

METRO ATLANTA WATER SUPPLIES ENDANGERED BY SPRAWL FROM NORTHERN ARC



The proposed route of the Northern Arc would cross the Chattahoochee near this spot in Gwinnett County.

The proposed 59-mile Northern Arc, a four-lane highway 25-35 miles north of Atlanta, will slice through scores of tributaries to the Etowah, Chattahoochee, and Ocmulgee Rivers, the mainstems of the first two Rivers, and hundreds of acres of floodplains and wetlands.

Each of these crossings will come at an environmental cost, but none of the direct effects of the construction of the Arc are nearly as harmful as the *cumulative impact* of introducing unrestricted sprawl into the land lying between Lakes Allatoona and Lanier. Both of these reservoirs are water supply sources—the sole reserves for 4 million people in metro Atlanta and its exurbs.

The Arc, and its accompanying development, will accelerate a population explosion in north metro Atlanta—thousands of new arrivals whose needs must (but may not) be met from the existing water supplies. Those supplies themselves will inevitably constrict, as the natural storage characteristics of their tributaries and watersheds are damaged and clogged by eroded soil, polluted stormwater, and runoff from impervious surfaces.

Streams in Arc Counties Already Degraded

Many of the tributaries in the four Arc counties (Bartow, Cherokee, Forsyth, and Gwinnett) are already impaired to

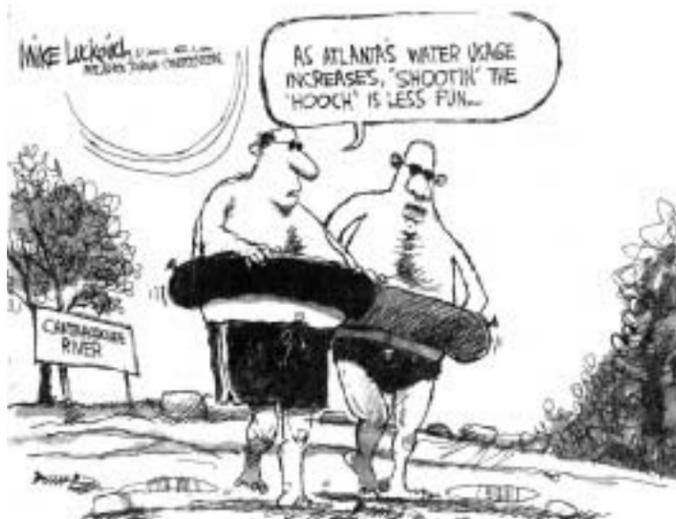
the point of not supporting designated fishing, swimming and drinking water uses because of the pollution and hydrologic impacts associated with stormwater runoff. A 1999 study by Kennesaw State University found that the

current rate of pollution would make Allatoona unfit for use as a drinking water supply in 10 years. A regional representative of the State Soil and Water Conservation Commission has stated that erosion control programs in the Arc Counties are "not as good as they should be." Accelerated development in this area will exacerbate all of these problems, pushing governmental resources to the breaking point. The Environmental Protection Division (EPD), the state agency charged with ultimate

enforcement of erosion control laws, admits that it lacks the staff and resources to perform that task now.

Changing the Pattern of Development

The effect of a completed Arc will be to change the pattern of development from north-south corridors (e.g., I-75, GA 316, I-575, GA 400, I-985, and I-85) to the more familiar metro "Atlanta sprawl model" which converts any vacant parcel into housing or commercial development without regard to its location or the availability of necessary infrastructure. The result of the sprawl pattern has been excessive "catch-up" costs to taxpayers,



On the Web, In the River

Real-time predictions of bacteria levels in the Chattahoochee River National Recreation Area are now available on the web at <http://ga2.er.usgs.gov/bacteria/>. And the news is good—data collected over the past eighteen months shows that the River between Buford Dam and Peachtree Creek is clean enough for recreation most of the time!

Since October 2000, 87 percent of the samples collected at the Medlock Bridge Unit (Norcross) and 72 percent of the samples from the Palisades Unit (Vinings) of the Park had bacteria counts *below* the federal public health standard (235 bacteria colonies per 100 milliliters). Electronic and satellite technologies help estimate bacteria levels using a "real-time" measure of light-absorbing particles in the river (turbidity), as an indicator of the amount of E. coli bacteria. The prediction is then calculated based on the relation between turbidity and E. coli that exists from nearly 1,200 samples collected for this BacteriALERT program over the past year and a half.

For those who'd like to just take a look at the River to determine whether or not they want to fish, boat, or swim, there's a common sense approach that can be deduced from the water quality monitoring data. It's as simple as this: if the River is muddy, don't go swimming. It's after storm events that the runoff from urbanized areas, cracked sewer lines and other sources contribute the highest levels of bacteria to the River. (see *Stormwater*, page 6)

A very successful government/nonprofit partnership is responsible for this model program. Federal agencies involved include the **U.S. Geological Survey** led by District Chief Ed Martin, **National Park Service** led by Superintendent Kevin Cheri, the **Georgia Environmental Protection Division**, and nonprofits—**Riverkeeper**, **The Georgia Conservancy** and **Trust for Public Land**. Hardy Riverkeeper staff who brave the elements to take daily samples are: Birgit Bolton, Bill Crawford, Alice Champagne and Kristi Rose.

Future partnership collaboration will involve a symposium to be held on Friday, October 18, to explain the BacteriALERT program and how to use our urban river, safely and responsibly. Contact Birgit Bolton for details on this event at bbolton@ucriverkeeper.org.



Bill Crawford pulls the daily water sample near Vinings.

See *Northern Arc*, page 7

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Our mission is to advocate and secure the protection and stewardship of the Chattahoochee River, its tributaries and watershed.

REFLECTIONS



An interesting thing has been happening lately within Georgia's conservation community. Our organizations are working quite well together, cooperating on joint campaigns to an unprecedented, and occasionally surprising, degree. The result has been measurable improvement to natural resource protection throughout the state.

In 2000, environmental groups created and galvanized support for the Georgia Water Bill of Rights, securing 1.6 million endorsements of the nine-principle declaration. This effort helped lead to the establishment of a state Legislative Water Study Committee in 2001, currently in progress, and the recent creation of the Georgia Water Coalition—GWC (see pg 8). Groups that are organizing the GWC include: Georgia Wildlife Federation, The Georgia Conservancy, Upper Chattahoochee Riverkeeper, Southern Environmental Law Center, National Wildlife Federation, Georgia Chapter of the Sierra Club, Georgia Public Interest Research Group, Georgia Conservation Voters, Garden Club of Georgia, Inc., Coosa River Basin Initiative, Turner Environmental Law Clinic, Georgia Center for Law in the Public Interest, Altamaha Riverkeeper, Coastal Environmental Organization, and Coastal Center for Sustainability.

Putting Differences Aside for Common Goals

In the past, environmental groups such as the above, and others, have too frequently operated on their own, without pooling the considerable talent and clout of Georgia's conservation community. Concerns over potential competition for funding, varying political styles and other differences have now been put aside in the interest of strengthening the movement and working more aggressively to protect the state's air, land and water.

Examples of other cooperative successes include last year's passage of regulations requiring the posting of labels on all industrial and municipal outfall pipes into state waters. This was one of a series of proactive legislative campaigns generated several years ago by a number of groups within the conservation community. Another goal of these organizations was to pass legislation requiring the state to develop a water quality sampling protocol for citizens and other third parties, so that their quality-assured data would be used in determining the health of waterways around the state. In 2001, such a bill (H.R. 206) passed the General Assembly and the Board of Natural Resources has now approved regulations that detail how adopt-a-stream groups, neighborhoods, local governments, businesses, and others can assist the state in monitoring its 70,000 miles of waterways.

The door is wide open for others to join up and work together to protect and restore Georgia's environment.

Sally Bethea

6TH ANNUAL RIVER REVIVAL GOES LIVE ON Z-93 RADIO

Riverkeeper's Sixth Annual River Revival was our best-attended and most profitable springtime celebration yet, realizing a net income of \$73,000! The **Park Tavern** in Midtown Atlanta hosted over 550 guests who rocked to the sounds of the Bradley Smith Cole Acoustic Band, enjoying micro-brewed beer and outstanding gourmet appetizers provided by **Paul Smith**, owner of the Tavern. **Z-93 Radio** broadcast live from the event for over three hours, providing opportunities for Riverkeeper supporters to talk on-air about their commitment to cleaning up the Chattahoochee.

We couldn't have done it without our **River Revival Co-Chairs: Beth Gottleib, Amy Schulman, Tess and Scott Seydel and Gannon and Beau Turner**; Kristi Rose as Logistics Chair and Corporate Co-Chairs Ansley Jones, Kris Koldoff, Bill Lathrop and Dominique Love; Host Committee Co-Chairs Ruthie Bolvig and Carrie Richards and Auction Chairs Katie Bush, Margaret Barnhart and Andrew Sugrue.

Thank you to all of our outstanding sponsors! **Lead: Turner Broadcasting System, Inc., Protector: Banc of America Capital Management, Ted Turner, Watts and Browning Engineers, Inc., and The Home Depot, Guardian: The Coca-Cola Company, Delta Airlines, Southwire Company, Gannon and Beau Turner, Laura and Rutherford Seydel, Leslie and Teddy Turner and Jennie and Peek Garlington; River: The Chevron Companies, Newfields Inc., Hooked on the Outdoors Magazine, Jordan Jones & Goulding, Green Street Properties, Montgomery, Watson and Harza and The Pacific Group, Friend: The Atlanta Fly Fishing Club, CH2MHILL, Rochester and Associates, Brown and Caldwell, Ecological Solutions, Inc., Hydrospec, Inc., Johnson and Bryan, AllConnect, Missy and Lanny Bridgers, Angela and Rhett Turner, and Shearon and Taylor Glover.**



"BEER, BLUES AND BARNES" DRAWS 300+ CROWD!

Over 300 people attended the "Beer, Blues and Barnes" event in April, which was co-hosted by **Laura and Rutherford Seydel**, to thank the Governor for his dedication to protecting and restoring Georgia's environment. The celebratory event at the **Dogwood Brewery** included Delta Moon, and Kevin Kinney of Drivin' and Cryin' who provided soulful blues music, while guests enjoyed the local Dogwood beer donated by **Crawford Moran**, owner of the brewery, beverages from **Coca-Cola** and Church's Fried Chicken and Popeye's Chicken & Biscuits provided by **AFC Enterprises**. In addition to our co-hosts, we would like to thank event sponsors: **Stephen and Lucy Draper, Susan and Jim Butler, Donna and Michael Coles, Carol and Larry Cooper, Gail and Kim King, and Diane and Bob Matthews.**



Riverkeeper Sally Bethea, Governor Roy Barnes, Marie Barnes and Laura Seydel.

3RD ANNUAL RIVERKEEPER GOLF CLASSIC HELD IN SOUTH FULTON

On June 11, eighteen teams took to the fairways of the Piedmont Driving Club for the 3rd Annual Riverkeeper Classic Golf Tournament. Chairman **Richard Courts, IV** hosted this year's event. No one won the Hole-In-One prize of a Sebring Convertible Limited, sponsored by **Ed Voyles Chrysler-Plymouth**, but everyone had a great time trying.

Tournament winners were: 1st Gross, Ed Voyles Chrysler-Plymouth, 134; 2nd Gross, Siemens Westinghouse Power, 138; 3rd Gross, Overton Park, 144; 1st Net, Lawson, Davis, Pickren & Seydel, 100; 2nd Net, Longstreet Publishing, 114; 3rd Net, Wiedeman and Singleton, Inc., 115. And a great showing by the rest of the field!

Many thanks to this year's steering committee: **Richard Courts, IV**, Chair, **Scott Bard, Maureen Darcey, Stiles A. Kellett, III, Jeff Kibler, Bill Malloy, Chris Means, Rutherford Seydel, Clay Snellings, Austin Stephens, and Bill Voyles.**

Thanks also to our sponsors: **Coca-Cola, Courts and Company, Courts Properties, Crescent Resources, Delta Airlines, Innovative Water Solutions, Lawson, Davis, Pickren and Seydel, Longstreet Press, Overton Park-A Hines Development, Restore Health Group Inc., Siemens Westinghouse Power, Merrill Lynch/STG Partners, Visy Recycling, Inc., Ed Voyles Chrysler-Plymouth, Weitz Golf, Wiedeman and Singleton, Inc., Parsons Engineering, Chris Means, Michael Reid, John Weber, Barry Bauguss, and Bill Malloy.**



The team from Courts Properties, l-r: Mike Henos, Richard Courts, IV, Richard Courts, II and Bill Todd.



HELEN DEVELOPER FINED FOR POLLUTING TROUT WATERS

In March, a Riverkeeper member in White County noticed a muddy discharge flowing from the developing **Helen Water Park**. A culvert, originating at the construction site, was dumping warm, sediment-laden water directly into the Chattahoochee, causing an orange plume for more than one-quarter mile downstream. In less than 200 yards downstream, the plume expanded to fill the entire width of the River—a state-designated trout stream.

Anglers fishing out of Unicoi Outfitters were stunned to see the cloud of mud approaching them. The turbidity in a water sample taken directly from the culvert was so high that it could not be measured by a Hach 2100P turbidimeter. Further investigation by Riverkeeper revealed that water used to clean out the footings of a new building was being pumped directly to an outfall pipe into the River, rather than to the onsite sediment pond—resulting in an illegal discharge of 250 gallons of muddy water.

Riverkeeper recommended that a strong enforcement action be taken, and the city of Helen imposed a \$1000 fine, along with requirements to improve erosion control measures.



TESTIMONY CONFIRMS POTENTIAL THREATS FROM GWINNETT DISCHARGE

Expert testimony—particularly from state witnesses—confirmed our suspicions that limits in **Gwinnett County's** permit to discharge 40 million gallons per day of treated sewage into Lake Lanier do *not* guarantee protection of existing water quality. During 17 days of testimony, from November to March, Judge Jesse Altman heard arguments from attorneys and witnesses for the plaintiffs (Riverkeeper, Sierra Club, Lake Lanier Association and Terry Hughey) which described potential environmental and health problems associated with the Gwinnett discharge. **Lanier's Shoal Creek Embayment**, near Lanier and Buford Dam Parks, is where wastewater will enter the Lake, only 20-30 feet below the water's surface. No other reservoir in Georgia or the Southeast is currently permitted to receive such a large quantity of treated sewage. The state EPD's action in this matter will set a precedent for other similar lake discharges, especially into Lanier. A ruling is expected in September.



"EAGLE EYE" SPOTS BUFFER VIOLATION AT FORSYTH SUBDIVISION

Last spring, we received several calls from a Riverkeeper member concerned that a stream was being destroyed by construction at **Eagle's Landing subdivision in Forsyth County**. Upon investigation, we learned that approximately 300 linear feet of stream buffer had been cleared to make way for the development's cul-de-sac. According to Forsyth County inspectors, the developer's engineering plans *failed to note the location of "state waters" on the site*, despite the fact that several springs feed a stream that flows through the property and empties directly into Lake Lanier within a few hundred yards. Furthermore, the County has documented violations of required best management practices on the site, including a failure to maintain silt fences and to stabilize a steep hillside above the stream. Both Riverkeeper and the Georgia Soil and Water Conservation Commission requested that the County require immediate action to remedy the problems. Additionally, Riverkeeper has asked the developer to submit a plan to the County to stabilize and revegetate the destroyed stream buffer.



STATE HONORS VOLUNTEER WITH RED FLAG AWARD

As a graduate student at Georgia Tech in 1997, **Dr. Jud Ready** started the **Underwood Brook Adopt-a-Stream** project to protect this tributary to Tanyard Creek and the River. Returning to Atlanta in 2000, he settled in a home adjacent to Underwood Branch, and again became its guardian. After heavy storms, Jud noticed that two nearby construction sites were not using erosion control practices, resulting in streams of muddy water flowing directly into his creek. Jud contacted Riverkeeper and provided a dramatic video of the erosion problems. He then advised the city of Atlanta and stop work orders were issued. One developer installed appropriate erosion control devices, but the other did not and fines were imposed. The state EPD recently honored Jud with its "Red Flag Award" at the 2002 Environmental Education Association Conference. If you would like to learn about this issue and/or how to prevent erosion damage to our streams, contact Jud at judready@hotmail.com.



TAILWATER FISHERY SUSTAINS REPRODUCING TROUT POPULATIONS

In 1998, state biologist **Lisa Klein** began a multi-year survey of the fish in the Chattahoochee below Buford Dam. A video of spawning trout near Jones Bridge, taken by Riverkeeper member **Brett Salter**, peaked her interest in natural trout reproduction. Lisa found what she was looking for—trout fry.

In the 1970s, the 50-mile section of the Chattahoochee from Buford Dam to just below Peachtree Creek in Atlanta was designated a "secondary" trout stream under Georgia law, in other words, a waterway capable of serving as habitat for stocked trout. The cold water released from the bottom of Lake Lanier (50 degrees F on average) could ensure the 68 degree water required for trout habitat. Aided by a ready supply of fish from the Buford Hatchery, the Chattahoochee became a well-known urban trout fishery—the southernmost in this country.

One-third of *all* fish stocked by the state in Georgia are released into the Chattahoochee below Buford—some 400,000 fish! In a 16-month

period in 2000-2001, the state documented 286,000 angler hours spent on the River, a significant economic value to the community. While the average trips per acre in Georgia reservoirs stands at 10-15, the Chattahoochee registered a whopping 119 trips per acre.

DNR Board Recommends Action

Secondary trout waters are protected by state law in two ways—temperature and turbidity limits (turbidity/sedimentation can clog fish gills, destroy spawning areas and mask food sources). Discharges of industrial and municipal wastewater cannot elevate the stream's temperature more than 2 degrees.

In February 2001, based on Klein's studies, the state Wildlife Resources Division recommended that EPD change the classification of the Chattahoochee (Buford Dam to GA 400) to "primary", thereby prohibiting *any* discharges that could elevate the temperature in the River. Currently, 70 million gallons per day of treated sewage are permitted by the state to discharge directly into the section where nat-

ural reproduction was discovered. Water temperatures can also be elevated by stormwater runoff from roads, parking lots and roof tops.

Last spring, several DNR Board members asked for an update on the year-old WRD recommendation. Riverkeeper, Trout Unlimited, Georgia Wildlife Federation and others urged additional protections. Because the Chattahoochee is a regulated waterway (i.e., dammed), it was determined that the state's existing "primary" and "secondary" classifications were not appropriate to protect the fishery. The Board asked EPD and WRD to work together to develop a *special classification* to protect the new life discovered in the midst of Atlanta, and to bring a recommendation back to the Board next year.



Fishing guide Chris Scalley

On Patrol

Upper
Chattahoochee
Basin

Helen



Lake
Lanier



Buford
Dam



Atlanta

West
Point
Lake

West
Point
Dam

LEARNING ABOUT WATER QUALITY ON THE RIVER!

What's the best way to teach people about the Chattahoochee River? Just get on a pontoon boat and float downstream. That's exactly what Riverkeeper's Alice Champagne and Dr. Mary Mayhew have done the past several months, while teaching Citizen Soil Watch and Adopt-A-Lake workshops. Participants experience the River first-hand aboard the **Chattahoochee Nature Center's** 16-passenger pontoon boat, driven by Capt. Harlan Trammell. This outdoor classroom provides an excellent venue to learn about non-point problems affecting the River's water quality and offers participants graphic ways in which they can get involved in protecting the Chattahoochee.

While cruising along on Bull Sluice Lake near Roswell, workshop participants view Morgan Falls Dam (the oldest dam on the Chattahoochee), the Gold Branch Unit of the Chattahoochee River National Recreation Area, and Riverkeeper's real-time water quality monitoring station (see *RiverChat* Winter/Spring 2002). This majestic section of the River is filled with beaver dams, rock cliffs and green shorelines. The **Citizen Soil Watch Workshop** focuses on eroded soil as a pollutant in our drinking water—its sources, impacts on water quality, and methods of control. An informational tool kit is provided for participants to take home, so that they can take action in



Dr. Mary Mayhew conducting an Adopt-A-Lake workshop.

their own communities. The **Georgia Adopt-A-Lake Workshop** promotes citizen involvement in protecting water quality in reservoirs and offers a wide range of activities. Volunteers can become part of AAL by organizing a lake cleanup or collecting and interpreting data, such as chlorophyll a, on a long-term basis to document trends.

As the boat heads back to the dock, it is always evident that the River trip has met its objectives—connecting people and the River that they care about saving. Hands-on learning followed by personal action is the message of the day. **For more information, contact Alice Champagne at 404-352-9828 (16), or achampagne@ucriverkeeper.org.**



GREENSPACE PROTECTED ALONG UTOY CREEK



Atlanta Mayor Shirley Franklin

Mayor Shirley Franklin presided over an Earth Day ceremony last April in which a 74-acre tract of land in south Atlanta's Utoy Creek Basin was dedicated as part of the city's commitment to spend \$25 million to protect water quality by purchasing stream buffers, wetlands and floodplains. The 1998 settlement of Riverkeeper's lawsuit with the city included a two-part Supplemental Environmental Project (SEP). The first component, a highly successful \$5 million, 37-mile stream cleanup, was completed in 1999. To date, the city's land acquisition program has permanently protected 120 acres in the Chattahoochee and South River Basins, based on a master plan developed by the city's consultants with input from the SEP Advisory Committee, including Riverkeeper Director Sally Bethea and Rex Boner with The Conservation Fund.



A TRIP DOWN THE ETOWAH INSPIRES CONCERNS FOR ITS FUTURE

By Joe Cook
(Joe, Monica and Ramsey Cook explored the 160-mile length of the Etowah River by foot and canoe in April 2002)

Throw together a 59-mile superhighway and a river basin that holds 91 native fish species, including four species found nowhere else in the world, and what do you have? A bad idea.

While impacting the Chattahoochee River basin in Forsyth and Gwinnett Counties, the **Northern Arc** would also bisect the Etowah River basin in Bartow, Cherokee and Forsyth Counties, as well as numerous tributaries that harbor federally-listed endangered species.

The Etowah provides about 10 percent of the drinking water for metro Atlanta, supplying residents throughout the northern suburbs, as well as citizens of Dawson and Floyd Counties.

More Imperiled Species Than Any Other Southeast River System

According to University of Georgia biologists, the Etowah basin is home to more imperiled fish species (17) and invertebrates (16) than any other similar river system in the Southeast. The federally-protected Etowah and Cherokee darters are believed to occur nowhere else in the world, as are two other unnamed darters. The Arc

and resulting development will undoubtedly threaten habitat for these and other federally-protected species.

Development spawned by the Arc will also further threaten water quality in Lake Allatoona, the 12,000-acre Corps of Engineers impoundment located in Cherokee, Cobb and Bartow Counties. Studies conducted by Kennesaw

State University indicate that lake water quality declined steadily during the 1990s, due to non-point source pollution. Currently, Georgia's EPD lists the Lake as only *partially* meeting clean water standards for drinking water and recreation.

During the past decade, no other Georgia river basin has grown at a faster rate than the Etowah basin, and during the next 20 years, the population of a six-county region comprising the bulk of the basin, is expected to double. The Arc will

only speed this process in communities already struggling to keep pace with unprecedented growth (see *cover story*).

Unlike the Chattahoochee, the Etowah River corridor has virtually no land tracts set aside for permanent protection. Currently, the Etowah remains largely unspoiled. The potential for wise stewardship of the resource is great, but foolish plans like the Northern Arc will only make it more difficult for citizens to protect this water resource and the land surrounding it.



This spot along the Etowah River is in the path of the proposed Northern Arc.

GET READY FOR RIVERS ALIVE-COMING AGAIN THIS FALL!



Mark your calendar to volunteer for Rivers Alive! in October, Georgia's month-long celebration of cleaner streams, rivers, lakes and wetlands. To register a cleanup on your local waterway or to find a cleanup in your area, check out www.riversalive.org for more details. Help keep Georgia's Rivers Alive!

REVERENCE FOR THE NATURAL WORLD IN "TALES OF LONG AGO"

"Tales of Long Ago" brings alive the relationship of our Native American ancestors to the Chattahoochee River. Through storytelling and music, **Hawk Hurst**—animated story teller, talented musician, artist, and outdoor educator—shares his passion for native traditions, spirituality and life styles in an hour-long program. This year, his program reached 325 elementary students in the metro-



Hawk Hurst helps student with gourd project.

Atlanta area involved in the **Riverkeeper Youth Program**, led by Kristi Rose, our Director of Watershed Education. Hawk's lively performances focus on the intimate connection between early peoples and the River and especially on their reverence for the natural world.

"Tales of Long Ago" provides an excellent opportunity to learn, in depth, the living skills, arts and crafts, and the life-ways of Native American culture, while exploring and interacting with nature. Hawk's performances and multi-cultural programs delight audiences of all ages. For more information about "Tales of Long Ago" and additional environmental education programs offered by Hawk Hurst, check out www.hawkhurstflutes.com.

CHOTA PRINCESS SAILS INTO THIRD YEAR ON LANIER

Since 2000, Riverkeeper, in partnership with **Elachee Nature Science Center**, has provided water quality education programs aboard the *Chota Princess* for more than 3,700 kids throughout the north Georgia area. Serving as the first floating classroom for Lake Lanier, the *Chota Princess* has provided hands-on water quality experiments to connect kids with the headwaters of the River. Aboard the *Chota Princess*, students chemically test lake water, sample for plankton and view under microscopes and conduct turbidity tests. On land, students are engaged in several activities from building a mini-water treatment plant to seeing the effects of soil erosion on streams through "Nature's Filter", a demonstration of how buffers can filter dirty water. "Everything we did was quite valuable. The trip out onto Lake Lanier was well done with water sampling and seeing micro-invertebrates", commented one teacher.



Students enjoy learning about Lake Lanier from an Elachee naturalist.

River Kids

RIVERKEEPER YOUTH PROGRAM HIGHLIGHTS "ART IN NATURE"

Art in Nature, taught by Naturalist and Art Instructor, **Gretchen Neal**, is an exciting after-school program offered to 50 students at Spalding and High Point Elementary Schools by Riverkeeper, thanks to a grant from Fulton County. Providing art instruction to children for more than 15 years, she uses art to heighten students' awareness and understanding of their natural surroundings. Students use natural materials and find inspiration for their artwork in the great outdoors. When working with a particular plant or animal species, Gretchen shares valuable facts with students regarding habitat, migration patterns, physical characteristics, etc. This year, students used Georgia red clay to create a background "wash" for their artwork, studied snakeskin to learn about different textures in nature and used real flounder fish to create "fish prints". All artwork created by the students are made into bookmarks, note cards, magnets, frameable pieces and much more. Gretchen has successfully created a program that combines art with the wonder of nature.



Students at Spalding Elementary in Fulton County display their Art in Nature projects.

SCHOOL HAPPENINGS AROUND THE WATERSHED...

Riverkeeper has worked with **Galloway School** for the past two years to test the water quality of Nancy Creek near Chastain Park. This year, students used biological and chemical data to create an exciting and educational *Bioindicators of Water Quality* website. Each student team researched a particular macroinvertebrate to learn its habitat, life cycle, and physical characteristics, plus created drawings of the critters for their page on the website.



Galloway sixth grade students assess the health of Nancy Creek by sampling for macroinvertebrates.

"Students were fascinated to discover life in Nancy Creek and thoroughly enjoyed learning about aquatic insects. This project really opened their eyes to creek life and made them more aware of the water quality of their local waterway", said Galloway teacher, **Marsha Berger**. **Check out their website at: <http://www.galloway-science.com/6thscience/biodindicate.htm>**

REI STEWARDSHIP TRUNKS

Riverkeeper still has Watershed Stewardship Kits available for schools in the Chattahoochee Basin. If you are a teacher interested in conducting chemical and biological water quality tests on your locate waterway, please contact Kristi Rose at 404-352-9828 x17 to find out how you can participate in this program.



Aquatic Insects

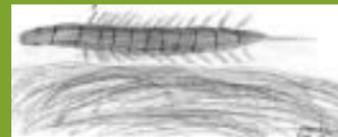
Artwork by Galloway School
6th Graders



Stonefly



Crawfish



Alderfly



Midgefly Larva



Riffle Beetle



Dobsonfly



Scud



Stonefly

IS METRO ATLANTA RUNNING OUT OF WATER?

A recent Corps of Engineer's report caught Georgia by surprise. Atlanta area water consumption from the Chattahoochee River—water withdrawals minus returns via wastewater discharges—sometimes exceeds levels not expected until 2030!

The Georgia Environmental Protection Division (EPD) quickly responded that this report was all wet. The Corps based its numbers on data provided by EPD, so how can these agencies draw different conclusions from the same set of numbers? Where can we find the truth? And, what will it mean for the Region's future?

The key to unlocking this hydrologic mystery lies with understanding the 2030 consumption estimates. The Corps used estimates based on (1) a six-year comprehensive study which determined how much water could reasonably be withdrawn from the Upper Chattahoochee Basin; and (2) the assumption that Atlanta water consumption does not vary greatly from season to season. This last assumption, while questionable in hindsight, has been a supposition that Georgia has operated under for the past four years of "water wars" negotiations with Florida and Alabama.

Georgia Officials Scrambling

The Corps' findings about summer water consumption sent Georgia

officials scrambling. EPD claims now that the 2030 water demands used for the last four years do not accurately represent the *timing* of water consumption in the Atlanta area. Under EPD's newly proposed water regime for 2030, *annual average* water consumption remains the same, but consumption shifts more profoundly with the seasons. Water consumption suppressed in the winter months increases dramatically in the summer, making the new use pattern look more like a mountain than a mole hill.

Under EPD's new 2030 predictions, water consumption is the highest during the hot, dry Georgia summers, a time when the River can handle loss the least. According to Bob Kerr, Georgia's lead tristate negotiator, however, "The effect on river levels will be minimal." EPD expects that decreased releases in winter months will ensure that Lake Lanier levels can be maintained in the summer. Modeling results and real numbers, however, remain to be seen. Nevertheless, EPD acknowledges the need for change. "This should serve as a wake-up call," says EPD Director, Harold Reheis in a May 23 memo that calls for, among other things, "aggressive water conservation... good water management", and water re-use.

Already Over-Allocated?

Along with this new information about water use trends, the *Atlanta Journal Constitution* uncovered startling evidence that the state has already over-allocated water from the Upper Chattahoochee Basin. "State environmental regulators

have pledged more water than is safe to withdraw from the Chattahoochee and Lake Lanier," notes an *AJC* article (6/6/02). Despite an upper limit of 705 million gallons per day (mgd), EPD has already issued permits totaling *over 760 mgd*. More importantly, this withdrawal limit of 705 mgd was not expected until 2030.

As host to what *Time Magazine* calls "the fastest-spreading human settlement in history," Georgia faces many challenges. First among them is the task of providing water to a burgeoning population.

Innovative Water Reuse

A good example of innovation can be found in Fulton County, in the form of Georgia's first water reclamation project. The Cauley Creek Water Reclamation Facility converts "a by-product into a product," says Ron Green, CEO of Innovative Water Solutions. Cauley Creek has just begun treating and reclaiming 2.5 mgd of wastewater for Fulton County. The County has sold 2.5 mgd of reuse water to golf courses, subdivisions and a church. The water from the Facility decreases direct water withdrawals from the Chattahoochee by minimizing the amount of water needed by its customers. Rather than using potable water for irrigation, Cauley Creek customers now water golf courses and landscapes with highly treated reuse water, water clean enough for outdoor use, but not treated to a level necessary for drinking. This saves energy as well as decreasing the demands on local municipal water suppliers.



Captain Harlan Trammell

CAPTAIN'S CORNER

On routine patrols, I've noticed that pipe owners below Atlanta have already begun installing pipe labeling signs, per DNR regulations which require that all permitted discharges into state waters be labeled by November 2002. Each sign must contain the permit number, type of discharge and state emergency phone number. Pipes discharging treated sewage must also be labeled with the name and phone number of the permittee. Some of the signs now posted are easy to read from the boat; others are hidden by brush and need to be moved.

The unpermitted "mystery pipe" in South Fulton, that I discovered discharging wastewater several years ago (and which stopped flowing upon state investigation), is now flowing again at a slower rate. I've contacted the state about this and plan to keep an eye on it.

Our monthly water quality monitoring runs below Atlanta continue to go smoothly, thanks to our new, faster boat, which increases efficiency. We're also continuing to conduct on-the-river interviews with anglers for our fish consumption surveys which will be used to determine who's eating what kind of fish, and how much, in the section of the River below Atlanta.

Dependable Honda Four-Stroke

Thanks to dependable, fuel-efficient, environmentally-friendly Honda four stroke outboards (the only outboards to feature aircraft tolerances), all boats are running perfectly and are ready for deployment in 20 minutes notice. I have done a rebuild on the jet drive of our first boat (1995) complete with replacing main bearings, liner and water pump. I will be installing a hydraulic jack-plate on the newly-commissioned *Sweet Virginia* that will allow her to run in *four inches* of water with a full load. Finally, I've recently scrubbed the bottom of the *Chota Princess*, a process that will add up to four knots of additional speed, making our floating classroom more efficient.



Pipe labeling signage is beginning to go up in the watershed.

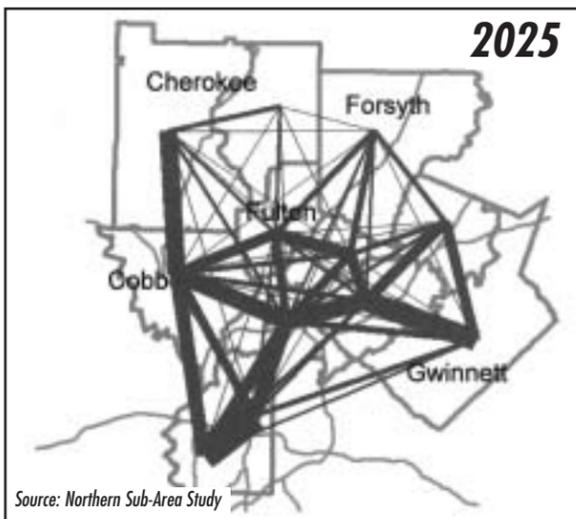
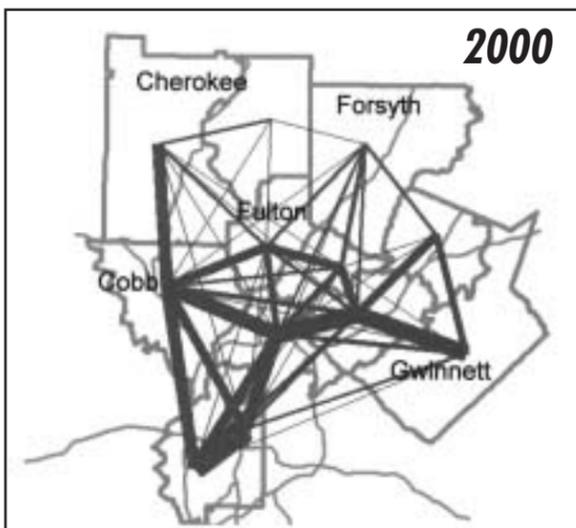
NORTHERN ARC

Continued from page 1

and heavy environmental impacts—particularly on water supplies. Approximately 550 million gallons per day of water are permitted to be withdrawn from the waterways *downstream* of the proposed Arc.

The Arc's east-west route from Cartersville (US 41 in Bartow) to Lawrenceville (GA 316 in Gwinnett) bisects the land lying between the Lakes and parallels GA 20, which has been widened in some places, but neglected in many others. Even though current traffic projections show that demand for travel in this inter-lake area is primarily for north-south trips (*see maps below*), the Arc instead proposes a very expensive road cutting *across* the preferred routes, and across scores of waterways.

In the past, roadbuilders sought routes on ridgetops to avoid the costs of bridges and fills over streams. Atlanta's Peachtree Street is one of the best examples of this practice. However, modern earthmoving equipment makes other, less environmentally-friendly techniques "cost-effective", but only if environmental and other social costs are not considered.



Source: Northern Sub-Area Study

Outer Perimeter Highway Out of the Way

The only (slightly) bright spot in this picture is the fact that the Arc is a remnant of the 211-mile Outer Perimeter Highway (OPH), which would have encircled Atlanta with what one legislator called a "concrete choke-collar." This beltway was part of the Governor's Road Improvement Program and ARC's Regional Transportation Plan beginning in the late 1980s, when Cartersville's Joe Frank Harris was Governor. Environmentalists and citizens' groups fought the Outer Perimeter for two decades before Governor Roy Barnes killed it during the 2001 General Assembly, substituting the Northern Arc for the OPH in the Road Improvement Program.

Critical Road Decision in October

In October, the Atlanta Regional Commission Board will vote on whether or not to appropriate funding for a package of transportation investments that includes approximately \$158 million for right-of-way acquisition for the Northern Arc. Removal of the Arc from the region's long-range transportation plan is an achievable goal. The last time that the ARC Board voted on the Arc (May 1999), this \$2.4 billion "investment" prevailed by a slim margin (18-15).

For more information:

Northern Arc Task Force (www.natf.com), **The Georgia Conservancy** (www.gaconservancy.org), and **the Georgia Chapter of the Sierra Club** (www.georgia.sierraclub.org).

USING THE CLEAN WATER ACT TO FIGHT STORMWATER POLLUTION

A drop of rain falls from the sky, landing on a parking lot, a roof top, or other non-natural surface. Soon there is a small stream of water heading for the nearest drainage way, and ultimately the Chattahoochee, picking up trash, bacteria, oil, and chemicals along the way—creating a "toxic soup".

In many urban areas, industrial facilities and the streams they drain into are located next to community parks, schools, children's playgrounds and residential areas. As a result, the creeks that once were amenities for these neighborhoods are, instead, dangerous nuisances and public health threats, filled with trash and contaminated with bacteria and other pollutants.

Is this "Toxic Soup" Legal?

The federal Clean Water Act (CWA) regulates stormwater runoff from major industrial facilities, construction sites and large municipal storm sewer systems. In the case of industrial facilities, the CWA requires facility owners to: (1) give the state a Notice of Intent to discharge stormwater, (2) prepare a Storm Water Pollution Prevention Plan, which details how the facility will keep reduce contaminated runoff; and (3) manage stormwater runoff from the facility in accordance with the CWA requirements.

Because the CWA contains a citizen suit provision, affected citizens and public interest groups can file suit against industrial facilities that discharge stormwater in violation of the CWA.

Riverkeeper is working with **Georgia Center for Law in the Public Interest** and **National Wildlife Federation** to fight stormwater runoff impacts watershed by watershed. This campaign is designed to document, analyze and reduce runoff pollution from industrial sites in the most urbanized sub-watersheds of the Chattahoochee basin with input from local residents. We plan to

work cooperatively with the state EPD and the industries to resolve water quality problems, unless there is no other recourse and a citizen suit is necessary to stop the pollution.

Industries Flush Polluted Stormwater into Proctor Creek Neighborhoods



Proctor Creek is not safe for recreational use, partly due to industrial stormwater runoff in the area.

Southwest Atlanta's Proctor Creek drains from the World Congress Center through a valley of landfills, public housing, chemical and manufacturing plants, middle-income neighborhoods, schools, and railyards, to the Chattahoochee. The industrial facilities have developed around, and virtually on top of, the residential areas.

Children can be seen playing in tributaries to

Proctor Creek that contain industrial and municipal pollution, making it even more imperative that industrial facilities properly treat the water that flows from their sites. Fecal coliform bacteria contamination also plagues Proctor Creek from two combined sewer overflows (CSOs), which must be cleaned up by 2007 as a result of Riverkeeper's 1995 lawsuit against the city of Atlanta. Controlling stormwater runoff will also help reduce bacteria levels.

Campaign partners have identified *one hundred industrial facilities* within the Proctor watershed—thirty of which are covered by the CWA. By reviewing state files, driving and walking the watershed, and talking with residents, these thirty facilities have been ranked in order of compliance with the CWA. Four facilities have been identified, to date, as representing the most serious problems—an unlined landfill, a shale processing company, a recycling facility, and an asphalt company. We will continue to conduct periodic water quality samples, improve the mapping of the identified facilities, and investigate other facilities, as we work to build long-term community relationships and clean up Proctor Creek.

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ACTION ALERT

LEGISLATIVE WATER STUDY FALLING SHORT? NEW GEORGIA WATER COALITION FORMS TO FILL GAPS

The Water Bill of Rights Campaign helped lead to the creation of the Joint Legislative Water Study Committee (JSC), charged with developing recommendations for a statewide water plan by September. Based on the work to date, we anticipate that the JSC report will fall short of its purported intentions, due, at least partially, to the lack of environmental voices on both the JSC and its Advisory Committee. The conservation community owes a big thanks to Dr. Stephen Draper, Christy Lambert, Jerry McCollum and John Sibley for their tireless work with this Committee.

Formed in mid-July at the Georgia Wildlife Federation's Alcovy Center, the Georgia Water Coalition (GWC) will take actions developed by a representative group of citizens, especially with regard to issues overlooked by the JSC, such as aquifer recharge protection, conservation and water supply reservoirs, stormwater and erosion control management, and instream flows.

The JSC is developing recommendations for the Legislature in four important areas: water rights, water planning framework (i.e., who develops/approves the state's water plan), regional water management, and interbasin transfers of water. Some of the work groups for these four topics have reached conclusions that are consistent with environmental concerns, while others have strayed into more political decision-making.

Fundamental Coalition Principles

The GWC will put forth a strong and consistent voice on the broad array of water issues that Georgians confront, based on the following principles:

- *The surface and ground waters of the state continue to be a public resource managed in the public interest and in a sustainable manner by the state to protect natural systems and meet human and economic needs,*
- *Water management must be guided by a comprehensive state water management plan, developed by a lead agency with a dedicated planning staff, in coordination with agencies and with the participation of all interested citizens,*
- *Effective water management requires regional water planning, based on watersheds, river basins and aquifers, that is tied to implementation including an adaptive management process*
- *Regulation of interbasin transfers must be strengthened to reflect scientific knowledge, respect natural systems, and protect the basins of origin and receipt.*

If you want to participate in the Georgia Water Coalition, contact Sarah Gaines at sgaines@gwf.org or 770-787-7887.



Reclaiming Our River

1900 Emery St. Suite 450 Atlanta, Georgia 30318
404 352-9828



BARNES VETOS CHEMICAL INDUSTRY'S COST-BENEFIT BILL

Thanks to all of you who asked Governor Barnes to veto the Cost-Benefit Bill!

For the third year in a row, the General Assembly passed, and Gov. Roy Barnes vetoed, legislation intended to impede protection of the natural environment.

In 2000, legislators tried to create a process to overturn environmental regulations they found displeasing. In 2001, agricultural interests wanted to be guaranteed seats on the Board of Natural Resources, regardless of other qualifications or geographical representation. This year, the chemical industry tried to create a committee to draw up "guidelines" for cost-benefit analysis and risk assessment for environmental rules. The Georgia Chamber of Commerce was an enthusiastic proponent of this proposal.

Industry lobbyists and legislative supporters were quick to point out that these guidelines would be "optional" for the Board, but the bill's sponsor also referred to the measure as a "first step." The intention was clearly to make cost-benefit studies mandatory, with a likely result of "paralysis by analysis". Industry costs can be established fairly easily, while the human health benefits of a regulation, as expressed in dollars, can be difficult to assess.

NEW STATE LEGISLATURE ON THE WAY

The 2002 Election in November will see an entirely new Georgia General Assembly selected from newly-drawn districts. Many members of the old 2002 Legislature will be back in 2003, but, to a remarkable extent, even these returnees will be representing some new territory. The technology now available to legislators wanting to protect themselves and their fellow party members is extraordinary—a computing power that can draw districts with shapes almost unknown to nature. One trend among legislators is how "green" they are becoming. All the legislators elected during the last year, to fill vacancies, have run on more aggressive environmental platforms, notably opposition to the Northern Arc.

Now that the candidate lists are final, you can go on-line and find out who's running in your neighborhood: www.sos.state.ga.us/misc/districts.html.

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River Matters

**Metro Atlanta White
Water Trip** July 20
Call 404.352.9828 ext.14 or
bcrawford@ucriverkeeper.org

**Metro Atlanta White
Water Trip** August 17
Call 404.352.9828 ext.14 or
bcrawford@ucriverkeeper.org

**Chemical Adopt-A-Stream
Workshop** August 31
10:00 a.m. - 3:00 p.m.
Smithgall Woods State Park
Contact Kristi Rose at krrose@ucriverkeeper.org for more information

**2002 Water Stewardship
Conference** September 5-7
For more information or to register,
contact Brandon Anderson at (706)202-
7098 or upperocmulgee@yahoo.com

**Baker's Branch
Hike** September 8
Call 770.531.1468 or
kcostley@ucriverkeeper.org

**Influencing TMDL
Development in the
Chattahoochee/
Flint Basin** September 8 & 9
Jenny Culler at Georgia Legal Watch:
706.546.9008 or jennyculler@georgia-legalwatch.org

**Canoe the Chattahoochee
Below Atlanta** September 14
Call 404.352.9828 ext. 24 or
bbolton@ucriverkeeper.org

**Saving Georgia's Landscape
Call to Action** September 20
For more information and to register, go
to www.georgiaconservancy.org and click
on the Saving Georgia's Landscape icon.
Or call 404-876-2900 ext. 40

**Canoe Trip from MacIntosh
Reserve in Carroll County to
Franklin** September 28 & 29
Call 404.352.9828 ext. 24 or
bbolton@ucriverkeeper.org

**Big Trees Forest
Preserve Hike** October 26
Call 404.352.9828 ext. 24 or
bbolton@ucriverkeeper.org