GEORGIA Adopt-A-Stream

Volume 27, Number 1 January-March 2020 *Adopt-A-Stream Staff, Editors*



Adopt-A-Stream Wraps Up 2019!

Georgia Adopt-A-Stream has had another successful year of water quality monitoring and increasing awareness about the issues impacting our state's waterways! We couldn't have done it without our incredible volunteers, trainers, community coordinators, advisory board members, and partners, as it is through your support that our program can continue to grow. We sincerely thank you for the 26,000 hours of service, worth over \$675,000 in volunteer dollars that you contributed to the program this past year! For more statistics from the 2019 monitoring season, flip to "Adopt-A-Stream by the Numbers".

Explore More Ways to Get Involved with AAS in 2020

Are you looking for even more avenues to get to know and protect your local watershed outside of the traditional chemical, bacterial, and macroinvertebrate monitoring? Contact us at AAS@dnr.ga.gov and we will help coordinate trainings for any of the following workshops:

Intro and Visual Monitoring



Amphibian Monitoring



Wetland Monitoring



Rain Garden and Stream Restoration



Continuing our Partnership with EEA



Georgia Adopt-A-Stream is proud to have extended the Environmental Protection Division (EPD) Memorandum of Agreement (MOA) with Environmental Education Alliance (EEA) of Georgia. We've shared an MOA since the year 2000 and we signed a new contract in the summer of 2019. The MOA essentially stipulates that we will support our common goal of increasing the environmental literacy of all Georgians and secures EEA's fiscal partnership

with AAS. We are looking forward to many years of mutually beneficial partnerships, since this new MOA will take us to December 2034!

iAAS en Español!

This past January, the coastal Adopt-A-Wetland (AAW) program conducted their first bilingual monitoring workshop. AAW Coordinator Luke Roberson collaborated with Dr. Checo Colon-Gaud, Nancy Fernandez, and Katie Higgins to create Spanish PowerPoints, guides, tests, keys and data sheets for coastal chemical certification. In addition to these resources, there are a number of materials available for our Spanish-speaking volunteers on our website, AdoptAStream.Georgia.gov, including Spanish versions of the Intro, Visual Stream Survey and Chemical & Biological Monitoring manuals. Contact the state office if you would like more information about making AAS more accessible to Spanish-speaking citizen scientists in your area.

Do you want to become an AAS Trainer?

We are so grateful to our trainers and all they do to serve as points of contact for over 1,500 AAS volunteers across the state. Trainers engage communities through workshops, review data submissions to ensure QA/QC guidelines are followed, and act as first responders when an issue is detected. We ask that all trainers be QA/QC certified in the type of monitoring they wish to teach, attend and pass a "Train the Trainer" (TTT) workshop, which provides instruction on how to conduct a workshop and work with volunteers, and conduct two co-trainings with an experienced trainer.

If you are interested in becoming an AAS trainer, contact the State Office at AAS@dnr.ga.gov to set up a TTT workshop.















Thank You Active 2019 Trainers!

Trainers who led at least one QA/QC workshop in 2019

Alexa Robinson
Angie Marcus
Bob Schmitt
Bruno Giri
Callie Moore
Checo Colon-Gaud
Chris Kodani
Eric Eberly
Frank Carl
Ganesh Venugopal
Hannah Penn
Harold Harbert
Hayley Wise
Jacob Oblander

Javier Sayago
Jennifer McCoy
Jennifer McLaurin
Jesse Demonbreun—
Chapman
Jessica Sterling
Jessica Warren
John Butler
Jordan Girard
Joseph Rigdon
Julie Parsons
Julie Shutters
Kate Mowbray
Ken Fahey

Laura Early
Laura Schneider
Lori Forrester
Luke Roberson
Malloree Holcombe
Michael DeLisle
Michael O'Shield
Michele Smith
Mike Kahle
Rachael Thompson
Raleigh Keagan
Robert Hodgdon
Robert Thomson
Ruth Eilers

Ruth Mead
Samantha Eubanks
Sarah Sweat
Seirisse Baker
Shelley Lange
Shelly Krueger
Sumner Gann
Terry Porter
Tyler Sims
Vicki Culbreth
Vicki Soutar
Will England
William Lott
Yvette Wise

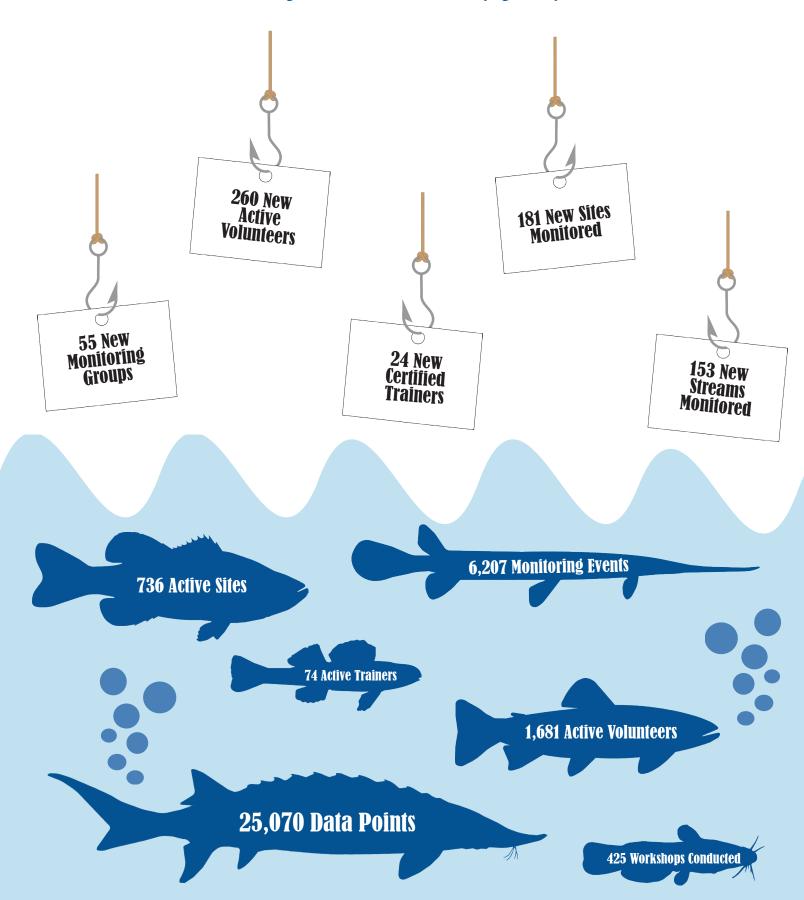
Welcome New 2019 Adopt-A-Stream Trainers!

New trainers who led at least one QA/QC workshop in 2019

Annie Couch Ashley Ray Ashley Turner Bailey Crapps Ben Martin Cecilia Nachtmann Charlee Martin Damon Mullis Erica McLelland Gretchen Quarterman Jackie Encinas Justin Bristol Kate Carson Lyn Watts Patricia DuBose Rebecca Risser Robert Gipaya Sabrina Hodges Shaundon Moore

Adopt-A-Stream by the Numbers 2019

Thanks for making 2019 an o-fish-ially great year for AAS!



Community Partnership Highlight: EPA Region 4

Water Quality Monitoring and Citizen Science in Proctor Creek

Cynthia Y Edwards, PE, Region 4 Urban Waters Coordinator



The Environmental Protection Agency (EPA), in cooperation with United States Geological Survey (USGS), Georgia Environmental Protection Division (EPD), City of Atlanta, West Atlanta Watershed Alliance (WAWA) and other stakeholders, completed a water quality study in the Proctor Creek Watershed in Atlanta in 2018. The study was designed to collect and provide baseline water quality data to evaluate impacts of present and future actions within the watershed as part of the Proctor Creek Urban Waters Federal Partnership.

The primary goals of the Proctor Creek Watershed Monitoring Quality Assurance Project Plan were to assess both baseflow and stormflow surface water conditions, to determine if any pollutants were exceeding water quality

standards and to work cooperatively with other groups to share data and information regarding the condition of the streams in the watershed. EPA sampled 15 locations in the Proctor Creek Watershed based on input from citizen stakeholders. The citizen science teams, which included Chattahoochee Riverkeeper's Neighborhood Water Watch (NWW) and Georgia Adopt-A-Stream (AAS) volunteers, identified issues of concern as well as potential sampling locations.

Water and sediment samples were collected and analyzed for a variety of constituents, including fecal bacteria, nutrients, classical parameters (oxygen, pH, turbidity, conductance, and flow), metals, pesticides and a variety of chemicals used by both commercial businesses and private homeowners. Additional tests conducted include in situ water quality measurements, stream discharge calculations, macroinvertebrate and habitat assessments, and fish tissue analyses. Sampling was conducted on a quarterly basis over a two- year period. USGS provided continuously operating flow gages at three locations in the watershed in cooperation with the EPA and the City of Atlanta.

Now that the project plan is complete, other projects that are utilizing these data are currently underway. As a result of the Fish Tissue Study, EPD placed four species on Georgia's fish consumption advisory and adopted the recommendations in the Fish Tissue Report. Additionally, ecoSPEARS, a leading global provider of green remediation technologies, is hoping to use the water quality data and sampling locations from this study to demonstrate their technologies in and around Proctor Creek. Finally, as a result of the project plan, funding was received from the Coca Cola Company to install trash receptors that will collect litter from the creek which would otherwise flow into the Chattahoochee River. The partners and stakeholders involved will receive water quality data from before and after the installation of the receptors to determine the impacts of different types of trash on water quality.



There will continue to be conversations about using the monitoring plan data to supplement ongoing monitoring by EPD, the City of Atlanta, NWW and AAS volunteers with the Upper Chattahoochee Riverkeeper. The results of the water sampling events from September 2015 through 2017, the Fish Tissue Analysis and the Final Summary Reports are available on the EPA Proctor Creek Urban Waters website:

www.epa.gov/urbanwaterspartners/urban-waters-and-proctor-creek-watershedatlanta-georgia

Check Out Our New Website!

We're kicking off the new decade by giving our website, AdoptAStream.Georgia.gov, a makeover! Although it may look different, the location, content and database are all the same as when you last visited. Contact AAS@dnr.ga.gov if you have any questions concerning the new website.

Board Member Highlight: Sarah Sweat, Tennessee Aquarium Conservation Institute

Sarah joined the Georgia Adopt-A-Stream Board in late 2018, but her interest in water and aquatic critters began while she was growing up in Canton, Georgia. This interest is what led Sarah to pursue a Bachelor of Science in Environmental Sciences from Georgia College & State University. It was here that she first became AAS certified by Ruth Eilers in 2012 through an Environmental Education class. To further pursue her love of water, she obtained a Masters of Science in Biology at GCSU while studying the hydrogeology and spatial distribution of the Oconee Burrowing Crayfish (*Cambarus truncatus*), a threatened species of burrowing crayfish.



In 2014 she accepted a job just across the state line at the Tennessee Aquarium Conservation Institute (TNACI) as their GIS Analyst. The TNACI mission is to

connect people with nature and empower them to make informed decisions about water and wildlife; therefore, she thought that AAS would be the perfect addition to the education programming they offered to the northern Georgia and southeastern Tennessee regions. She became a macroinvertebrate, chemical, and bacterial trainer, and soon AAS became a key program that the TNACI staff offers.

At the Tennessee Aquarium, they have found that educating teachers is a great way to maximize their impacts on their community and spread the word about water quality issues that affect most of the southeast. Every summer they host a weeklong workshop, called River Teachers, that gives teachers the tools and training to facilitate lesson planning focused on freshwater biology. AAS training and Project Wet certification are both part of that week. The Conservation Institute also works to partner with land trusts to incorporate water quality into their conservation efforts.

Sarah lives in the Chickamauga watershed with her husband Matt, their baby boy and their dog Luna. They can often be found around Chattanooga enjoying the wide range of events and food.

Welcome New Adopt-A-Stream State Coordinator, Jenna Dodson!



Georgia Adopt-A-Stream is excited to announce Jenna Dodson as our new State Coordinator! Jenna graduated Summa Cum Laude from Virginia Commonwealth University (VCU) in 2014 with a Bachelor of Science in Environmental Studies and a minor in Music. In 2015, Jenna received her Master of Science degree in Environmental Studies, also from Virginia Commonwealth University.

After her graduate studies, Jenna spent two years in the Peace Corps in Senegal, West Africa. During this time, she coordinated agroforestry trainings, conducted workshops, partnered with other Peace Corps volunteers and local organizations, organized meetings and developed curricula to communicate with volunteers. For the past two years, Jenna has lived in Sweden, working as an Associate Researcher at the University of Gothenburg. Here she wrote scientific reports and science arti-

cles, developed outreach materials and conducted outreach through social media channels and writing weekly blogs. During this time she also took advantage of her music minor and served as a volunteer coordinator implementing community music events. Jenna has two scientific publications, one in Ecology and Evolution and another in Environmental Science & Technology.

Jenna also has extensive experience conducting water quality analyses, as a result of both her undergraduate and graduate school experience as well as her three years of volunteering with the James River Association, the local volunteer water quality monitoring program in Virginia. Jenna will be joining State Coordinator Bailey Crapps and the rest of our outreach staff to help protect Georgia waters. Feel free to send an email to Jenna.Dodson@dnr.ga.gov to welcome her to Georgia!

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The preparation of the Georgia Adopt-A-Stream quarterly newsletter is financed in part through a grant from the US Environmental Protection Agency under provisions of Section 319(h) of the Federal Clean Water Act of 1987, as amended. For more information about the Georgia Adopt-A-Stream program or to contribute to the newsletter, contact:

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AdoptAStream.Georgia.gov

AAS Staff: Harold Harbert, Bailey Crapps, Jenna Dodson Jackie Encinas, Kate Carson, Cecilia Nachtmann

GO BLUE! Sign up for our e-newsletter by emailing us at AAS@dnr.ga.gov



Dragonfly





Riffle Beetle



Dobsonfly



Stonefly



Net Spinning Caddisfly

Confluence 2020 Postponed

Due to concerns over COVID-19, Confluence will now take place

August 28-30, 2020

at Unicoi State Park

Current registrations will carry over, but full refunds are available if needed For more details, go to AdoptAStream.ga.gov or contact us at AAS@dnr.ga.gov

Stay Connected!

Like us on Facebook and follow us on Instagram to stay up-to-date on the latest Adopt-A-Stream news! Use #gaadoptastream or tag us when you post photos of yourself monitoring. We love to see all the good work you do!



