

GEORGIA Adopt-A-Stream

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Tara Muenz and Anne Stahley, Editors



Adopt-A-Stream by the Numbers 2013

If you're an Adopt-A-Stream QA/QC volunteer, you know our goals by heart. Let's take a look at how all of us, as volunteers, trainers, coordinators and AAS Board members, met the goals and contributed more than 22,500 hours of service worth over \$462,000 in volunteer dollars to protect Georgia's waterways.

Check out the 2013 successes that WE created!



- Delivered via hard copy or e-mail our bi-monthly newsletter to over 8,100 individuals statewide. Over 40% of these were electronic. GO BLUE!
- In 2013, over 220 volunteers attended our annual conference, Confluence.
- Our Facebook spread is a strong force of 339! Please 'like' us and post stories, upcoming events, and wisdom from your monitoring experiences.



- A major accomplishment was working with our awesomely patient programmer to create the new online data entry structure launched in 2014!
- 18,548 monitoring data points were captured in 2013.
- 48 new groups and 177 new sites were registered.
- EPD added 5 AAS volunteer sites to their regulatory monitoring schedule .
- Volunteer data is used in a multitude of ways to protect Georgia's waterways!



- Big updates to Visual Stream Survey manual finished!
- New observations on data forms to be taken when sampling, including flow/water level, clarity, color, surface, odor, trash and photos.



- **Our following partners continued the success of Adopt-A-Stream in 2013**

Environmental Protection Division	UGA Marine Extension
Environmental Education Alliance of Georgia	Georgia River Network
Keep Georgia Beautiful Foundation	AAS Advisory Board
AAS Community Coordinators and Trainers	

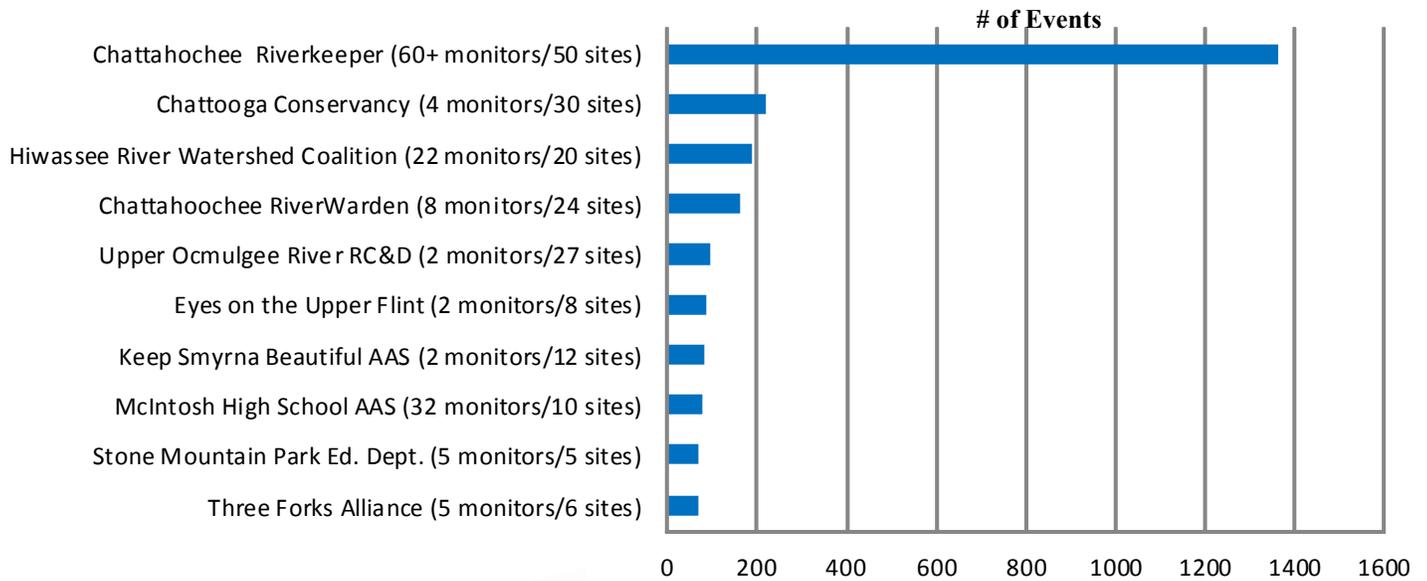


- AAS said goodbye to Allison Hughes and hello to Anne Stahley as State Coordinator.
- Our 50 active trainers & 9 new trainers conducted 424 workshops conducted & trained 2,795 volunteers.
- AAS equipment loan & replacement reagent program continues its success in 2013.

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Adopt-A-Stream by the Numbers 2013 continued...

Top 10 Monitoring Groups for 2013



Watersheds: Monitoring Events	Events
Upper Chattahoochee River	1647 events
Upper Middle Chattahoochee River	565 events
Upper Ocmulgee River	295 events
Etowah River	250 events
Tugaloo River	226 events
Upper Flint River	211 events
Lower Middle Chattahoochee River	207 events
Hiwassee	195 events
Middle Savannah River	143 events
Ogeechee Coastal	112 events
Toccoa River	67 events
Lower Ocmulgee River	48 events
Lower Ogeechee	28 events
Upper Oconee River	24 events
Conasauga River	24 events
Oostanaula River	17 events
Canochee River	14 events
Coosawattee River	14 events
Little Ocmulgee River	12 events
Upper Tallapoosa	11 events

Trainers: Top 10 Workshops Conducted	Workshops
Kevin Smith	44 workshops
Mike Kahle	34 workshops
Roger Martin	30 workshops
Brian Wiley	25 workshops
Jennifer Collins	23 workshops
Jennifer Flowers	22 workshops
Susan Meyers	18 workshops
Michael O'Shield	17 workshops
Kathleen Lemley	17 workshops
Frank Carl	16 workshops

Act as if what you do makes a difference. It does!

~William James

What a GREAT year, thank you volunteers!

Rivers Alive had another successful year in 2013. The education message focused on making the connection to our coastal waters reminding folks that from the Georgia mountains to our white sand beaches, we all play a role in reducing the impacts of human activities. A poster was published to reinforce this theme and it included a classroom activity on the back called, "Turtle hurdles." The artwork (right) captures the beauty of the coast, once again reinforcing the theme. The fundraising committee had a successful year, raising nearly \$50,000. New bylaws were approved, providing further guidance on the governance of the program. As for the final numbers, we experienced a little of everything last year: volunteer numbers went down, hours and bags of trash went up, and curiously, total pounds removed went down. And if we all agree that less trash is progress, we can confidently consider 2013 a resounding success!



Adopt-A-Stream by the Numbers 2013 continued...



The heart of a volunteer is not measured in size, but by the depth of the commitment to make a difference. DeAnn Hollis

Going Beyond: Big Changes Coming to the AAS Program in 2014

The State Office has been working hard to fine tune and update many aspects of our monitoring program, including new QA/QC duplicate precision rules (say goodbye 10% DO rule, hello +/- 0.6ppm!), manuals, datasheets and online data entry. All of these changes will be launched this year and we are very excited. Please stay tuned to newsletters, emails and communications from us and your local coordinators and trainers for these changes so the transition will be as smooth as possible. As always, our program welcomes comments and suggestions from you to improve the AAS program, so please feel free to call or write us. We would love to hear from you and value your perspective.

**We Appreciate Your Dedication to Georgia's Waterways,
Happy Monitoring in 2014!**

Chattooga Conservancy Partnership written by Nicole Hayler, Chattooga Conservancy



May 10, 2014, marks the 40th anniversary of the Chattooga River's reign as the crown jewel of the 'National Wild and Scenic Rivers' system in the Southeast. Yet for at least as many years, the lower reach of the Chattooga has suffered the ill effects from the polluted waters of one of its main tributaries, Stekoa Creek, beset with excessive levels of both fecal coliform and sediment. In fact, back when the Chattooga was protected under the Wild & Scenic Rivers Act, the section below the Stekoa/Chattooga confluence was only included under the provision that

the City of Clayton and the State of Georgia would work to improve Stekoa Creek's water quality. This provision has been largely ignored—until relatively recently.



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Chattooga Conservancy Partnership *continued*

A couple of years ago, the Chattooga Conservancy partnered with the City of Clayton in submitting a grant request to the GA EPD's 319(h) program for funds to begin improving Stekoa Creek's water quality. About the same time, the City of Clayton applied for funding from a couple state agencies to replace some sections of their failing sewage collection system, much of which runs next to Stekoa Creek. These grant requests were successful, which has finally started the ball rolling.

Stekoa Creek was among the first in the State of Georgia to have received a "total maximum daily load" (TMDL) plan, which outlines ways to improve water quality in impaired waters. The grant funded a variety of demonstration activities such as repairing an eroding stream bank; rehabilitating numerous failing septic systems in or near the stream's floodplain; implementing "agricultural best management practices;" restoring the riparian zone on a ¼ mile stretch of the stream; and, constructing an "urban filtration basin" to intercept and clean storm water runoff from State Highway 441, which runs next to portions of Stekoa Creek.

Based on project successes with the first 319 grant and urgent need to clean up Stekoa Creek, the Chattooga Conservancy and the City of Clayton were tapped by the GA EPD to take on a second 319 project aimed at producing a "watershed management plan" for the Stekoa Creek watershed. The purpose of a watershed management plan is to seek out and identify the hotspots of pollution within the watershed, and to also name the sources of funding and management measures that could reduce/eliminate root causes of pollution and thus lead to measurable improvements in water quality. This conduit of funding is especially critical for Stekoa Creek, whose TMDL plan calls for a whopping 76% reduction in fecal coliform loads and a 75% reduction in sediment loads for the creek to meet its designated uses as a primary trout stream and recreation resource, as well as to honor the 40-year-old commitment to improve water quality in the lower Chattooga River.



The confluence of Stekoa Creek (muddy water) and the Chattooga River (clean water), a common site in this watershed.



Duncan Hughes, AAS trainer, leads a certification workshop in monitoring for macroinvertebrates as indicators of water quality.

The Chattooga Conservancy in partnership with the City of Clayton is now engaged in our second 319 grant for the "Stekoa Creek Watershed Management Plan Development" project, which will adhere to Georgia Adopt-A-Stream methods to guide the water quality data collection process. Staff and volunteers collecting the water samples are required to pass the appropriate Adopt-A-Stream classes. So over the past few months, the Chattooga Conservancy has participated in many of the Adopt-A-Stream certification workshops, including bacterial, macroinvertebrate, chemical, as well as the visual stream surveys. Folks attending the workshops have included local Boy Scout troop members, Trout Unlimited members, local officials, college students, and a diverse assembly of citizens who all believe that progress should be made in starting to clean up Stekoa Creek.

To date, 33 sites at strategic spots along Stekoa Creek and its tributaries are being sampled every few weeks to determine pollution hotspots of high levels of *e. coli* bacteria and chronic sources of sediment. We are also using a fluorometer to test for the presence of optical brighteners, which are used in a variety of flushable products that could leach into streams from failing septic/sewer systems, and thus help differentiate if a high *e. coli* result was due to a dysfunctional septic/sewer system, or originated from agricultural sources. Our water sampling results are entered into the Adopt-A-Stream website for reporting purposes as well as public education. The daunting but truly attainable task of cleaning up Stekoa Creek is finally starting to gain momentum thanks to community resolve, and GA EPD's 319 and Adopt-A-Stream programs.

Visit their website at www.chattoogariver.org

Supporting Healthier Waters in Macon written by Chris Wood, Macon Water Authority

The Macon Water Authority (MWA) continues to invite customers and citizens to get involved in efforts to protect local water quality. Approximately 20 volunteers joined the cause in mid-December when they completed Georgia Adopt-A-Stream training, the first hosted by the MWA, as the utility plans to grow the number of participants in the program from Macon and Bibb County in the future.

For educators such as Paul Midkiff, Upper School Counselor and sponsor of the Environmental Science Club at Mount de Sales Academy, water quality is important, both personally and professionally. Midkiff and some of his students received Adopt-A-Stream training two years ago when they began monitoring the stream quality at Sabbath Creek in North Macon. They now are in the process of adopting a stream closer to home, so their monitoring efforts are likely to move to a stream at the nearby Indian Mounds. Midkiff brought fellow teacher Jill Smith and Mount de Sales student Madison Dorminey with him to the training at the MWA on Dec. 14, so they too could obtain certification. He says he hopes to expand student participation in Georgia Adopt-A-Stream, while perhaps including stream monitoring in his school's course curricula.

"A couple of years ago, some students approached me about adopting a stream, after they became interested following their participation in Ocmulgee Alive," says Midkiff, referring to Macon's annual river cleanup, also organized and hosted by the MWA. "Our school hopes to add an AP (Advanced Placement) environmental science class next year that will require monitoring for completion of the course. My plan is for all students taking this class to in turn become certified to monitor."

Tara Muenz mentioned that the 20 citizens certified in Adopt-A-Stream chemical and bacterial monitoring protocols will be able to collect and enter water quality data into a publicly accessible online database for one year, before recertification is required.



On the banks of the Ocmulgee, participants learn how to conduct tests of the river including pH, dissolved oxygen, temperature and conductivity.



Volunteers discuss how to take the dissolved oxygen (DO) reading on the titrator. This is the final step of the DO test!

"We really don't have much data collected in the Macon area or for the Ocmulgee and Altamaha watersheds, so it's exciting for us to have this momentum following the training sponsored by the Macon Water Authority," says Muenz. "The local support and connections we have through the Macon Water Authority will be a great help for spreading the word about healthy waterways and how to get involved in the Adopt-A-Stream Program."

MWA officials concur, noting their intent to increase public awareness of the need for Adopt-A-Stream volunteers locally in Macon, Bibb County and surrounding areas in Middle Georgia.

"We're going to continue our support of Georgia Adopt-A-Stream and really push for more involvement by volunteers locally, as we enhance our role in protecting water quality and call attention to water quality issues," says Mark Wyzalek, MWA Director of Laboratory and Environmental Compliance, who notes that future MWA support will include lending test kits to local groups who organize and become involved in the program. "By hosting the workshops, we had an opportunity to kick-start the Adopt-A-Stream Program in Macon, and it has borne fruit as evidenced by the establishment of two new local groups who are providing stream monitoring at Langford Creek and Jackson Springs."

For the full article and additional information on the Adopt-A-Stream training workshops see the MWA Web site at www.maconwater.org or contact Mark Wyzalek at mwyzalek@maconwater.org.

The Georgia Adopt-A-Stream Newsletter is published quarterly.
For more information about the Georgia Adopt-A-Stream program or
to contribute to the newsletter, call or write to:

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**GO BLUE in 2014 by signing
up for our e-newsletter &
receive all the same news while
saving our natural resources.
Sign up by emailing us at
aas@gaepd.org.**



Dragonfly



Riffle Beetle



Dobsonfly



Stonefly



Net Spinning Caddisfly

Thank You to Active QA/QC Trainers, You Are Gold to Us!

**Trainers who have led at least one QA/QC workshop in 2013*

Jennifer Arp
Robbie Arrington
Cheryl Ashley-Serafine
Coral Bass
Brandi Cagle
Eric Cagle
Blake Caldwell
Frank Carl
Jennifer Collins
Laurie Crooks
Vicki Culbreth
Beverly English
Jennifer Flowers
Lori Forrester

Scarlett Fuller
Harold Harbert
Sheila Humphrey
Dan Huser
Allison Hughes
Duncan Hughes
Mike Kahle
Pam Keel
Chris Kodani
Kathleen Lemley
Eric Lindbergh
Roger Martin
Jennifer McCoy
Brian McKinney

Brian McKnight
Ruth Mead
Michael Meyer
Susan Meyers
Kate Mowbray
Tara Muenz
Michael O'Shield
Robert Phillips
Michael Reardon
Alexa Robinson
Tom Sewell
Tyler Sims
Mary Carol Sheffield
Dave Smith

Josh Smith
Kevin Smith
Sharon Smith
Anne Stahley
Brian Sterner
Mary Sweeney-Reeves
Obby Tapley
Beth Walker
Amos Tuck
Jason Ulseth
Beth Walker
Andrew Walter
Tom Weiland
Brian Wiley

Welcome to our New Trainers and Coordinators

Rich Bowerman
Jessica Forbes
Lance Renfrow

Mark Dallas
Chelsea Hopkins
Joseph Adams

Sayuri Adams
Jennifer Haney
Tom Lamb

*Please visit our online calendar at www.GeorgiaAdoptAStream.org
for upcoming monitoring workshops and Adopt-A-Stream events.*