experiential, outdoor learning.

OUR TEAM

The Communications & Education Division includes staff from three units: Communications, Water Efficiency, and Watershed Stewardship.

Kristina Ha, Communications Specialist

Kristina has worked for the Water System since 2008, serving primarily as Cobb Water's Webmaster. In addition to website management, she oversees graphic design for marketing and education materials.

Education:

Bachelor of Fine Arts (Interior Design), Georgia State University, 1999

Associate of Fine Arts (Multimedia Web and Graphic Design), the Art Institute of Atlanta, 2001 (56 hours completed)

Mike Kahle, Watershed Stewardship Supervisor

Mike joined our team in October 2011, initially as a part-time educator. He previously worked as program coordinator with The Nature Conservancy and as a naturalist with the Orange County Department of Education in California.

Education:

Bachelor of Science (Geographical Sciences), University of Nevada, 2008

Certifications: Project WET, Wild & Project Learning Tree Facilitator, Monarchs In the Classroom Trainer, Adopt-A-Stream Community Coordinator and Chemical/Macroinvertebrate/Bacteria Trainer, Master Gardener, Trail Crew Leader, Certified Interpretive Guide, MS4 Compliance & Enforcement Certified Inspector, Leave No Trace Educator

Aminta Liu, Water Efficiency Program Specialist

Aminta joined our team in April, 2019. After completing her undergraduate degree at Cornell University, she spent three years working as an environmental health inspector specializing in lead poisoning prevention and integrated pest management for New York City's Department of Health & Mental Hygiene.

Education:

Bachelor of Arts (Biology & Society), Cornell University, 2015

Certifications: EPA Licensed Lead Risk Assessor, Adopt-A-Stream Chemical Volunteer, Project WET, Wild & Learning Tree Facilitator

Angie Marcus, Water Efficiency Supervisor

Angie joined our team in July 2015. Her background includes work in youth counseling as well as environmental education with Virginia 4-H and Learning Tree Farms.

Education:

Master of Social Work (Family & Children), Kennesaw State University, 2014

Master of Education (Outdoor Education Administration), Georgia College & State University, 2000

Bachelor of Arts (Sociology), Lenoir-Rhyne University, 1997

Certifications: Project WET, Wild & Learning Tree Facilitator, Challenge Course Trainer, Outdoor Wildlife Leadership School, Leave No Trace Trainer, Adopt-A-Stream Chemical Trainer

Jennifer McCoy, Communications & Education Division Manager

Jennifer has worked for Cobb County since 2000 as an environmental educator and as an environmental compliance inspector. Her work as a naturalist at a nature center, an instructor at a science museum, and a biologist for an environmental consultant contributes over 20 years of professional experience to our program.

Education:

Master of Public Administration, Kennesaw State University, 2011

Master of Science (Ecological Teaching & Learning), Lesley University, 2007

Certificate (Geographic Information Systems), Kennesaw State University, 2000

Bachelor of Science (Biology), Kennesaw State University, 1997

Certifications: Project WET, Wild & Learning Tree Facilitator, Monarchs in the Classroom Trainer, Leopold Education Project Facilitator, Adopt-A-Stream Chemical/Macroinvertebrate/Bacteria Trainer, Master Gardener, NAAEE Guidelines for Excellence Trainer

Shaundon Moore, Watershed Stewardship Program Specialist

Shaundon joined the Watershed Stewardship program in June 2019, soon after receiving his graduate degree in Conservation Biology. His specialties lie in environmental conservation and outreach, previously serving in positions with Georgia Aquarium, Zoo Atlanta, and Hancock Biological Station in Kentucky.

Education:

Master of Science (Conservation Biology), Central Michigan University, 2018

Bachelor of Science (Biology), Valdosta State University, 2016

Certifications: Master Herpetologist, Adopt-A-Stream Chemical/Macroinvertebrate/Bacteria Trainer

Laurelle Panchoo, Water Efficiency Program Leader (Part Time)

Laurelle joined our team in July of 2019 and is coordinating the Brooke and Branch puppet show. Her background is in illustration and brand development. She has experience teaching art and social skills to children and individuals with special needs. She has also spent time teaching STEAM lessons to elementary students.

Education:

Bachelor of Fine Arts (Illustration and Design), Art Institute of Atlanta, 2011

Chrissy Rubel, Watershed Stewardship Program Specialist

Chrissy has worked for Cobb County since 2017 as a water conservation specialist and environmental educator. She specializes in sustainability consulting and education, previously working with Kennesaw State and Georgia Tech to improve their sustainability curriculum and outreach.

Education:

Bachelor of Arts (Theatre & Performance Studies/Minor Enviro Sciences/Sustainability), Kennesaw State University (2016)

Certifications: Project WET, Wild & Learning Tree Facilitator, Adopt-A-Stream Chemical & Bacteria Trainer

Virma Vélez, Communications & Education Division Administrative Specialist

Virma has worked at Cobb Water since 2018 and joined our team in 2020. She has years of experience working with children and youth in outdoor and classroom settings. Virma translates valuable information that goes out to our community and provides assistance to our environmental educators at events and classes, including the Model Water Tower competition.

Education:

Master of Arts (Communications - Writing), Universidad del Sagrado Corazón, 2015

Bachelor of Arts (Communications - Public Relations & Advertising), Universidad de Puerto Rico, 2011



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