



# Chattooga Quarterly

Winter ♦♦ 2018 / 2019



## TALLULAH GORGE

*George Cooke's 1841 painting showcases three waterfalls of Tallulah Gorge.*

Artwork c/o GA Museum of Art, UGA; Gift of Mrs. William Lorenzo Moss

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# Director's Page

*Nicole Hayler*

A literal tsunami swept over the Chattooga River during 2018, in the form of record-breaking, relentless rainfall throughout much of the watershed. Now looking ahead, I fear that a figurative tsunami may befall the Chattooga watershed in 2019. For an inkling of what this might be, see this publication's "watershed update" section: Cashiers Lake development, Nantahala-Pisgah Forest Plan Revision, Foothills Landscape project, loblolly pine clearcutting, Southside Project—just to name a few.

If this isn't enough pressure on Mother Nature in the Chattooga watershed, there's more. The Andrew Pickens (AP) Ranger District is in the early stages of developing a proposal for "the management of Eastern white pine plantations" on over 2,000 acres of national forest lands in the South Carolina portion of the Chattooga watershed. The project has not been officially released for public comment yet, but the AP District did convene a "collaborative public meeting" in December 2018 to "have a dialog about the project proposal." The Chattooga Conservancy participated in the meeting, which was sparsely attended. We learned a few details, as follows.

The draft white pine project currently proposes about 800 acres of uneven-aged cutting and 1,400 acres of even-aged cutting, for a total of 2,200 acres of affected forest. "Even-aged" cutting generally means clearcutting, where all of the trees, shrubs, etc. are razed across the land. "Uneven-aged" cutting identifies forestry practices such as single-tree selection and small group cutting.

While the white pine project might change before the proposed action is finalized for public comment, the AP District said that the total acreages likely will not change much, unless the Forest Service changes their basis for determining which forest cutting treatment is proposed for a given white pine stand. The Forest Service indicated that this project is to correct for the agency's bad forestry practices of the past, where our native forests were converted to pine monocultures to meet the demand for timber products (pine trees grow much more quickly than hardwoods).

For those of you who have seen the effects of the loblolly pine removal harvests on Charlie Cobb, Cassidy Bridge and Turkey Ridge Roads in Mountain Rest and Long Creek, the white pine project could be more of the same, on a large scale—unless folks get involved, up front.

Some may think that on the surface, the white pine proposal

might be a reasonable forestry project. However, there are several issues that we're concerned about:

- Front and center is the use of clear-cuts, which is the even-age tree harvesting technique that the Forest Service is expected to use on 1,400 acres. Clearcutting is an extremely heavy-handed forestry treatment, which causes major habitat disruption and destruction. The denuded lands are also much more susceptible to developing erosion and sedimentation issues. As an alternative, the Chattooga Conservancy could potentially endorse small group or single-tree selection, that would allow a diverse mix of native species, including hardwoods and understory shrubs, wildflowers, etc., to regenerate and gradually occupy the opened areas of the forest.
- If the white pine logging project turns out like the AP District's loblolly project, it could result in regenerating just another pine plantation. Contractors would be re-planting the clear-cut areas with native pine species on such a close spacing that nothing else could grow, resulting in a significant loss of native biodiversity.
- The Forest Service's preliminary maps show that some of the "white pine plantations" are located next to areas that have already been hard hit by the clear-cuts of the ongoing loblolly project. This double whammy of clearcutting would create very large swaths of major habitat disruption and destruction in some sensitive areas, including right next the Chattooga Wild & Scenic River Corridor in the Turkey Ridge Road area, and around the Chauga River at the Cassidy Bridge area.



*The ongoing Loblolly Pine Project has drastically altered the landscape on Turkey Ridge Road.*

Many people have expressed concerns and complaints about the Loblolly Pine Removal & Restoration Project that is currently underway in the Andrew Pickens Ranger District, which, like this white pine project, is being promoted in the name of "restoration forestry." We urge folks to get ahead of the curve by learning about these big "restoration forestry" logging projects during the agency's planning and scoping process, where public pressure has a better chance of affecting the outcome.

We are devoting more time and resources to our website and social media outlets, to keep people abreast of Forest Service projects, as well as other news and happenings in the Chattooga River watershed. Please check online regularly, where we'll post opinions, updates, deadlines and other suggestions on how to get involved!



# Trillium Persistens

**Buzz Williams**

The Persistent Trillium (*Trillium persistens*), like other trilliums, is in the lily family. This trillium, however, is unique because it only exists in the wild with a maximum distance between known populations of about 5 miles, most of which are in the Tallulah Gorge in northeast Georgia. The U. S. Fish and Wildlife Service listed the Persistent Trillium as an endangered species in 1978 because of its limited distribution and threats from logging, development, and collecting. This beautiful native wildflower can only be saved by studying its lifecycle, understanding and preserving its critical habitat, and educating the public about its value and need for protection.

All trilliums have similar characteristics. They are perennial herbs arising from an underground rhizome, a root-like structure growing horizontally beneath the surface of the soil. The rhizome puts out roots below and sends up shoots from its upper surface. In the case of trilliums, this shoot is called a flowering scape. The scape has no true leaves, but it forms bracts that are photosynthetic and function like leaves. The bracts subtend a flower with parts in multiples of threes, thus the name trillium. There are three sepals, three petals, six stamens, and three stigmas on a short style. Trilliums are either pedicellate or sessile. If it is pedicellate, the flower is on top of a stem above the “leaves” that is either standing “erect” or is recurved downward between the leaves, referred to as “nodding.” If a trillium is sessile, the flower grows directly from the axis of the whorl of leaves with no stem.

The trillium that most closely resembles *Trillium persistens* is *Trillium catesbaei*. The two species differ in that the Persistent Trillium is smaller and blooms earlier, and *Trillium catesbaei* has petals that are more recurved. The Persistent Trillium blooms from mid-March to mid-April. It occurs on organic soil in mixed deciduous pine forests along stream flats and at the edge of rhododendron and mountain laurel thickets on steeper slopes. Juvenile plants have single leaves for the first five years, and on the sixth year, they develop three leaves. They flower between 7-10 years and may live as long as 30 years. Interestingly, the Persistent Trillium is primarily

propagated by ants that are attracted to the protein-rich tissue that coats the seed called elaiosome. The ants take the seeds back to their nest and eat the oily seed coat, then discard the bare seed outside the nest where it sprouts. The green “leaves” are broadly lanceolate, 3-9 cm long and 1.5-3.5 cm broad. Petals are 2-3.5 cm long and 0.5-1 cm broad, and are white at first, but turn pink as they mature. The pollen-bearing anthers on stamens are bright yellow. The Persistent Trillium is a “nodding,” pedicellate type trillium.



*Trillium persistens* blooms from mid-March to mid-April.

Photo by Amanda Gladys

Botanists who have studied *Trillium persistens* believe it evolved in an area extending from Tallulah Gorge in Rabun and Habersham Counties in Georgia, down to the confluence with the Chattooga River, and possibly upstream to Camp Creek. The region may have also extended downstream on the Tugaloo River, up Battle Branch in Oconee County, S.C., and down to and up Panther Creek in Habersham County.

A large portion of this area was inundated in the early 1900s by lakes created by the construction of Yonah and Tugaloo Dams. Consequently, large patches

of the Persistent Trillium were destroyed in the heart of its prime habitat. The remaining populations were then isolated from each other, which undoubtedly hindered genetic exchange necessary for adapting to disease and changing conditions.

Populations of the species have remained stable through time since the early 1900s, but recent new threats could result in another decline in population. Visitation to Tallulah Gorge State Park has dramatically increased since the beginning of aesthetic and recreational whitewater releases in 1997, which may result in trampling, harvesting, and collection for scientific study. Logging on both private and public land in the area could result in population and habitat destruction. Prescribed burning on Forest Service lands adjacent to the rim of Tallulah Gorge could also cause destruction of Persistent Trillium populations.

Saving *Trillium persistens* is important not only for the sake of the species, but because all things are connected in nature; saving *Trillium persistens* requires saving its habitat, which includes protection for many associated species of plants and animals, including people. Protecting the intricate and beautiful tapestry of life begins with spreading the word.

# Tallulah Gorge

*Buzz Williams*

The Tallulah and Chattooga Rivers are inextricably connected by geologic origin and location. Both rivers evolved millions of years ago as a result of mountain building episodes that heated, folded, and compressed sand, sediment and mud of an ancient seabed into hard metamorphic rock with igneous inclusions.

These mountains are believed to have once been as tall as the Rocky Mountains. The streams that preceded the Tallulah and Chattooga Rivers, fed by a climate producing excessive rainfall, cut through and wore these tall mountains down, reducing them by as much as 10-15,000 ft. in height to create the lower, more rounded Blue Ridge Mountains we see today. Over time, factors including humidity, aspect, soil types and the absence of glaciation spawned incredible biological richness in the Tallulah and Chattooga watersheds. They also share an equally rich human history. Both rivers are natural wonders, but the Tallulah River is often overshadowed by the Chattooga River, which escaped the disastrous development that destroyed much of the Tallulah and basks in the accolades of National Wild and Scenic River designation. The focus of this writing is aimed at telling the story of that place on the Tallulah River known as the Tallulah Gorge, that, although having suffered tremendous human impact, remains one of the most impressive natural wonders in the eastern United States.

Today, the headwaters of both rivers originate from the summit of the southeastern-facing Blue Ridge Mountains in North Carolina, between Whiteside and Standing Indian Mountains, on either side of a ridge extending down from Black Rock Mountain near Clayton, Georgia. They drop swiftly down the steep escarpment, cutting deep gorges, and converge at the state line between Georgia and South Carolina to form the Tugaloo River in the Savannah River watershed, which eventually flows into the Atlantic Ocean. Some scientists believe that the Tugaloo River once flowed into the Chattahoochee River but was "captured" by a headwater stream of the Savannah River as it eroded backwards across the divide between rivers. Since the Savannah River dropped more rapidly across

elevation differences, deep gorges were cut in the bedrock. This process was accelerated by erosion at the base of waterfalls that caused them to collapse and erode deeper into the earth. As a result, the Tallulah Gorge is 800 ft. deep in places, with spectacular waterfalls ranging from 16 feet to almost 100 feet in height.

The various ecological niches that have developed in the Tallulah Gorge provide habitat for an unusual array of plants and animals. Forests surrounding the gorge where dry, sandy soils prevail are home to the Table Mountain Pine, a species that has evolved with natural wildfires that cause their spiny cones to open and spread seed. The Bachman's Sparrow and Appalachian Lilly are also found in this habitat. Along the dry, rocky, south-facing north rim, mountain laurel, blueberries, and Bird's Foot violets thrive. On rocky ledges of the north rim, rare Peregrine Falcons lay eggs and fledge their chicks. The south rim is more shaded and moist, where the endangered Green Salamander hides among lichens and moss. Its dark body covered in green blotches serves as camouflage, protecting it from predators. Two other beautiful herbaceous flowering plants that grow here are the Round Leaf Sundew and the largest population of White Fringeless Orchids in Georgia. The upland hardwood forests that thrive on the more gentle slopes beneath the rim consist of multiple layers of vegetation. In March, the rare Persistent Trillium grows beneath the rhododendrons and mountain laurel. The Bird-on-the-Wing Orchid also brightens the forest floor where one may find snails, copperheads, and



*Hurricane Falls, one of the Tallulah Gorge's magnificent waterfalls, surrounded by rich fall foliage.*

*Photo by Peter McIntosh*



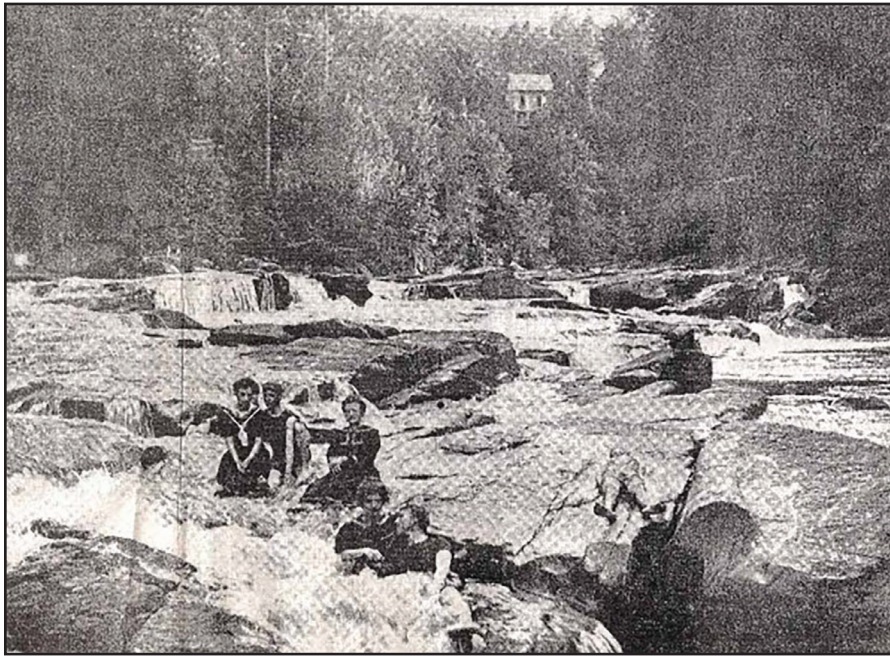
## Tallulah Gorge

shrews in the forest litter among decaying logs. Along the lower slopes, the Carolina hemlock, white pine, mountain laurel, blueberries, and Pinxter Azaleas grow in the acid soils of the talus. Gathered around the smaller streams teeming with macroinvertebrates, such as mayflies and caddisflies, are striking herbs including Bloodroot and Showy Orchids. Tucked away in the dark grottoes are delicate filmy ferns. And though the aquatic ecosystem has been greatly disrupted, the Whitefin Shiner still exists in the main river. One spring trip to the gorge is enough to convince anyone that it is a biological wonder.

The Tallulah Gorge is also rich in human history. No one knows for sure who the first person was to enter the gorge, but it was almost certainly an "Indian trader." Early visitors claim to have observed initials carved on a beech tree, with the date "1718." This jibes with known accounts of Scots-Irish fur traders originating out of Charleston, SC, who lived among the Cherokee people around that time. Other traders who had warehouses at Silver Bluffs near Augusta, GA, were known to operate in the area in the early 18th century. It is said that they traded blankets, axes, knives, trinkets and other goods to the Native Americans for furs, and then assembled at a place called "The Gatherings" where they prepared for the long journey back to the European settlements.

The Tallulah Gorge and surrounding lands were in the domain of the Cherokee people until 1817, when the United States government acquired them by treaty. Then in 1820, the State of Georgia sold the land in blocks by lottery. Soon, homesteads began to appear near the gorge. One interesting character who bought 102.5 acres near the rim of the gorge in 1841 was Adam "Squire" Vandever. Another was "Grindstone" Weaver, who claimed that he had discovered chunks of gold in the gorge as big as a grindstone, and that he had killed over 500 deer in his hunting career. Several "hermits" also lived in the gorge around the time of the Civil War, including John Cole Vandever, and most likely those who were deserters from the Confederate Army. At least one hermit was known to have lived in the Tallulah Gorge as late as WWII.

The first written account of the Tallulah Gorge appeared in 1819 in *Georgia Review*, a newspaper published in Milledgeville, GA, written by David Hillhouse. "The cataract of Niagara, and its great whirlpool and banks, is the only superior natural curiosity to the rapids of Tallulah, that I have ever seen," he wrote. News of this spectacular natural wonder spread, prompting adventurers, writers and artists to brave the wild to see for themselves.



*Indian Arrow Rapids, c. 1900. This section of the river now sits below Tallulah Lake.*

*Photo c/o Rabun County Historical Society*

Tourists had discovered the Tallulah Gorge as early as the 1840s. The small town of Clarkesville, about 10 miles south, was beginning to attract well-to-do Southerners from the lowlands around Savannah, GA, looking for respite in the cool mountains to escape the heat and mosquito-borne diseases like Yellow Fever. Large Victorian boarding houses sprang up to accommodate them, and offered various recreational opportunities,

including what they called the "Grand Tour." The Spencer House provided this tour,

which hired horse-drawn buggies and took tourists to Currahee Mountain, Nacoochee Valley, Toccoa Falls and Tallulah Gorge. The trip to Tallulah Gorge was a rough trip along a primitive dirt road, and accommodations, once there, were even worse. The only place to stay was a small log cabin with a leaky roof known as the "Rough and Ready." A few trails had been built into the gorge, and tourists began giving names to prominent rock formations, overlooks and waterfalls, including L'Eau d'Or, Tempesta, Hurricane, Oceana, Bridal Veil, Serpentine and Sweet Sixteen. One of the most popular rock formations was the Witch's Head.

In 1882, completion of the Tallulah Railroad to Tallulah Gorge greatly increased tourist travel. By 1885, the small town of Tallulah Falls had grown considerably, and by 1890, several grand hotels and an 80-ft. observation tower had been constructed. The largest hotel was the Cliff House, which featured a band that played to greet tourists as they disembarked at the train station across the street.

One of the greatest tourist attraction schemes was a stunt by a tight rope walker known as Professor Leon, on July 24,



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***Historical photo of the Witch's Head rock outcrop, prior to the construction of the Tallulah Falls Dam in 1913.***

*Photo c/o Georgia Department of Natural Resources*

1886. Hotel owner W. D. Young had once seen Professor Leon walk a tight rope between two buildings in Atlanta. Hoping to attract more tourists to Tallulah Gorge, he hired the aerialist to walk across the gorge and back on a tight rope for the price of \$250. The feat was advertised as the highest and longest high wire walk ever attempted at 1,000 ft. across and 1,000 ft. above the floor of the gorge. The hemp rope was strung across the river, and held steady by a series of guy ropes. On the day of the event, over 6,000 tourists arrived at Tallulah Falls to watch the death-defying walk. In the late afternoon, the professor, steadying himself with a 30-foot pole weighing 46 pounds, started his walk from Inspiration Point on the North Rim. About a quarter of the way across, one of the guy ropes snapped, causing the professor to gyrate wildly to keep his balance as the main cable swayed. Finally, he managed to sit down on the cable for 9 minutes until the guy rope was retied. Steadily, he stood and resumed his walk the rest of the way to Lover's Leap on the South Rim. Though the contract was for a return walk, Professor Leon was paid in full for his one trip.

Tourism thrived at Tallulah Gorge until Georgia Railroad and Power Company finished construction of the Tallulah Falls Dam at the head of the gorge in 1913. When the waters in Tallulah Lake behind the dam were finally diverted into the penstock—bypassing the gorge—to generate electricity at the power plant below, the mighty roar of the rapids and scenic beauty of the falls of Tallulah Gorge were no more. Tourism dwindled, but the near death knell came in 1921, when a roaring fire of unknown origin, fueled by vicious winds, burned the town of Tallulah Falls to the ground. The railroad, that had been extended by this time across the Blue Ridge Mountains, now passed by the dry gorge and the burned-out town on its way carrying tourists to other destinations.

Tallulah Gorge remained somewhat forgotten until 1970, when it became the object of another daredevil event. The Great Wallenda, a famous German circus performer, accepted the challenge of local promoters to duplicate the high-wire crossing of the gorge by Professor Leon 84 years earlier. On July 18<sup>th</sup>, at about 3:00 p.m., the 65-year-old aerialist walked out onto the cable stretched over the gorge as 25,000 tourists, including Governor Lester Maddox, held their breath. It took Karl Wallenda 18 minutes and 541 careful steps, pausing twice to execute two remarkable headstands, to complete the amazing feat.

Other events gradually revitalized public attention to Tallulah Gorge, including its use for part of the filming of *Deliverance* in 1972. A dream came true in 1993 when the Georgia Department of Natural Resources and Georgia Power Company collaborated to build Tallulah Gorge State Park on the north rim. Then in 1996, the Federal Energy Regulatory Commission required Georgia Power Company to schedule recreational and aesthetic water releases through the gorge, as a requirement for relicensing Tallulah Power Plant.

Today, Tallulah Gorge State Park draws hundreds of visitors on a sunny day to see the magnificent Tallulah Gorge. Whitewater enthusiasts gather from afar to brave the falls and rapids during spring and fall water releases. Peregrine Falcons return regularly to nest, and the Persistent Trilliums, along with all the rich biological displays within the gorge, wait to inspire anyone who comes to visit. Hopefully, the beauty and majesty of this natural wonder—even as affected by human travesty—will inspire the protection of our increasingly rare wild places.



***Tallulah Falls after the fire of 1921.***

*Photo c/o Rabun County Historical Society*



# How the Drought of 1925 Saved the Chattooga River

**Buzz Williams**

The rivers that plunge down the steep Southern Blue Ridge Escarpment from their headwaters in the high mountains to the Piedmont are famous for their lush fauna and flora, and their stunning scenic beauty. The primary factor in shaping this extraordinary place is the abundance of water. In fact, the Chattooga River headwaters area of the Highlands Plateau in North Carolina is a temperate rainforest that receives as much as 80 to 100 inches of rain per year. The abundance of water and steep gradient is also the reason these escarpment rivers are prime for hydroelectric energy production. In the early 20th century, when the Southern states were beginning to recover from the post-Civil War reconstruction period and were faced with the demand for energy to meet the needs of a growing population and development of an accompanying industrial sector, entrepreneurs started looking towards the potential to develop hydroelectric power by constructing dams on these escarpment rivers. If it hadn't been for the drought of 1925, rivers like the wild Chattooga would have been doomed.

In 1850, the population of Atlanta was only 2,500. By 1884, it had risen to 45,000 in a city only three miles in diameter. Horse-drawn street cars provided transportation, and streets were illuminated with gas light. Industry was powered by coal-fired steam engines. But things were changing fast; the advent of electric power was becoming a reality thanks to Thomas Edison's inventions, including the incandescent light bulb in 1879. Soon, power companies began supplying a new demand for both commercial and residential electric lighting. Coal-fired dynamos that produced electricity to run electric motors powered sewing machines, lathes, and appliances using direct current. This system could only deliver electric current for a short distance; however, that changed in 1886 when George Westinghouse patented the transformer, which facilitated power transmission over greater distances. This new development resulted in power companies looking at the potential for hydropower that could be produced by harnessing swift flowing rivers of the Blue Ridge Escarpment.

The first water power pioneer in Georgia was S. Morgan Smith, a Moravian minister from York, Pennsylvania, who had served the Union Army

as a chaplain during the Civil War. Smith was originally from Davis, North Carolina, where he developed a passion for machinery on his family farm. In later life, he manufactured and sold washing machines and invented a water turbine. In 1882, the first hydroelectric plant was built in Appleton, Wisconsin, with a generator driven by a water turbine. Later, in 1890, power companies began mounting a water turbine and electric generator on the same shaft, making them more efficient. This made potential hydroelectric sites close to growing cities much more valuable, and created the demand for water turbines. Smith immediately recognized the opportunity to build a hydroelectric plant using his new water turbine, and on the recommendation from a friend in Atlanta, he came south to scout out a site on the Chattahoochee River, 17 miles from Atlanta. The site was a rapid called Bull Sluice, and the hydroelectric facility that was later built there would be named Morgan Falls.

Smith was inspecting the site when a man who owned property nearby had him arrested for trespassing and thrown in jail. Fortunately, Smith's lawyer contacted Jack Spalding of the Atlanta legal firm King and Spalding, who was one of the most powerful men in Atlanta and who subsequently got King released from jail with all the charges dropped. The liaison resulted in connections with others interested in Atlanta's development and would lead to the founding of the Atlanta Water and Electric Company that finalized plans for the Morgan Falls Project. Morgan Falls Dam was completed in 1904, constructed by Westinghouse, Church, Kerr and Company. The dam consisted of seven hydroelectric units that produced a total



*In the early 1900s, the advent of streetcars in Atlanta & growing demand for electric lights spurred construction of dams to generate hydroelectric power. Photo: Library of Congress*

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of 10,500 kilowatts of electricity, delivered to Atlanta across a 22,000 volt transmission line where it was sold to the Georgia Railway and Electric Company. Morgan Falls is still in use today.

Hydroelectric development moved even further toward the mountain streams in 1907 when the Savannah River Power Company built a low head dam on the Savannah River in Elbert County, Georgia to supply electric power to Anderson, South Carolina. The

hydropower plant, known as Gregg Shoals, had four S. Morgan Smith waterwheel turbines and four 500-kilowatt Westinghouse generators. The power plant stayed in operation until 1955 when it was abandoned and demolished by blowing out the center of the dam. The treacherous rapid thus created later became a destination site for expert paddlers. [An interesting side note: In the mid-1960s, my cousin Ted and I, at the age of about 14 and much to the consternation of our parents, attempted to paddle the Savannah River from above Hartwell Dam to Savannah, GA in an open canoe filled with camping gear. We portaged Gregg Shoals and peeled out into the rapids below where we capsized and lost all our gear except a canoe that was badly damaged. We were very lucky to have survived. It was probably a dubious first descent of these rapids, even though we swam most of it.]

Hydropower companies were also moving closer to the escarpment rivers from the west. The Ocoee River in Tennessee had just been dammed to supply water, delivered by a massive wooden flume, to a power plant several miles below to service Chattanooga, Tennessee. The company that built the power plant on the Ocoee also had ideas about developing the North Georgia rivers.

The series of events that lead to the development of the Tallulah and lower Chattooga Rivers dates to the turn of the century

when the second major developer to make a name building hydroelectric plants in North Georgia came on the scene. That developer was General A. J. Warner, a Union Civil War field general from Ohio with experience in mining and railroad building. Warner visited Dahlonega, GA about that time to investigate the possibilities of opening a gold mine. Instead, he recognized the potential for constructing hydroelectric plants to supply power to the growing cities of Northeast Georgia.

Warner founded the North Georgia Electric Company that built

a power plant on the Chestatee River in 1902, which supplied power to Gainesville and Atlanta. The transmission line that delivered electricity between these cities was the first steel tower transmission line in the Southeast and the second in the United States. In 1908, the North Georgia Electric Company built a large hydroelectric plant on the Chattahoochee River. The plant was constructed of logs and was 500 feet long and 36 feet high. The site now lies beneath the waters of present-day Buford Dam.



*The Gregg Shoals hydroelectric dam on the Savannah River was in operation from 1907 to 1955, when it was abandoned and demolished.*

Warner and the North Georgia Electric Company were ahead of their time. The Company had over-

extended its investments beyond demand and had to default on bond payments. When Warner retired in 1908, remaining board members of the North Georgia Electric Company looked for new investors and obtained a charter for a new power to create Georgia Power Company. In 1910, the North Georgia Electric Company went belly-up.

The new movers and shakers of the Georgia Power Company did indeed find new investors and began eyeing a massive hydroelectric development on the Tallulah River. In January of 1911, the Board of Directors of Georgia Power Company made the decision to focus on developing a hydroelectric plant on the Tallulah River. In February, the company began negotiations for contracts to construct a power plant with five generation units and a total output of 60,000 kilowatts.

The Tallulah Falls project depended on selling power to Atlanta, a market that was controlled by the Georgia Railway and



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Electric Company. Jack Spalding, who was a principle player in organizing Georgia Power Company and served as its general council, collaborated with new investors that recognized the potential of the growing Atlanta market to lease the properties of Georgia Railway and Electric Company and acquire Georgia Power's properties at Tallulah Falls. The new company received its official charter in March of 1912. Georgia Railway and Power Company then took over the Tallulah Falls project where construction had already begun in 1911 under the ownership of Georgia Power Company.



**Mrs. Helen D. Longstreet organized the Tallulah Falls Conservation Association in 1911.**

*Photo: tallulahfallsga.gov*

The Tallulah Falls development was not without controversy. Mrs. Helen D. Longstreet, the widow of Confederate General James Longstreet who served under General Robert E. Lee, had fallen in love with the natural beauty of the Tallulah Gorge. She was one of the founders of the Tallulah Falls Conservation Association dedicated to opposing the Tallulah Falls hydroelectric project. The organization tried to block the construction of the development by arguing that the power company did

not have clear title to the property at Tallulah Falls and that it was still the property of the state. The Georgia state legislature addressed their argument in 1912 and passed a resolution directing the governor to instruct the attorney general to hear the argument in court.

On May 27, 1913, trial was held on the matter in the Superior Court of Rabun County in Clayton, Georgia. Judge J. B. Jones of the Blue Ridge District presided over the trial. After two days of testimony, the court sided with the power company and the ruling was affirmed by the State Supreme Court. In "History of the Georgia Power Company 1855-1956," the author, Wade H. Wright, expressed his reaction to Mrs. Longstreet's characterization of the Tallulah Falls development as "ruthless destruction." Wright, a former vice president of Georgia Power Company, wrote, "This adverse sentiment long since has given way to the realization that the beauty of the six lakes created by the Company and the opportunities they afford for recreation activities more than compensate for the loss of the water flowing over the falls."

The Tallulah Falls Project was a massive undertaking. When completed in 1914, it consisted of a dam across the Tallulah River immediately above the gorge, 116 feet high and 400 feet

long. A tunnel carved through solid granite 11 feet wide and 14 feet high delivered water from the lake behind the dam to a forebay on the right side of the gorge, where it plummeted through a penstock 5 feet in diameter and 1,200 feet long. The total head was 608 feet-- the highest east of the Rocky Mountains. The water powered five 12,000-watt generators and produced over 140,000,000 kilowatt-hours of power per year.

Investors in the Tallulah Falls Project had made a huge gamble that economic growth in the Atlanta and surrounding area would create enough demand to make the investment pay, and they were right. The "hydro boom" had begun. Soon, plans for additional power plants on escarpment rivers were on the drawing board to keep pace with a growing population in the South and the economic development that came with it. Economic growth notwithstanding, there was another reason for more dams: drought! Drought is the anathema of hydropower-- no water, no power. To hedge their bets, investors pushed for more water storage reservoirs upstream of the Tallulah Power Plant to ensure water during drought periods, as well as new dams downstream to meet growing demand.

In 1914, the Georgia Railway and Electric Company began construction on Mathis Dam, located 7.14 river miles upstream of the Tallulah Power Plant, as a water storage reservoir. The dam would be 90 feet high and 500 feet long, impounding an 834-acre lake to be called Lake Rabun. The reserve water in Lake Rabun was enough to generate 15,000,000 kilowatt-hours of electric energy at the Tallulah Power Plant. Mathis Dam was completed on May 12, 1915.

In 1919, another water storage reservoir was completed 9.42 river miles above Mathis Dam. This reservoir was named Burton Dam after the small mountain community of Burton that existed in the river flood plain, occupied by about 65 families.



**The town of Burton, Georgia was torn down to make way for Lake Burton and Burton Dam.**

*Photo c/o Rabun County Historical Society*

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The dam was 1,250 feet long and 116 feet high. Burton Dam was constructed primarily for water storage, but in 1927, two power units that combined could generate 6,120 kilowatts of power were added to the facility. To construct Burton Dam, the power company had to purchase the town of Burton. Cemeteries were to be relocated on higher ground and the town was to be torn down. To expedite construction, much of this work was to occur while the reservoir filled after construction; however, the lake filled so fast after the dam was built that work could not be completed, and several houses and the school house floated away downstream.

The booming economy demanded even more electric power, and construction on another power plant below Tallulah Falls had already begun in 1917 before completion of the Burton Dam. The facility was called the Tugaloo Plant and was located on the Tugaloo River just below the confluence of the Chattooga and Tallulah Rivers. The plant would take advantage of a combined 500,000 acres of watershed from the Tallulah and Chattooga Rivers. At 140 feet high, Tugaloo Dam was the second highest of the six dams that would eventually be built in the Tallulah/Tugaloo Complex. Construction was delayed by World War I, but the plant was completed in 1922.

In 1923, just a year after Tugaloo Dam went on line, construction began three miles downstream on the Tugaloo River for yet another hydroelectric facility called Yonah. It would be 75 feet tall and 900 feet wide with three generators connected to 12,500 horsepower waterwheels. The facility was completed in 1925.

Hydroelectric power development in the Tallulah/Tugaloo Complex reached its zenith in 1923 when Georgia Railway and Electric Company began construction on a project between the Tallulah Lake and Lake Rabun called the Terrors Development. The distance between Tallulah Lake and Mathis Dam was only about a mile as the crow flies, but the Tallulah River meandered naturally around a mountain of solid granite for six miles and dropped 100 feet in elevation between the foot of Mathis Dam and the surface of Tallulah Lake. Adding the 90-foot height of Mathis Dam, the total head pressure was 190 feet. An ambitious plan was developed by chief engineer Charles G. Adsit to take advantage of this power potential that rivaled the Tallulah Falls Project.

In the fall, two crews began tunneling through the mountain from Lake Rabun to Tallulah Lake. Nine months later, on the Fourth of July, 1924, the two crews met in the middle of the mountain with two sections of tunnel only a fraction of an inch off center. The tunnel allowed water to pass from Lake Rabun to a power house at Tallulah Lake that could generate 60,000,000 kilowatt-hours of electric power in a normal year.

The last hydroelectric plant built in the complex was constructed on the Tallulah River between Burton Dam and the backwaters of Lake Rabun in 1926, named the Nacoochee Development. A 60-foot dam was built at Rabun Lake to form an impoundment now called Lake Seed. The powerhouse had two generators that produced 4,800 kilowatts of electric power.

The Tallulah/Tugaloo Complex, constructed over a fifteen-year period, was the largest hydroelectric development in the nation. In subsequent years, the Southeast would see phenomenal growth, and with it an insatiable demand for more electric energy.

But trouble was brewing. In the late winter and spring of 1925, northeast Georgia rainfall was already far below normal. Then in the summer months, rainfall in the Chattooga River watershed reflected the worst drought ever recorded in the Southeastern United States. Rain gauging stations near Highlands, NC recorded 47 inches for the year--only about half of a year's



*Construction of Tugaloo Dam, which was completed in 1922.*

*Photo c/o Georgia Power Co.*



# How the Drought of 1925 Saved the Chattooga River

normal rainfall. In Clayton, GA, only 2.62 inches of rain fell in the months of August and September, far below the 25-year average of 12.2 inches.

The drought was so severe that electric power generation at the Tugaloo and Yonah Dams on the lower Chattooga and upper Tugaloo Rivers dropped almost 60 percent. Georgia Power Company struggled to meet power demands by pushing steam power plants to full capacity and by purchasing power from other power companies in the region, but they too were experiencing drought and had little power to spare. Faced with a complete shutdown of the company's water power plants, a meeting was called in Atlanta by major industrial power users to study the problem. As a result, restrictions were placed on city water pumping loads, business water use, and lighting systems. Cotton gins were only allowed to operate four days a week.

The drought broke in October, but Georgia power companies had learned a valuable lesson: water power plants were vulnerable to severe natural events. Consequently, future plans to develop the escarpment rivers for further power plant development were put on hold.

Nonetheless, the region was still growing at breakneck speed. Through the years up into the 1960s, federal and regional agencies issued reports on potential energy sources to meet demand, including the Army Corp of Engineers (COE) in 1935 and 1944, the U. S. Study Commission, Southeast River Basins (SERB) in 1963, and the Federal Power Commission in 1969. In all, eight new potential hydroelectric or pump storage sites were identified on the Chattooga River at Opossum Creek, Long Creek, Rogues Ford (aka Thrifts Ferry) near Hwy 76, Sand Bottom, Warwoman, and a site just south of Cashiers, north of Norton Mill Creek. The Rogues Ford impoundment would have been almost as large as Tugaloo Lake at 5,800 acres, draining 193 sq. miles.

During the 1960s and 70s, demand for electric energy was increasing at the rate of eight to ten times per year due to the sheer increase in population caused by the "baby boom" after World War II. Power companies began developing plans for

new electric power generation facilities on the Blue Ridge Escarpment to meet growing demand. Duke Power Company was quickly moving forward with the Keowee-Toxaway Project in S.C., which included hydroelectric, nuclear power and pump-storage facilities. At this time, the Chattooga River was still considered a viable candidate to meet increasing energy needs.

However, a new factor was introduced into the equation in the late 1960s. The U.S. Congress passed the National Wild and Scenic Rivers Act aimed at protecting free-flowing rivers, and the Chattooga River was listed as a "Study River." The *Study Report* written by the Forest Service, which was recognized as the management agency should the Chattooga River be designated as a Wild and Scenic River, concluded that the river

was a prime candidate because of its pristine free-flowing condition and pointed out that the Chattooga offered some of the most challenging whitewater in the country. Soon, as more and more people discovered the sport of whitewater paddling, the once isolated and largely anonymous Chattooga River gained a new and powerful advocate. Georgia Power Company, which owned about 60% of the lands along the Chattooga River,



*Claude Terry and Jimmy Carter in an open canoe at Bull Sluice on the Chattooga River. The Chattooga received Wild & Scenic designation in 1974, thanks in large part to Jimmy Carter's efforts as governor of the State of Georgia.*

*Photo: Doug Woodward/ American Rivers*

saw the handwriting on the wall and began negotiations with the Forest Service for a massive land exchange if Congress designated it a Wild and Scenic River. In 1972, James Dickey's best-selling novel *Deliverance*-- inspired in part by Dickey's own experiences on the Chattooga River-- and the subsequent blockbuster movie of the same name propelled the Chattooga into the national spotlight. Finally, on May 10, 1974, the Chattooga River was designated by congress as a National Wild and Scenic River.

Most historians credit the Wild and Scenic Rivers Act with saving the Chattooga River from development, as it certainly did by giving it permanent protection. Nonetheless, one could effectively argue that had it not been for the drought of 1925, which caused electric power companies to shelve plans for its inevitable development, the Chattooga River would have never been saved.

# Watershed Update

## **“If It Looks Like Bad Forestry, It Probably Is.”**

Many folks have expressed concerns about the Loblolly Pine Removal & Restoration Project that is underway in the Andrew Pickens Ranger District, on the SC side of the Chattooga River. The Forest Service initially approved this large project targeting 5,542 acres of reported loblolly pine plantations back in 2013. Then in March 2018, the Forest Service added another 1,330 acres to the project, and also approved prescribed burning and additional herbicide treatments of the logged areas including the use of glyphosate (a probable carcinogen), as well as allowing logging trucks to drive through intermittent and perennial streams to access more trees. In addition, the 3/18 supplement to the project included more road reconstruction and maintenance on 9.4 miles of existing Forest Service system roads, and another 12 miles of temporary roads.

The Loblolly Project came about as a result of a 20-year battle to get the Forest Service to stop planting non-native loblolly pine plantations in place of our native hardwood forests. Land managers with the Sumter National Forest capitulated, and produced an Environmental Impact Statement (EIS) in 2013 that proposed removing the loblolly plantations and restoring a native forest. Unfortunately, the Forest Service’s proposal featured clear-cutting, followed by extensive use of herbicides and replanting the logged areas with shortleaf pines on a 12’ x 12’ spacing. These treatments will inhibit regenerating a diversity of native hardwoods. Only the Chattooga Conservancy and the U. S. Environmental Protection Agency (EPA) submitted comments on the Forest Service’s proposal, and both strongly opposed the industrial strength logging geared towards replacing the loblolly plantations with “native” pine plantations. Though some concessions were made, the Forest Service’s final decision was to move ahead with their plan for clear-cutting, herbicides, burning and regenerating forests heavily geared towards commercially viable pine species.

One easily visible site that the Loblolly Project recently was implemented is on Turkey Ridge Road, which accesses the popular Opossum Creek Trail to the Chattooga River. Logging resulted in large areas of bare mineral soil exposed without adequate erosion control measures, and major damage to the native hardwood trees that escaped cutting. In another area recently logged, concerned landowners next to Forest Service lands on Charlie Cobb Road were shocked and dismayed at the amount of silt and runoff they observed in a small creek in the harvest area. Another citizen reported seeing large trees marked for harvest inside of the Chauga River Scenic Corridor, but there were no loblolly pines there! Fortunately, the Forest Service dropped those stands from the project, saying that the area was “not a loblolly pine forest type” and had been “mis-mapped.”



*The Loblolly Pine Project is underway on Turkey Ridge Road, featuring logging, herbicide application and prescribed burning.*

Many more sections that the Forest Service has identified as loblolly pine plantations are scheduled to be logged in the coming year. Maps of all the areas scheduled for cutting are posted on our website, [www.chattoogariver.org](http://www.chattoogariver.org). What can you do? Visit areas of concern before they’re logged to verify that they are loblolly plantations. Monitor before and after the logging. Press the Forest Service to implement erosion and stormwater measures immediately, by seeding and mulching log landings and skid trails, which they’re obligated to do according to their management documents. We can also work to convince land managers to redefine the type of forest that’s desired for regeneration, to favor a more historic, diverse variety of native species. Let them know that we want to restore true native forests, and are opposed to replacing one type of pine plantation with another!

## **Cashiers Lake Development Proposal**

A public notice was issued by the U.S. Army Corps of Engineers in May 2018 for a proposed project on Cashiers Lake, which feeds the headwaters of the Chattooga River in NC. A Texas developer applied for a permit to dredge the lake as part of a plan to build a 100-unit resort hotel and a 55-home residential community. The proposal includes dredging 17+ acres of lake bottom and 6.5+ acres of wetland. Major ground-disturbing activity for the proposed development would impact numerous unnamed feeder streams and aquatic life. In addition, the project plan did not provide adequate information regarding storm water protection safeguards in case of excessive rainfall common to the headwaters. The proposed sewer line for this high density development would go to the Cashiers wastewater treatment plant on the Chattooga River, that is already capped and maxed at 200,000 gallons a day to protect the river, which is classified as Outstanding Resource Waters.



## Watershed Update

We submitted comments on the proposal in June 2018, and also requested a public meeting to allow members of the community to learn about this major project proposal, and discuss concerns. The NC Division of Water Resources recently agreed to hold a public hearing on the proposed development, but the date has not yet been scheduled. We will share updates on our website and social media as soon as they are available!

### Warwoman Creek Watershed Management Plan

The Chattooga Conservancy, in cooperation with the GA Environmental Protection Division (EPD), recently completed the Warwoman Creek Watershed Management Plan. This is an important milestone for improving water quality in this major tributary to the Chattooga River, because completion of a watershed management plan (WMP) is mandatory for future water quality improvement projects in the subject watershed to qualify for state and federal funding opportunities.

The GA EPD has identified all of Warwoman Creek as “impaired” (polluted). All of Warwoman Creek is impaired due to excessive sediment, and the lower portion—from Sarah’s Creek to the Chattooga River—is also impaired from excessive fecal coliform bacteria. In addition, Roach Mill Creek, a tributary of Warwoman Creek, and Law Ground Creek, a tributary of the West Fork of the Chattooga River, are both listed as impaired due to excessive sediment. The Warwoman WMP identifies hot spots of pollution in impaired waters, and the goal is to facilitate timely implementation of management strategies and corrective and protective actions to improve water quality in the watershed.

The administrative boundary of the Warwoman watershed encompasses over 45,000 acres in northeast Georgia and includes the subwatersheds of the West Fork of the Chattooga River and its headwaters, which extend into North Carolina. Water sampling was conducted from May to September 2018, and included testing for turbidity and fecal coliform at 20 sites. The highest average fecal coliform readings were from sample sites on Warwoman Creek between Black Diamond Rd. and Earl’s Ford Rd., with the highest being from the sample site at the bridge over Warwoman Creek on Earl’s Ford Rd. The highest average turbidity was found in Reed Mill Creek, a tributary to the West Fork.

Hot spots for sediment and/or fecal coliform pollution identified during surveys and sampling include:

- Unpaved roads within riparian buffer zones;
- Campsites within riparian buffer zones, absent “Leave No Trace” and best management practices (BMPs);
- Agriculture/pasture within riparian buffer zones, absent BMPs; and
- On-site waste disposal and associated septic systems near or within riparian buffer zones.



*A makeshift toilet next to Warwoman Creek is a clear display of waste disposal issues in campsites along Earl's Ford Rd.*

The Warwoman WMP is available in its entirety on our website, [chattoogariver.org](http://chattoogariver.org)!

### Stekoa Creek Implementation Project

The Stekoa Creek Watershed Management Plan Implementation Project is underway. This project is being funded through a cost-share grant from the GA EPD, made possible by our previous completion of the Stekoa Creek Watershed Management Plan. Some of the first aspects of the project include septic system educational presentations in cooperation with the Rabun County Health Department, and completing cost-share septic system repairs to landowners near streams in the Stekoa watershed. We’ll also be composing a “Citizen’s Guide to the Stekoa Creek Watershed,” which will provide an overview of the watershed, describe the creek’s pollution sources and associated issues, and summarize steps that individuals and groups can take to help improve Stekoa Creek’s water quality.

The “Citizen’s Guide” is expected to be completed in early 2019. Additional activities include the installation of agricultural best management practices at one site in the Stekoa Creek floodplain and water quality monitoring.

The largest undertaking with the Stekoa Implementation Project will be green infrastructure improvements at the Food Bank of NE GA’s parking lot, which is prominently located right next to Stekoa Creek on Highway 441 in Rabun County, GA. This big, impervious parking lot extends all the way onto Stekoa Creek’s streambanks and funnels large quantities of polluted stormwater directly into the creek. We’ll be working with the Food Bank to execute an engineering plan designed to remove the pavement inside the creek’s 50-foot buffer zone and replace it with rain gardens, tree islands, and permeable pavement to mitigate erosion and treat stormwater runoff in Stekoa Creek. The green infrastructure project requires cost-share funding from the Food Bank, so we are hopeful that it will be underway in 2019.

## Watershed Update

### Nantahala-Pisgah National Forest Plan Revision

The process of revising the Nantahala-Pisgah National Forest Plan began four years ago, and is still underway. Once completed, this new forest plan will guide management of public lands in the Chattooga River's headwaters in North Carolina for the next 15-20 years—so the outcome is a big deal! The Chattooga Conservancy has been involved in this forest plan revision since its start in 2014, through submitting timely comments to the Forest Service, attending meetings and networking with citizens. The Forest Service has periodically convened public meetings at venues in western NC to solicit input on various building blocks of the new forest plan. These “building blocks” encompass extremely important features of our national forests, such as potential wilderness areas; stands of old growth trees; streams eligible for protection under the Wild & Scenic Rivers Act; lands suitable or not suitable for timber production and logging; etc. It's important to note that historically, if special public lands such as roadless and potential wilderness areas are not carried forward into new forest plans, these areas will be opened up to road-building, logging and other extractive uses, and the unique, undeveloped attributes of the area will be destroyed.

The Chattooga Conservancy's input for the Nantahala-Pisgah Forest Plan Revision includes strongly advocating for potential wilderness area designation for Terrapin Mountain and the Ellicott Rock West Extension Area, and continued protection for the Overflow Wilderness Study Area. We have also advocated for recognition of Overflow Creek, and Overflow's East and West Forks, as eligible for Wild & Scenic River designation.

Forest plan revisions have a track record for being very contentious endeavors, because the timber industry, interest groups, and others are all vying for a revised forest plan that favors their special interests. So this time, in parallel with the Forest Service's work, two primary groups—“Stakeholders Forum for the Nantahala-Pisgah Plan Revision” and the “Nantahala-Pisgah Forest Partnership”—have been organized around the objective of working collaboratively across diverse interests to reach a consensus on public land and resource management issues to present to the Forest Service's plan revision team. The Chattooga Conservancy has participated in some of the Partnership group's meetings as well.

To date, the Forest Service has received a massive, unprecedented amount of comments about developing the new

forest plan—over 20,000. That said, there is growing concern about the Forest Service's “lack of transparency” since the last comment period ended, which was during late summer of 2017. The Forest Service's next step will be to release a “Draft Environmental Impact Statement (EIS), Nantahala-Pisgah National Forest Land & Resource Management Plan,” expected sometime this year. The EIS will be hundreds of pages long, with a minimum of 45 days for citizens' comments. Keep an eye out for an update and next steps!

### Chauga River Watershed Large Woody Debris Additions

*The Forest Service has received over 20,000 comments in regards to developing the new Nantahala-Pisgah National Forest Plan*

The AP District issued a scoping notice for the “Large Wood Additions to Streams/ Rivers in the Chauga River Watershed System Project” in April 2018. This project features cutting trees along the main stem of the Chauga River and placing them into the stream for the purpose of improving fish and other aquatic habitat. We submitted comments questioning the need for this project, given the ongoing mortality of trees from increasingly regular extreme weather events, as well as the widespread death of hemlock trees that have succumbed to the Hemlock Woolly Adelgid. We were also concerned about creating “strainers” that could be hazards for recreational users of the Chauga River. Nevertheless, the Forest

Service was quick to provide their assurances and justifications for the project, which was approved in August 2018. Please help us monitor the effects by sending pictures and observations.

### Southside Timber Project

When the Nantahala Ranger District in the Chattooga's NC headwaters released their “scoping notice” for the Southside Project back in March 2017, it immediately raised alarm! The proposed project encompasses some of the most sensitive areas in the Chattooga River watershed, and we've been fighting the ill-conceived project for over a year now. The outcome is still unresolved, and we expect the Forest Service to issue a decision soon.

What's at stake? Nearly 60% of the timber offered for harvesting in the Southside Project is over 100 years old, and is a prime candidate for old growth restoration. At least two stands of timber are existing old growth, which is extremely rare, with trees over 200 years in age. The project would implement heavy-handed timber harvesting and repeated herbicide applications and burning in what is arguably the most important wildlife corridor in the Chattooga watershed.



## Watershed Update

In brief, the Southside Project calls for:

- Cutting 317 acres of timber—including 2 stands of rare old growth at Brushy Mountain and Granite City—mostly through “2-age” harvesting, which is essentially a clear-cut;
- Timber harvests in the Ellicott Rock West Wilderness Extension Area and the Terrapin Mountain wilderness inventory area, and in NC State Natural Heritage Areas, which have been designated by the state to preserve their unique, unusual and outstanding natural features;
- Timber cutting in and near habitat for Green Salamanders, a charismatic species that is regionally listed as endangered or threatened, and cutting around the popular Foothills Trail and Jack’s Creek, habitat for Brook Trout;
- Extensive, repeated herbicide applications throughout all timber harvesting sites, roads and skid trails; and
- Repeated burning of over 1,700 acres in the project area.



*Citizens from across the Chattooga watershed participated in the “Save Our Old Growth” protest and rally outside the USFS office in Asheville. The protest was also featured on local WLOS News.*

The Southside Project’s environmental assessment (EA) was released in February 2018, which was followed by a “draft decisional” EA in July 2018. Challenging the Southside Project throughout this time has involved analyzing hundreds of pages of EAs; working with the Highlands Biological Station to mentor students studying old growth in the project area; convening public meetings; participating in numerous meetings with Forest Service officials; leading hikes into the project area; organizing a protest rally; and outreach to citizens to spread the word about what was going on and how to get involved. The Forest Service received over 200 comments that were overwhelmingly against the Southside Project, but despite this public opposition, the Nantahala Ranger District has steadily moved forward as planned.

In November 2018, the Forest Service was obligated to hold an “objection resolution meeting,” which was held at the NC Forest Supervisor’s office in Asheville. The Chattooga Conservancy participated along with other individuals and groups opposed to the Southside Project, including The Wilderness Society, Mountain True, Defenders of Wildlife, Southern Environmental Law Center and the SC Environmental Law Project. During the

objection resolution meeting, only “qualified objectors”—that is, those who had submitted comments on all the Forest Service’s documents from March through July 2018—were allowed to speak. Many compelling points were discussed including the project’s potential impacts to old growth, wilderness inventory areas, NC Natural Heritage Areas, Green Salamander habitat, water quality, soil erosion, and the excessive use of herbicides and prescribed burning.

After the meeting, a protest rally organized by the Chattooga Conservancy began in the parking lot. The purpose of the rally was to give citizens who were not allowed to speak during the meeting an opportunity to make their voices heard. Approximately 80 people including a local school group

participated in the rally to stand up for these precious forest lands! Forest Supervisor Nicholas and District Ranger Wilkins met with the protesters to listen and answer questions about the project. Local TV station WLOS covered portions of the meeting and rally, and aired the story that evening.

The Forest Service is considering objections, and a final decision is expected soon. Thank you to all who have attended informational meetings, followed the objection process, shared the issue with friends and family, and shown up! Check for news on our website and social media platforms.

### Native Cane Restoration Project

The Native Cane Restoration Project is a multi-year endeavor that we initiated 2012, in collaboration with the Eastern Band of the Cherokee Indians, Revitalization of Traditional Cherokee Artisan Resources and the Andrew Pickens (AP) Ranger District. The objective is to proactively manage the project site to restore 29 acres of native river cane habitat along the Chattooga River in South Carolina, at the Russell and Ridley Fields area near the Highway 28 bridge. Native canebrakes are one of the most endangered ecosystems in the Southeast. They provide habitat for a myriad of species, as well as weaving material for Cherokee artisans. Success with this project would restore the largest canebrake ecosystem in the Southeast.

Because establishing a canebrake ecosystem will take numerous years, we presented a detailed management plan to the Forest

## Watershed Update

Service to keep the project on track. During 2018, the Forest Service's Southern Research Station carried out a prescribed

burn in March, and cut down a patch of white pines in November. This burn was not part of our management plan, but we gave provisional approval for a "cool burn." While burning may sound counterproductive, some studies have suggested this may actually help cane grow, with new stalks sprouting and growing as much as one meter per year after a burn. In some cases, it may even rejuvenate cane stalks that are dying out. However, allowing a fire to burn too hot has adverse effects on river cane, heating it to the point where it's killed. Unfortunately, this is exactly what happened in certain areas of the project site. The patch of white pine trees was cut just upstream of the Highway 28 bridge. Clearing space in the canopy will allow more sunlight to reach cane stalks, which is expected to promote growth.

The science of restoring native canebrakes is relatively new with many unknowns, so we're studying the effectiveness of these management practices by establishing monitoring plots. Each monitoring plot is a circle with a 24' diameter, located in an area that appeared representative of the conditions of the site as a whole. We collected data within the priority sites in early December, counting all of the cane stalks, or culms, within each plot and recording the number of these that were living or dead to determine a survival rate following implementation of the described management practices. We'll continue to regularly monitor the sites as the project progresses. If you're interested in visiting the Native Cane Restoration Project site or would like to learn more, send an email to [info@chattoogariver.org](mailto:info@chattoogariver.org)!

### Foothills Landscape Initiative

The Foothills Landscape Initiative was launched by the Chattahoochee National Forest in the fall of 2016, and the Forest Service has not yet revealed their final draft for public comment. The initiative is a large-scale project encompassing 143,000 acres of national forest land in north Georgia, including a significant portion of the Chattooga River watershed. The agency convened numerous, day-long public meetings and workshops during 2017, and released a "proposed action" in late 2017. This "proposed action" included plans to create more

"early successional habitat" by cutting down older stands of oak trees, and applying herbicides to all timber harvesting areas.



*Native river cane, **Arundinaria gigantea**, at the Native Cane Restoration Project site. Unfortunately, some of the cane culms were killed in March 2018 when the Forest Service's prescribed fire burned too hot.*

However, the Forest Service did not identify which specific areas and stands of trees would be targeted. We strongly objected to this lack of specificity.

After more workshops and meetings in early 2018, the Forest Service has provided no further information. A large environmental assessment is expected in 2019, and will be subject to public comments. To learn more about the Foothills Initiative, visit [www.chattoogariver.org](http://www.chattoogariver.org).

### Leave No Trace

The AP District is collaborating with the Leave No Trace (LNT) Center for Outdoor Ethics to spearhead an initiative focusing on the SC side of Burrell's Ford as a "hot spot." This location is one of 19 hot spots chosen across the country for this LNT initiative aimed at implementing action plans to address impacts on popular recreation areas. The Chattooga Conservancy is one of several local groups that were invited to participate in planning the approach for this project, by providing insight into the key issues impacting this site. Events will take place during a week in March, including training sessions to teach LNT principles to agency personnel and the public. In addition, a member of our Board of Directors is currently training to become a certified LNT instructor!

### Chattooga Stewardship Initiative

We all know that the Chattooga River watershed is a mecca for outdoor recreation, and every year it seems that more and more folks are visiting the watershed's popular recreation sites to enjoy this wonderful resource! With people, inevitably comes trash...so we launched the Chattooga Stewardship Initiative in 2018. Our initial goal was to remove graffiti from rocks at Sandy Ford on the Chattooga River, which then expanded to holding monthly events where volunteers cleaned up trash at popular river access locations throughout the watershed. Thank you to all who joined the trash clean-up events! We'll continue this work in 2019, so please consider helping out! Check our website and social media for dates and locations soon.



# Members' Pages

**THANK YOU VERY MUCH** to everyone who recently contributed!\*

Your generous support will help us continue to work on the important conservation issues facing the Chattooga River watershed.

\*donations listed are from 9/8/17 through 1/25/19.

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9 Sequoia Hills Lane  
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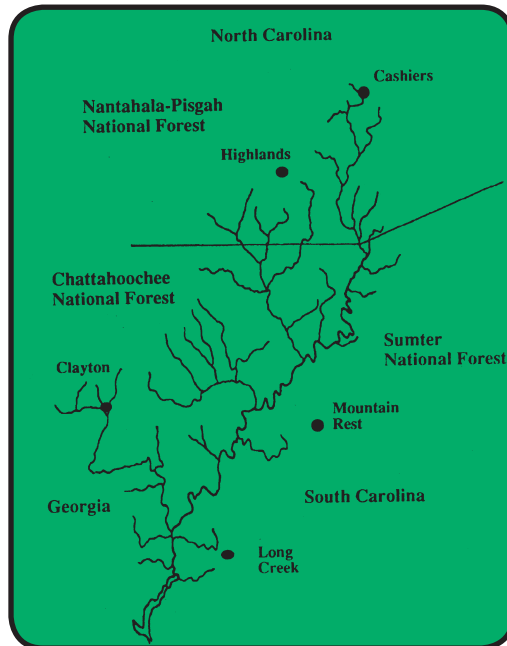
# Chattooga Conservancy

9 Sequoia Hills Lane  
Clayton, Georgia 30525

tel. (706) 782-6097 [info@chattoogariver.org](mailto:info@chattoogariver.org) [www.chattoogariver.org](http://www.chattoogariver.org)

## Mission:

To protect, promote and restore the natural ecological integrity of the Chattooga River watershed ecosystems; to ensure the viability of native species in harmony with the need for a healthy human environment; and, to educate and empower communities to practice good stewardship on public and private lands.



## Goals:

Monitor the U.S. Forest Service's management of public forest lands in the watershed, and work cooperatively to develop a sound ecosystem initiative for the watershed

Promote public choice based on credible scientific information

Protect remaining old growth and roadless areas

Promote public land acquisition by the Forest Service in the watershed

Educate the public

Promote sustainable communities

Promote conservation by honoring cultural heritage

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