

2019 IMPACT REPORT:

Launching the next decade of protecting and restoring the Cahaba River and its rich diversity of life



We just celebrated our 30th year!

Now we are shaping our future leadership and the relevance of our work in a changing world.

Did you know that four of our seven full-time staff love the Cahaba so much that together we've given over 90 years of service to Cahaba River Society?

This makes us especially mindful of the exciting potential of young, diverse leaders for the Cahaba River, our drinking water, and our Earth. This Impact Report tells you more about our work to inspire and empower young people and engage them in leadership roles with CRS to ensure healthy, resilient water resources for their future. **Join us as we work to:**

Inspire River Stewardship

and build the community of active support for the Cahaba by connecting people with the River through education, recreation, the arts, and volunteerism

Restore the River

through policy and project advocacy for water-sustaining urban development, green Infrastructure, clean and abundant water, biodiverse wildlife, and healthy communities

Build our Impact

to achieve our mission through commitment to equity, diversity and inclusion and through collaboration, communication and celebration

2717 7th Ave South ~ Suite 205 ~ Birmingham, AL 35233 ~ 205-322-5326

www.CahabaRiverSociety.org

Inspiring River Stewardship through Education

When people feel connected to a place, they act to care for it. Cahaba River Society has greatly increased the active community base of support for saving the Cahaba and our drinking water through education, recreation and volunteerism.

Shane Hulsey CLEAN Program 2019 Impacts

Children Linking with the Environment Across the Nation
Having served more than 38,500 students over its 23 years, the Shane Hulsey CLEAN Environmental Science Education Program connects youth with nature, teaches the science that underpins water stewardship, and opens the door to environmental and science careers to students from all walks of life.

2,327 People Served in 2019 **62** Programs Delivered to **32** Schools & Organizations **10** Schools & Organizations in Economically-Disadvantaged Communities

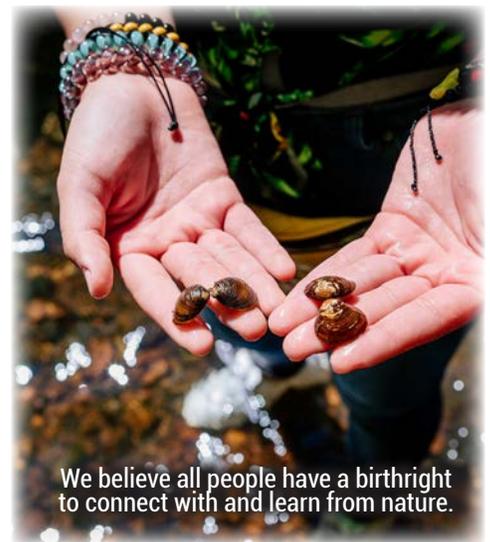
34% of participants were people of color



Bridging barriers to build Cahaba connections

For youth, lack of equitable access to the benefits of education and recreation in nature can be a barrier to personal growth. All of us become impoverished, as a society, if some members can't fully grow into their potential. CLEAN is bridging these educational and nature access barriers. This unique, transformative program is helping us reach more youth of all economic backgrounds and students of color as part of our work to raise the next generation of water stewards and diversify environmental leaders and professionals. Intensive outreach to

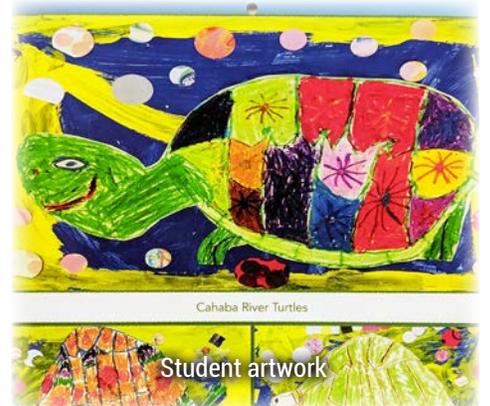
schools and new partnerships with non-profits that serve youth have led to scheduling more CLEAN trips, yet there are often last-minute hurdles to overcome. When one middle school let us know that they needed to cancel their trip for financial reasons, our staff secured an in-kind donation of bus transportation and lunches so that we could serve these students. Through targeted partnerships and our tenacity we are reaching more youth of color and those from less-advantaged communities who can benefit from this unique enrichment program.



Vestavia Hills Elementary Cahaba Heights

The CLEAN Program works to foster the Cahaba connection that inspires activism and stewardship. The students and teachers at Vestavia Hills Cahaba Heights exemplify that principle. They received an Alabama 200 bicentennial grant to explore what is special about the state. They used it to bring 131 4th graders on CLEAN trips to the Little Cahaba River. The entire school made

Cahaba-inspired art work and used it to create a beautiful calendar which they sold as a fundraiser, and they donated the proceeds to Cahaba River Society! The funds supported our 2019 Big Cahaba Cleanup Anti-Littering Campaign. Students, teachers, and parents from the school also gave a volunteer day to clean up trash along Shades Creek.



Volunteer River Restoration: Inspiring Stewardship through Service

Cahaba River Society multiplies the efforts of volunteers and partners working with us to restore river and forest habitat, clean up trash, and reduce littering behavior.

Big Cahaba Cleanup

In June 2019, CRS planned to launch a new event, Big Cahaba Cleanup, to clean 50 miles of River in one day. Although inclement weather forecasts prevented the event from being held, multiple corporate, local government, and civic partners were enthusiastically involved and helped amplify our public anti-littering education campaign. **We especially thank Alabama Outdoors, our presenting**

sponsor. We produced three "What Litter Ends Up In Your River?" short videos for social media (www.bit.ly/riverlitter) and led individual cleanups during the summer with teams that had signed up for Big Cahaba Cleanup. Save the date for Big Cahaba Cleanup: May 2, 2020! To volunteer or lead a team, contact Gordon Black at clean@cahabariversociety.org or 205-999-3459.



Volunteer Restoration Program

Our volunteer program has expanded way beyond river cleanups to removing invasive plants and replanting riverside forests with natives raised from Cahaba seed, in collaboration with Birmingham Botanical Gardens, Friends of Shades Creek, and others. Little Garden Club helped us replant a riverbank restoration project by Freshwater Land Trust

at the Grants Mill river access. We have built a river cane/native plant propagation facility by the River in Hoover. We are planning 2019-2020 projects along the Cahaba and Shades Creek that will compare experimental methods for efficient, effective privet removal and native plant restoration without any use of herbicides.



Eradicating invasive Wild Taro

We are pleased to report that our eradication efforts for Wild Taro (aka elephant ear plant), which is invading riverbanks and Cahaba lily habitat, are effective! Thus far taro is seriously knocked back in the Cahaba National Wildlife Refuge, Cahaba lily habitat, 280 drinking water pool, and below the Hoover East Sports

Complex. In partnership with Samford University, we produced an interactive online map that community volunteers can access to help us track taro locations in the watershed and record the success of our eradication efforts. Learn more at www.savethecahaba.org/taro.



2019 Volunteer Stewardship Impacts

We have led

360

volunteers in

14

service projects

plus

36

field work days for habitat restoration by staff, board members, and interns.

Removing invasive Wild Taro, shown here, has become one of our urgent priorities.

Thank you to all of the organizations that participated in volunteer service projects this year!

Alabama School of Fine Arts • Friends of the Cahaba National Wildlife Refuge • Highlands Day School
Impact America • Jefferson State Community College • Little Garden Club • Living River • Newk's • REI • Spire
Trussville Citizen's Group led by Jean Cox • Vestavia Hills Elementary Cahaba Heights

Restoring the River's Water Quality

Cahaba River Society works to restore the Cahaba River through policy and project advocacy for water-sustaining urban development, green Infrastructure, clean and abundant water, biodiverse wildlife, and healthy communities.

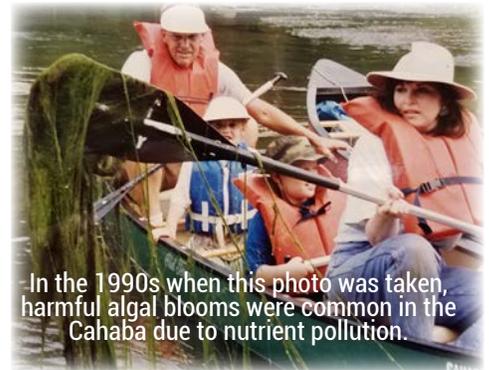
Phosphorous discharges into Cahaba down by 95%

Nutrient pollution is a widespread, costly and challenging problem caused by a range of human activities including stormwater and wastewater discharges.

For over a decade, Cahaba River Society has worked to push the Alabama Department of Environmental Management to put in place more protective limits on

the amount of total phosphorous, a measure of nutrient pollution, that can be discharged into the Cahaba.

The results of that work are paying off. Compared to discharge records reported in 2001, we recently calculated that Cahaba River wastewater treatment plants have reduced their Total Phosphorus discharges by 95%.



In the 1990s when this photo was taken, harmful algal blooms were common in the Cahaba due to nutrient pollution.

Broken sewer pipe spewing raw sewage discovered during stream bank assessment

While in the field performing stream bank assessments with Cahaba Riverkeeper and The Nature Conservancy in Alabama in February 2019, our staff investigated a suspicious outflow of nasty liquid and discovered a sewer pipe broken due to a bank collapse.

It was pouring millions of gallons of raw sewage directly into the Cahaba

River just upstream of the Riverchase Sports Park.

The treatment plant operators were unaware of the break or spill until we notified them. Thanks to our relationships with municipalities and agencies in the watershed, we knew who to contact and the break was fixed in 24 hours.



This sewer line break happened because urban runoff is escalating, eroding the Cahaba's banks and damaging infrastructure.

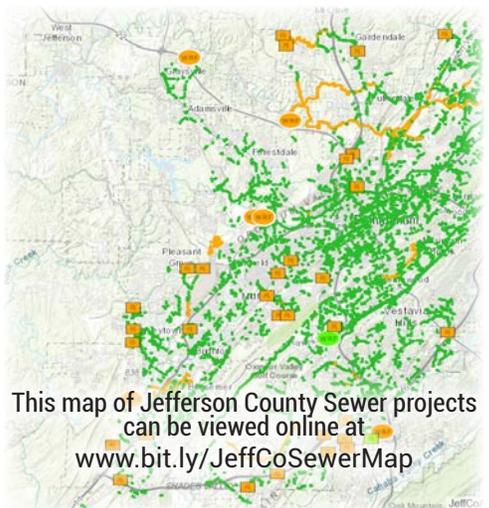
Jefferson County Environmental Services repairing sewer lines across the county

Because sewer overflows, leaks, and line breaks like the one described above are serious public health threats, we work with the agencies owning sewer pipes along the River to explore options for monitoring their collection systems for breaks.

CRS, with our partners, Southern Environmental Law Center, Black Warrior Riverkeeper, and EPA, have been meeting with Jefferson County staff for years to help guide the County's sewer repair program.

The County has dramatically improved their process to identify, replace, or repair sewer lines that are old, over capacity, leaking or broken.

Meanwhile, if you see or smell something that could indicate a sewer line break, please report it. Contact us at 205-322-5326 or info@cahabariversociety.org and report any Jefferson County sewer emergencies by calling 205-942-0681.



This map of Jefferson County Sewer projects can be viewed online at www.bit.ly/JeffCoSewerMap

"Dirty Water Rule" would dismantle Clean Water Act protections

Cahaba River Society joined with a nationwide coalition of environmental organizations opposing the dismantling of the Clean Water Act. The EPA proposal would allow polluting industries to contaminate smaller headwater streams without permits or water quality limits, resulting in dirty water flowing into larger streams and impacting the

drinking water sources of at least 117 million people.

Sadly, despite widespread opposition, EPA has rescinded a more protective 2015 rule and is developing a new rule that appears to strip protections from up to 40% of our waterways and wetlands. Join our email list for updates and action alerts.



In partnership with Southern Environmental Law Center, we distributed hundreds of post-cards in opposition to the Dirty Water Rule.

Protect The Cahaba River

Restoring the River with Green Design for Development

We advocate for growth that strengthens our communities and protects the River and your drinking water.

Designing development for a resilient River

Urban runoff causes the biggest threats to the Cahaba, our drinking water, and the River's biodiversity: river erosion, pollution, flooding, and depleted groundwater. Alabama's climate trends of heavier rains and deeper droughts are worsening those impacts.

The key to the River's restoration and resilience is to transform urban stormwater management with green infrastructure (GI) practices, such as rain gardens and pervious paving, that replenish groundwater and reduce damaging runoff. CRS is the lead organization working with local governments and developers to improve stormwater regulations and promote GI design for new development.

Model projects prove Green Infrastructure works

CRS has been a collaborative partner with development design teams to help prove that green infrastructure is feasible and effective at protecting water resources. In the past decade we've helped bring GI design to 21 development and road projects, working with 9 local governments and ALDOT and 30 private development entities.

We also award model GI projects. At our 2018 Annual Meeting we recognized University of Alabama at Birmingham and the engineering firm Dynamic Civil Solutions for GI design using bioswales in UAB Parking Lot #4 to reduce and filter runoff.



UAB has been a pioneer in water-sustainable development under the leadership of former Sustainability Director Julie Price. Bolaji Kukoyi of Dynamic Civil Solutions is designing many of UAB's green infrastructure projects. Julie and Bolaji are among the CRS Board members who bring us in-house expertise in green development.

Region's cities adopt better stormwater design standards

Because of years of CRS's work with partners, in 2018 most upper Cahaba cities adopted their first development codes requiring reduction of post-construction stormwater runoff. CRS advised the City of Birmingham's draft of their stormwater ordinance and handbook, which was officially adopted in May 2019 and strongly encourages green infrastructure. We are promoting this excellent model to the other local governments.

To influence Hoover's new stormwater code, CRS brought Hoover residents who have experienced property damage from stormwater runoff together with the Mayor and engineering staff. At this writing we are trying to improve their draft code to ensure Hoover has the tool they need to prevent the kind of flooding and erosion problems that have plagued their citizens and businesses.



Promoting Green Infrastructure through education

CRS has trained over 1,700 public officials and development professionals in green infrastructure. In fall 2019, CRS spoke to 150 city/county officials and development professionals at two trainings held by the Alabama Stormwater Association and City of Birmingham on how to implement the new post-construction stormwater codes. We presented on why GI stormwater design is essential and how it works to restore our rivers and safeguard drinking water supplies.



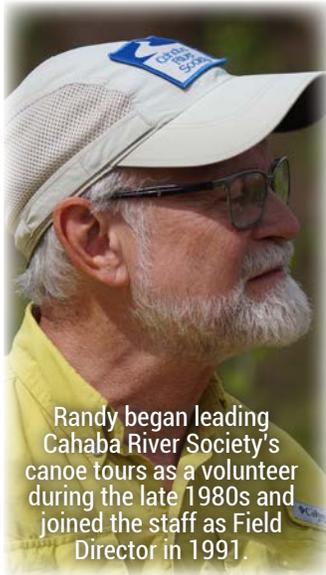
For a Greater Birmingham

Our thanks to the Community Foundation of Greater Birmingham and to Larry and Phyllis Wojciechowski, the lead funding partners for our stormwater work.

Watershed plan can attract funding to restore Shades Creek

CRS is helping fund The Nature Conservancy in Alabama's restoration plan for Shades Creek, which will identify GI projects to reduce sediment impacts and creek erosion and restore the beauty, stability, water quality and habitat of the Cahaba's largest tributary. The watershed plan will make these projects eligible for state and other funding. CRS has also aided TNC's threats assessment for the Cahaba River and baseline study of current bank conditions. A successful planning process for Shades Creek can inspire a larger effort for the Cahaba mainstem.

Connecting People to Nature through River Recreation



Randy began leading Cahaba River Society's canoe tours as a volunteer during the late 1980s and joined the staff as Field Director in 1991.

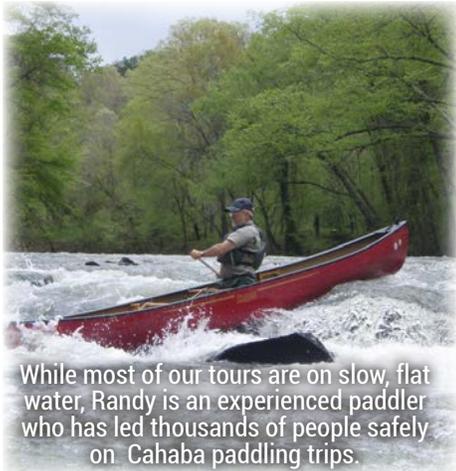
Rambling the River with Randy

Since the founding days of Cahaba River Society over three decades ago, CRS Field Director Dr. Randy Haddock has led guided canoe tours of the Cahaba River. **We estimate that he has taken more than 8,000 people on over 600 trips.**

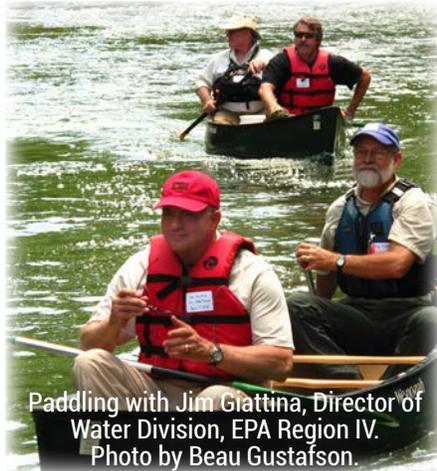
Participants have included elected officials, developers, state and federal agencies, teachers, foreign tourists, local celebrities, construction crews, and many more. One thing that all of these participants have in common is that they've shared a unique experience of the Cahaba that's impossible to come by any other way.

"Personally visiting the River is the best way to learn about it, enjoy it, and love it," Dr. Haddock says. "Being there inspires a desire to protect it, because when you realize what a wonderful place it is, you want to keep it around."

We host regular trips throughout the year to showcase the beautiful diversity of the many sections of the Cahaba River, from the suburban sections in Irondale Grants Mill to the Oxbow swamps. A day spent rambling on the river with Randy exercises the mind and body, helps us reconnect with nature, and soothes the soul. From fish to birds, turtles to wildflowers, trees to rock formations, you'll come away informed, entertained, and inspired.



While most of our tours are on slow, flat water, Randy is an experienced paddler who has led thousands of people safely on Cahaba paddling trips.



Paddling with Jim Giattina, Director of Water Division, EPA Region IV. Photo by Beau Gustafson.



Over three decades, Randy has brought unique, hands-on Cahaba experiences to generations of river lovers.

Learn more and book your trip at www.CahabaRiverSociety.org/canoe.

Cahaba Blueway

This spring saw the launch of the Cahaba Blueway, a river trail system that supports economic development and quality of life in Cahaba communities. The project is a partnership of the University of Alabama Center for Economic Development, Cahaba River Society, The Nature Conservancy, Cahaba Riverkeeper, Freshwater Land Trust, and the National Park Service's Rivers, Trails, and Conservation Assistance Program. The Blueway is a formal "water trail" on the Cahaba, providing the infrastructure and information needed to make accessing the river easier and the branding that will make the trail marketable. Similar water trails elsewhere in the Southeast and across the country have expanded opportunities for hospitality and retail business while making nearby communities more livable and attractive. Plan your Cahaba trip with the interactive map at www.cahabablueway.org.



Dedication ceremony for a new Cahaba Blueway site in Centreville.

Equity, Diversity, and Inclusion

CRS has created a board/staff working group to learn together and guide a process for CRS to practice and promote deeper understanding, intentions, commitments, and accountability metrics for equity, diversity and inclusion (EDI).

We ask our community to explore EDI with us. What is CRS' vision of and responsibility to ensure equity related to water, the River, and our mission? What is the full diversity of the people whose well-being and life potential will be affected by the intended and unintended impacts of our decisions and programs? What steps must we take to ensure that those we listen to, look to for leadership, partner with, and serve include the diversity we have identified? For more information or to become involved in our conversation, contact Executive Director Beth Stewart at 205-532-3080 or beths@cahabariversociety.org.

Connecting Young Leaders to the Cahaba through the Arts and Volunteerism

Intersection of art and nature: connecting to the Cahaba through Creative Arts

Through 2018-19, Cahaba River Society has partnered with a number of different arts organizations and artists to explore new ways to connect people to the Cahaba through visual arts, poetry, film, and music.



See the film at www.bit.ly/rivermusic



Share the films at www.bit.ly/riverlitter



Read more at www.tinamozellebraziel.com

"River Music for All"

In January, we partnered with the **Alabama Symphony Orchestra** for an "Unwined" concert featuring Handel's Water Music. Prior to the concert was the debut of "River Music for All," a short film by **Hunter Nichols** that follows **Alabama Symphony Youth Orchestra** members on a Cahaba field trip with the CLEAN Environmental Science Program that explores connections between nature, music, and equity.

Big Cahaba Cleanup Video Series

As part of the Big Cahaba Cleanup public education campaign to reduce litter pollution in the Cahaba, Cahaba River Society worked with local film makers **Carey Fountain and JC Swoopes of DoReMe Media Group** to produce 3 short videos about how litter ends up in the Cahaba. Help us share these videos on social media to encourage people to keep their trash off of streets and parking lots where it will wash into the Cahaba River.

Cahaba Eco Poet

In April, Cahaba River Society was chosen by the **Magic City Poetry Festival** to be the first beneficiary of the 2019 Eco Poetry Fellowship, and **Tina Mozelle Braziel** was named as the 2019 Eco Poet. Above pictured are Festival Director and poet **Ashley Jones**, Eco Poet **Tina Mozelle Braziel**, and artist **Travis Craig**. Tina is writing poetry about the River and has added a new CLEAN curriculum for creative writing students.

Young leaders launch new Junior Board

Cahaba River Society's new junior board members have backgrounds as diverse as the creatures who call the river home: they include scientists, students, architects, artists, educators, and bankers. The one thing that they have in common is their love for the Cahaba. This dynamic group will work to bring volunteer energy to advocacy, stewardship, and events and diversify Cahaba River Society's leadership. You can come meet some of these young leaders on February 6, 2020, at the Cahaba River Society annual meeting.



Learn more about our junior board at cahabariversociety.org/about/juniorboard.

Thank you to our 2019 Interns for their valuable contributions to our work!



Jorge Luis Santos
Stewardship Intern
UAB - Public Health
Projects: Invasive plant removal and streambank restoration



Hannah Thompson
Stewardship Intern
Samford - Biology
Projects: Invasive plant removal and streambank restoration



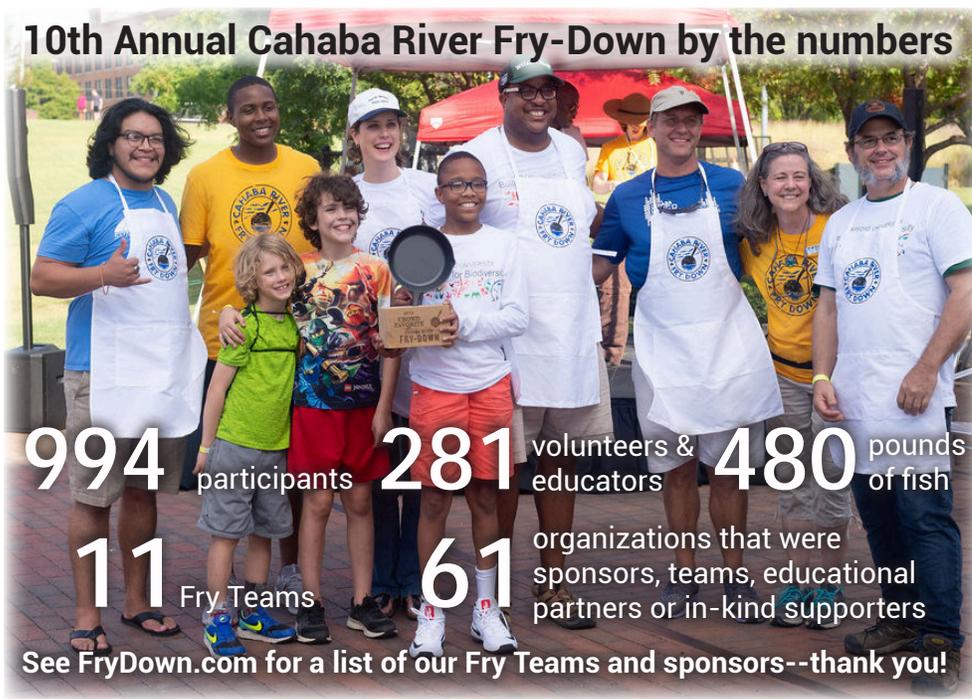
Bailey Cates
Stewardship Intern
Samford - History & Biology
Projects: research and write an anthropological history of the Cahaba



Adrienne Spencer
PR/Communications Intern
UAB - History & Biology
Projects: special events, public relations, communication, content creation

Building our Impact to Achieve our Mission

10th Annual Cahaba River Fry-Down by the numbers



994 participants
281 volunteers & educators
480 pounds of fish
11 Fry Teams
61 organizations that were sponsors, teams, educational partners or in-kind supporters

See FryDown.com for a list of our Fry Teams and sponsors--thank you!



This year we launched our exciting new Cahaba River Adventure Experience with the support of REI Co-op. This crown jewel of Fry-Down is an interactive stroll through a series of hands-on exhibits that evoke the feeling of traveling down the River, encountering its furry, finned, scaly and feathered wildlife, while discovering places to enjoy the river and opportunities to protect it. Participants of all ages reveled in the experience while collecting stamps on their "passports" to enter to win a variety of coveted prizes.



2019 Outreach Impacts



5 events hosted by CRS with over **1,209** participants
25 speaking engagements with over **420** attendees
27 tabling & educational events where CRS was represented
7 Fundraising events hosted for us by supporters --thank you!

Thank you Cahaba Brewing, REI Co-op & Piggly Wiggly for the Moonlit Lily Lager fundraiser as part of REI's Grand Opening!



Show your love for the Cahaba with a beautiful piece of art for your car!

Get your "Save the Cahaba" tag at your local licensing office when you buy or renew your tag. The \$50 added fee allows you to customize the tag and \$41.25 goes directly to CRS to keep the Cahaba clean for future generations!

Dates to save in 2020:



Cahaba River Society Annual Meeting: Launching the Next Generation of Leaders for a Resilient Cahaba
 Thursday, February 6, 2020, 5:30-8 pm
 Birmingham Botanical Gardens
 Keynote speech by award-winning scientist and explorer Dr. Jim McClintock



Big Cahaba Cleanup
 Saturday, May 2, 2020
 Cleaning up to 50 miles of the Cahaba River from Trussville to Helena
 "Don't litter--it ends up in your River!"



Cahaba River Fry-Down
 Sunday, October 4, 2020, noon-4 pm
 Railroad Park
 Join us for this delicious catfish festival that's our biggest fundraiser and education event of the year!

Help us build our impact! Become a member, donate, or volunteer at

www.CahabaRiverSociety.org