Lake Lanier—formed in 1956 by the construction of Buford Dam and beginning approximately 50 miles south of the Chattahoochee River’s source spring—provides drinking water for more than five million people and 70 percent of metro Atlanta residents. Few if any large metropolitan area water supply sources are situated so far north in a river system. It is projected that by 2050 Metro Atlanta will add 2.9 million people, which will increase the demand on the river for water supply. With these statistics in mind, the importance of maintaining a clean and plentiful lake is clear.

For 25 years Chattahoochee Riverkeeper (CRK) has used water quality monitoring, environmental education programs, and advocating for water conservation and efficiency to protect Lake Lanier for its diverse uses – water supply, recreation, and wastewater assimilation for municipal and industrial dischargers. To highlight and grow this work, CRK is launching The Clean Lanier Equation, a campaign to celebrate our growing headwaters and Lake Lanier programs.

Since 1996, CRK has maintained an office and staff in Gainesville and dedicated resources to protecting the lake and the headwaters. In 2015, CRK expanded its commitment by opening a larger office in downtown Gainesville staffed by two full-time employees and a water quality laboratory.

"Every week, CRK is monitoring water quality, coordinating cleanups that remove tons of garbage from our waters, educating policy makers, and using the law to stop polluters," said Lee Chadwick, a resident of Lake Lanier and member of the CRK Board of Directors. "My support will be as everlasting as my appreciation."

QUALITY
Water quality monitoring of Lake Lanier is critical to sustaining this resource. Bacteria and nutrient pollution can harm the aquatic life in the lake and pose a health risk for lake users if these contaminants are not properly treated. CRK’s nutrient monitoring spurred the Georgia Environmental Protection Division to adopt a comprehensive cleanup plan, which we continuously monitor to ensure it reduces pollution and creates a sustainable balance for all lake users.

EDUCATION
Environmental education is an investment in the future of Lake Lanier. The Lake Lanier Aquatic Learning Center (CRK’s first "floating classroom") is a partnership with Elachee Nature Science Center and Hall County Parks and Leisure. Together, we have engaged more than 70,000 students and teachers in a one-of-a-kind learning experience. The Clean Lanier Equation will enable our education programs to grow and serve more students and lake-lovers.

RESILIENCE
Using less water and using water smartly helps ensure sufficient supplies for future generations. CRK advocates at state-wide and local levels for advances in these management methods to secure enough water for current and for future generations, and to be resilient when our region faces the next drought.

CRK has dedicated itself to sustaining and improving Lake Lanier for 25 years, and our multifaceted approach will continue to grow as we foster more partnerships and engage the headwaters’ communities.

Learn more about The Clean Lanier Equation at chattahoochee.org/our-work/the-clean-lanier-equation.

Thank you for supporting our efforts to protect and preserve the Chattahoochee River.
The Waterkeeper movement was born out of a group of commercial and recreational fishermen on New York's Hudson River. They organized in the 1960s using science and the law to confront industrial polluters and reassert community control over public waters. Their love of their river and passionate environmental activism sparked the Hudson's recovery and inspired others to launch Waterkeeper groups around the world.

Based on this model of grassroots type advocacy, Laura and Rutherford Seydel started our own Riverkeeper organization on the Chattahoochee in 1994 and hired Sally Bethea as our first Riverkeeper. We are the 11th licensed Waterkeeper organization. Today, there are more than 350 Waterkeepers in 46 countries.

Since I started at CRK in 2007, and became the Riverkeeper in 2015, my focus has been and continues to be on the health of the Chattahoochee River. In the summer of 2019, I had the opportunity to become more involved in the worldwide movement as I was elected to the Waterkeeper Council. The Waterkeeper Council helps to guide the larger movement and is comprised of almost two dozen Waterkeeper representatives from all over the world.

Working more closely with these water warriors and learning about their fight for clean water is truly inspirational. These men and women stand on the front lines of their watersheds to deal with a variety of threats, including to their personal safety. We all share the common goal to secure drinkable, swimmable, fishable water everywhere.

While I am only a few months into this new and additional role, it is already having a deep impact on my understanding of worldwide water issues and is further igniting my passion for water protection.

To celebrate its 20th Anniversary, Waterkeeper Alliance is highlighting 20 Waterkeeper Warriors. You can learn more about these water heroes at www.waterkeeper.org.

"I began to turn the fishing skills of patience, organization, focus, determination, preparedness, and consideration into life skills that would guide my future direction. Now, I am able to use various sections of the [Chattahoochee] River as a classroom to teach the community's youth life skills through fishing."

fishingforhiphop.com
ALABAMA PLATING MUST CONTROL METALS DISCHARGES

CRK is investigating wastewater and stormwater discharges from a metal galvanizing facility in Lanett, AL. The facility, Alabama Plating Technology (APT), has a pretreatment permit, which requires treatment before sending its wastewater to the City of Lanett Wastewater Treatment Plant. APT’s failure to properly treat its wastewater led to elevated levels of zinc and nickel in the river throughout 2018 and 2019. CRK notified APT of our concerns about the elevated levels of contaminants and we learned that the Alabama Department of Environmental Management is working with APT to bring the facility into compliance. The company is making necessary upgrades and changes to operations, and CRK will continue to monitor to ensure no contaminants are being discharged to the river.

MICROPLASTIC MONITORING

In August 2019, CRK collaborated with scientists at Georgia Tech to collect water samples in the river downstream of Atlanta and inspect for microplastics. Microplastics are less than 5 millimeters in size and include bits of styrofoam, fibers, microbeads and plastic fragments. These particles likely come from wastewater treatment plants and trash that mixes with stormwater. This collaboration continues as CRK works to assess the extent of microplastic pollution while also continuing our effort to keep trash out of the river through cleanups and trash traps.

SEWAGE SPILL AT SOCCER FIELD

Water samples collected by a Neighborhood Watch volunteer revealed a problem upstream of Nancy Creek at Randall Mill Road. CRK tracked the source of contamination to sewage seeping from the base of a 36-inch lateral sewer line over the creek at the Tophat Soccer Club at Northside Drive. Further testing indicated that E. coli levels were one thousand times the U.S. Environmental Protection Agency safe water recreational standard. CRK notified the City of Atlanta, and now it appears that the latest efforts to repair the sewer line were successful, though we will continue to assess the effectiveness of the repairs in the long term.

EXXON FUEL TANK LEAK

A Hotline caller alerted CRK that an underground fuel tank at the Exxon station on West Paces Ferry was leaking into Nancy Creek. The Georgia Environmental Protection Division (EPD) immediately responded by requiring the station owner to contain the flow of gasoline into the creek and seek remediation. Subsequent sampling showed gasoline in the groundwater of the surrounding area and in the nearby creek. A recent review of EPD files shows that the owner is in the process of installing a pump to keep the fuel out of the groundwater and creek, but permanent remediation will take many years. CRK will continue to follow the facility’s progress.

CASSI

CRK is now measuring water quality in real-time. In November 2019, CRK installed a Chattahoochee Aquatic Sensor System Integrated (CASSI) device in the river at McGinnis Ferry Road. The device automatically detects turbidity (a measure of water clarity) every 15 minutes. This information is important to all concerned with the river’s health, including the fishing community as muddy water inhibits fish from seeing bait. All data collected from this CASSI will be made available online at chattahoochee.org/our-work/water-quality-monitoring.

ON PATROL WITH CHATTAHOOCHEE RIVERKEEPER

RELAY DOWN THE HOOCH PATROLS RARELY TRAVERSED SECTIONS OF RIVER

In December 2019, CRK completed the last section of the historic “Relay Down the Hooch,” a 435-mile year-long journey downriver. The initiative ended with a two-day river patrol that started in Columbus, Ga., then traveled through Lake Eufaula until reaching the Florida border, at which point the Chattahoochee River officially becomes Lake Seminole. Water samples were collected at multiple sites along the way.

For more information, visit: chattahoochee.org/our-work/enforcement.
## CRK Accomplishments
### By the Numbers 2019

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Monitoring</strong></td>
<td></td>
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<tr>
<td>180 NWW monitoring stations</td>
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<tr>
<td>150 BacteriAlert samples tested in the CRNRA</td>
<td></td>
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<tr>
<td>73 nutrient samples tested from Lakes Lanier and West Point</td>
<td></td>
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<tr>
<td>22 major sewer spills found</td>
<td></td>
</tr>
<tr>
<td>4 CASSI real time water quality sensors deployed</td>
<td></td>
</tr>
<tr>
<td>156 field investigations</td>
<td></td>
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<tr>
<td>5,251 samples tested by Neighborhood Water Watch (NWW) volunteers and partners</td>
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<tr>
<td>118 NWW partners</td>
<td></td>
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<tr>
<td><strong>Outings &amp; Cleanups</strong></td>
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<tr>
<td>1,771 miles patrolled</td>
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<tr>
<td>50 tons of trash removed</td>
<td></td>
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<tr>
<td>4.5 tons of refuse recycled</td>
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<tr>
<td>2 trash traps installed in Proctor Creek</td>
<td></td>
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<tr>
<td>1 new public park with green infrastructure</td>
<td></td>
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<tr>
<td>1,532 new members</td>
<td></td>
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<tr>
<td>1,829 volunteers removing trash</td>
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<tr>
<td>380 paddlers on the river</td>
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<tr>
<td><strong>Advocacy</strong></td>
<td></td>
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<tr>
<td>239 industrial sites investigated</td>
<td></td>
</tr>
<tr>
<td>330 citizen hotline reports</td>
<td></td>
</tr>
<tr>
<td>29 letters and testimonies before government bodies to maintain and advance environmental laws</td>
<td></td>
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<tr>
<td><strong>Education</strong></td>
<td></td>
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<tr>
<td>120 industrial operators trained in stormwater compliance</td>
<td></td>
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<tr>
<td>8,117 students and adults on the Lake Lanier and West Point Lake Floating Classrooms</td>
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<tr>
<td>531 rain barrels distributed</td>
<td></td>
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<tr>
<td>15 interns trained</td>
<td></td>
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<tr>
<td>3,597 students received full scholarships to floating classrooms</td>
<td></td>
</tr>
</tbody>
</table>

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4 RiverChat

Chattahoochee Riverkeeper
THANK YOU TO ALL OUR MEMBERS AND DONORS FOR HELPING US KEEP WATCH OVER OUR WATERS.

July to December 2019
To become a member, visit chattahoochee.org/become-a-member.
In October 2019, the first-ever Water Warriors Summit kicked off a collective for young people interested in protecting our waterways. More than 150 students and recent grads spent two days at the Georgia Aquarium with CRK, Captain Planet Foundation and many other organizations to learn from experts and organize to tackle the trash problems facing our waterways.

Now, Water Warriors are engaged in local advocacy campaigns to encourage local governments to reduce single use plastics, with recent successes in Fulton County and City of Atlanta. Water Warriors also took to the streets to make their voices heard at Youth Climate Strikes, including those in Atlanta, Dawsonville and LaGrange.

CRITTER CORNER
THE AMERICAN ALLIGATOR

As our CRK team pulled up to a boat ramp at Walter F. George Dam in December 2019, a yellow sign read “Caution – Alligators May Be Present.” This is not a usual sight at parks and boat ramps lining the upper and middle sections of the Chattahoochee, where our field work has been most active during the past 26 years.

The American Alligator (Alligator mississippiensis) lives in the swamps, marshes, rivers, ponds and lakes south of the Georgia fall line, which is the geological boundary that runs northeast across Georgia from Columbus to Augusta.

When the weather turns chilly, alligators adapt by digging a “gator hole” along a waterway and go dormant. Even though CRK staff did not get to spot any of these remarkable creatures during our trip, it remains exciting to think about these giant reptiles living among us as we spend more time down river.

Learn more about becoming a Water Warrior at chattahoochee.org/waterwarriors.

ALL-GIRLS FISH

Despite fly fishing's reputation as a male-dominated hobby, young female fly anglers are standing up as passionate advocates for land, fish and water. Our All-Girls Fish debuted in September 2019 as part of the Down the Hatch Fly Fishing Film Festival. Fourteen young women got together on the river in Helen for a day of fly tying, angling and camaraderie.

Not only are these young women staking their claim in the world of fishing, but our All-Girls Fish is an opportunity to come together in celebration of the incredible natural resource that sustains their passion.

The next All-Girls Fish will take place on Saturday, April 11, 2020. For information, visit chattahoochee.org/allgirlsfish.

CAMPUS AMBASSADOR PROGRAM

Chattahoochee Riverkeeper is heading to a campus near you! Created for students who care about the future of our water, the Campus Ambassador program is an opportunity to empower other students, communicate calls-to-action with peers and engage with CRK staff and members.

For more details on bringing CRK to your campus, email kthiessen@chattahoochee.org.

After celebrating our silver anniversary in 2019, we asked “what should CRK look like in the next 25 years?” The resounding answer - more opportunities for future protectors of the river to get involved. Now, in addition to our tried-and-true floating classroom trips and classroom presentations, we are offering more ways for students and young professionals to join our efforts to secure a healthier Chattahoochee River.

While stories of an alligator sighting in the upper and middle Chattahoochee circulate occasionally, their presence is likely due to relocation by humans. Alligators will only reproduce in the warmer waters of the Chattahoochee downstream of Columbus.

Tiny when they hatch (approximately 8 to 10 inches in length), fully grown alligators can span between 10 and 16 feet long. As adults, they are important predators in the ecosystems they inhabit and will eat almost anything they can catch including fish, turtles, snakes, waterfowl, raccoons, beavers and otters. Given the chance, they have also been known to eat pets and small farm animals such as goats and pigs.
The Chattahoochee River nourishes more than five million people. We cannot allow pollutants to be dumped into the river’s headwaters or to have wetlands filled in for parking lots.

For decades, Atlanta’s aging wastewater collection and treatment systems led to thousands of overflows and spills of untreated sewage during wet and dry weather. This pollution resulted in elevated bacteria levels in neighborhood streams, endangering residents and downstream communities including West Point Lake. When CRK fought to have Atlanta clean this up, we relied on the Clean Water Act (CWA), which provided minimum standards for pollution control and allowed organizations like CRK to bring lawsuits if industries or local governments were not meeting their obligations.

Now, the U.S. Environmental Protection Agency (EPA) is significantly weakening the law by eliminating protections on half of all wetlands and thousands of small streams like those in the Chattahoochee’s headwaters.

EPA first sought to repeal the 2015 Clean Water Rule that clarified the definition of “Waters of the United States,” which are the waterways that are covered by the CWA. The 2015 rule was the result of a rigorous two-year process, and relied on numerous scientific studies and solicited millions of public comments to clarify the scope of the law.

EPA’s second step is the issuance of the replacement rule, which eliminates protections for wetlands and small streams. EPA finalized the reckless new rule on January 23. If implemented, it will allow untreated wastewater to be dumped in small streams that feed the headwaters of rivers. The rule will also allow developers to fill in streams and wetlands without needing federal approvals. CRK has joined a collection of southeastern advocacy groups, led by Southern Environmental Law Center, to challenge this attempt to strip protections from our waters.

By the 1970’s, two-thirds of U.S. lakes, rivers and coastal waterways were unsafe for fishing or swimming, some due to untreated sewage spilling into open waters. Such practices in Atlanta led to the formation of CRK more than 25 years ago.

Three dams on the Chattahoochee to be removed

In late 2018, Southern Company and Georgia Power announced plans to surrender their Federal Energy Regulatory Commission licenses to generate hydropower at the Langdale, Crow Hop and Riverview dams on the Chattahoochee River in Valley, Al. At the end of this public process, the dams—three of six located between West Point and Columbus—will be partially or completely removed.

Why does Georgia Power want to remove dams?

At the top of the list: the low head dams—built in 1906 to power nearby factories—have outlived their purpose. The West Point Manufacturing Company initially built the structures and powerhouses, but sold the properties to Georgia Power in 1930. The dams have not generated electricity since 2009.

Money and safety are other reasons to consider dam removal. Dams are expensive to maintain and are liabilities for owners. Obsolete dams become public safety hazards, as paddlers and those attempting to cross dams on foot risk getting caught in the churning waters below.

Georgia Power also recognizes the environmental and recreational benefits of dam removal. Getting rid of these structures promotes free flowing rivers. In this region, exposed shoals and habitat are beneficial for all sorts of fish and other aquatic critters. Water flowing over the shoals promotes good water quality by increasing the oxygen content that fish need. Without the dams in place, an 11-mile section of river will be open to non-motorized recreational use when the popularity of “water trails” is growing.

CRK generally supports barrier-free creeks, streams and rivers. In this case, the dam removal will ultimately result in a natural streambed, so CRK anticipates improved aquatic conditions to support river shoal habitat. To ensure that Georgia Power gets it right, throughout the public comment process CRK has called on the company to make shoal bass habitat restoration a priority and central to their plans to remove the Langdale, Crow Hop and Riverview Dams.
For years, residents along Azalea Drive and Riverside Road in North Fulton County have anxiously watched the weather. Heavy rains in the area have meant sewage spills along Big Creek and the Chattahoochee. The creek is prone to flooding, and when it spills over its banks, rainwater surges through manhole covers into sewage pipes, which causes overflows and overwhelms the County’s treatment plant downstream.

Not only are these floodwaters unsightly, but sewage spills often lead to elevated levels of E. coli bacteria. When humans come into contact with E. coli-contaminated water, they can develop rashes, eye and ear infections, gastrointestinal distress and other illnesses.

CRK has been tracking sewage spills called in by members and engaging Fulton County on the issues at Big Creek since 2015. To ensure the County prioritized the necessary upgrades, we directed media attention to the issue, conducted site visits and took water quality samples to determine the scope of the problems.

CRK and Fulton County consistently meet to track progress to alleviate overflows into the creek as well as the expansion at the Big Creek Water Reclamation Facility.

Progress is being made, but the work is not done. Between November 2018 and February 2019, more than 18 million gallons of sewage spilled at Azalea and Riverside. To prevent flooding from causing these spills, the county is raising manholes along the tributary to heights above the flood zone. That work should be completed in 2020, as part of a $523.5 million package of projects.

“CRK has spotlighted this issue, gathered data, and worked with the County to encourage comprehensive improvements,” said Riverkeeper Jason Ulseth. “The County has worked with us to show how these projects will prevent many of these overflows in the future.”

Along with efforts to curb spills into Big Creek—which entails not just raising manholes but surveying, repairing, replacing and possibly relocating water and sewer lines—Fulton County is planning to expand the Little River and Big Creek water treatment plants. An expansion at Big Creek to 38 million gallons per day (mgd) from 24 mgd will allow the facility to accept greater volumes of wastewater during heavy rains, which should prevent backups along the service lines that can lead to overflows upstream.

“In 2020, Fulton County will be embarking in the largest infrastructure project in its history with the expansion of the Big Creek Wastewater Reclamation Facility,” said David Clark, Fulton County’s Director of Public Works. “Treated wastewater from the new facility will meet all of the new federal and state regulated permit levels and will result in water that is returned to the Chattahoochee River system that is among the cleanest in the Metro Atlanta region.”

This first phase is expected to continue through June 2020. If all goes as planned, the County Board of Commissioners should approve final construction plans by May with construction beginning in July.
Being a membership-based organization means more than just being a fan club for the Chattahoochee River—though that is an unofficial prerequisite.

Members are at the heart and soul of CRK’s mission. Our work focuses not only on caring for the river for the river’s sake, but also for your sake, and for those that will come after you. While becoming a member is easy, it’s also a generous responsibility that we don’t take lightly.

CRK is dedicated to ensuring our members have everything they need to fulfill their commitment to the river, and no one exemplifies this better than the person on staff who is here each day to serve our members, Kyndall Thiessen. Membership Manager Kyndall Thiessen joined the CRK team just one year ago.

With our membership stronger than ever, we are now offering supporters more “bang for their buck” with added benefits like member-exclusive outings and early registration to CRK events. Before joining CRK, Kyndall earned a Master of Social Work with a Certificate in Nonprofit Management from The University of Georgia. Having grown up in Georgia, Kyndall spent much time enjoying the river. Today, she enjoys meeting new and long-time members at cleanups, paddle trips, festivals and outings.

When Kyndall is not in the community connecting with members, you can find her in our West Midtown office planning outreach and fundraising events, collaborating with staff to develop unique member experiences like our “Open Lab Days,” and managing merchandise.

“My vision for CRK is for its member base to represent the diverse communities who rely on the Chattahoochee River,” said Kyndall. “I would love to see people from all over the watershed take ownership of the river in an effort to protect and sustain it.”

Join our 10,000 CRK members today to show your commitment to a cleaner, healthier river.

Text JOINCRK to 41444 or follow the QR code.

Questions about your membership status? Reach out to Kyndall at 404-352-9828 or kthiessen@chattahoochee.org.
From volunteer cleanups to film festivals, there are plenty of ways to come together with the CRK community while supporting our work to sustain the Chattahoochee River.

**WATCH FOR WATER**  
**SUNDAY, MARCH 8**  
Westside Cultural Arts Center

Who knew bell-bottoms could be good for the river? Featuring a 70’s-themed costume contest and showing of the iconic film “Shampoo,” Watch for Water will be a glamorous kick-off to Aveda Earth Month 2020.

**WILD & SCENIC FILM FESTIVAL**  
**SATURDAY, MAY 16**  
Brenau University

The Wild & Scenic Film Festival inspires environmental activism and a love for nature through film. Hosted each year at Brenau University in Gainesville, Ga., attendees will enjoy more than a dozen films about nature, conservation, wildlife, climate change and other topics related to our planet’s health.

**Sweep the Hooch**  
**SATURDAY, APRIL 4**  
Chattahoochee Watershed

Back for the 10th year, CRK’s annual multi-site volunteer trash cleanup is a chance for everyone who depends on the Chattahoochee to tackle pollution in the river by walking, wading or paddling. Register today at sweepthehooch.org.

**Valley River Rally**  
**SATURDAY, MAY 9**  
West Point

River-lovers throughout the Middle Chattahoochee region are welcome at the fifth annual Valley River Rally for an easygoing paddle trip and party in the park.

Learn more about CRK’s upcoming events at chattahoochee.org/events.