



Thirst for Growth

In southeastern water wars, Georgia holds the trump card: the headwaters of two major river basins that cross state lines.

BY JEFFERSON G. EDGENS

While skirmishes over the allocation of scarce water resources have been common in the more-arid western states, such as California, Colorado, and Nevada, rapid population growth has brought the prospect of water wars to the water-rich Southeast. For more than a decade, the states of Alabama, Georgia, and Florida have been engaged in a dispute over water resources. One of the wettest states in the region, Georgia, has two major river basins with headwaters in the north Georgia mountains. This puts Georgia at the center of the tri-state dispute. All streamflow in these two basins moves in a mostly southwesterly direction across Georgia—and through the metro-Atlanta region—before entering Alabama or Florida. In

the future, managing water supply to account for Atlanta's growth as well as fulfill the needs of downstream states will be a tall order.

The two river basins at the center of this tri-state water war are the Apalachicola, Chattahoochee, and Flint (ACF), and the Alabama, Coosa, and Talapoosa (ACT). The ACT river basin flows from Georgia through Alabama and empties into the Gulf of Mexico at Mobile Bay, while the ACF river basin crosses into portions of Florida and empties into the Gulf at Apalachicola Bay.

Both bays are essential for maritime commerce; Apalachicola Bay, in fact, is one of the richest oysters beds in the nation. If adequate flow for Mobile Bay or Apalachicola Bay is not maintained, water levels will deteriorate and water quality will decline. For Apalachicola Bay, this is a significant concern be-

cause most oyster beds need fresh water or bay flushing to be productive.

In addition, Florida and Alabama, like Georgia, are also growing. The central issue in this tri-state dispute is how to allocate water resources from these two river basins in a way that allows further growth in the metropolitan Atlanta region without compromising water quantity and quality for downstream users in Georgia and its Alabama and Florida neighbors.

While negotiations have been contentious, the debate has generated new ideas. One of the more promising concepts to emerge is linking watershed plans to comprehensive, local land-use plans. This ensures local control of water allocation. Comprehensive watershed planning also requires coordinating decisions about how many new homes, commercial sites, and industrial parks are to be constructed and where they can be constructed. In essence, watershed management requires a regional approach to dealing with water quantity and water quality, since watershed boundaries ignore political jurisdictions.

Watersheds, of course, encompass several counties or states, yet our land-use planning remains completely at the hands of county government. This raises additional questions for regional planning and watershed management, specifically, what can be done about local sovereignty. Depending on the shape of a tri-state agreement, local sovereignty will either be eroded or left much as it is. Where the tri-state pact would infringe on local control is combining water-quantity and land-use restrictions from a top-down structure. One real possibility is fash-

ioning an agreement that ties new water withdrawals with a land-use plan while giving regional governance veto power, thus effectively overriding local decisions.

An assessment of what is taking place in the tri-state area may serve as a lesson for planners in other regional watershed disputes.

Legal Nuances

Water law has a long history, especially in the western United States. (See “Western Groundwater Wars” in this issue of FORUM.) There are two distinct water regimes within the nation: prior appropriation and riparian rights.

Under the doctrine of prior appropriation, the landowner who has the first claim on the land also has first rights for nearby water resources. These waters do not have to be adjacent to the land, but could in fact be hundreds of yards or several miles away. All landowners have to do to lay claim to the water resource is to put the water to use. They then essentially have legal title to that resource and can divert the water to their own property, or sell it to anyone, even outside the water basin or the state.

Riparian rights, on the other hand, prevail in the eastern United States. In riparian rights regimes, landowners have the right to use water that runs through or lies adjacent to their property.

These two legal concepts—prior appropriation and riparian rights—combine to ensure that water law doctrine will evolve over time, and the law in Georgia is no exception. For example, interbasin water transfers are familiar concepts in the water-scarce western United States, but they are foreign in many respects to the wetter east-

ern United States. Yet the three states with an interest in the water of Georgia’s two water basins are proposing interbasin transfers as a primary method of settling their water disputes. This places Georgia, Florida, and Alabama in the same league as the western states in using the doctrine of prior appropriation in a region that usually respects riparian rights.

Sharing the Wealth

The future growth of metro Atlanta is a major factor in the dispute over water allocation in the region. Downstream users also want their share of these two river basins, and much of that area is either agricultural land or is rapidly urbanizing. South Georgia, for example, is mostly agricultural, and relies in part on irrigation to sustain its farming economy. The cities of Birmingham and Montgomery, Alabama, which continue to grow, also rely on water from these two water basins. Somehow, Atlanta and Georgia must share their bountiful water resources with Alabama and Florida.

Georgia can control the water resources within the state for several reasons. One, the headwaters of both river basins originate in north Georgia and the north Georgia mountains. Most water diversions were created either to ensure an ample supply of water or to control flooding. In essence, Georgia is hoarding the water from the downstream states for its own purposes. How to balance these and other competing uses for agriculture, the environment, and urbanization becomes a critical question.

Some would even argue that any agreement the three states create will limit growth within Georgia.

Opponents of the tri-state water plan, for example, claim that Alabama and Florida indeed want the water, but they further charge that environmental groups also want to limit growth—and economic development—by imposing land-use planning in metropolitan Atlanta and the rest of Georgia as well. Whether or not these claims are true, the three states need to minimize conflict in managing their water resources and providing for the future needs of the three states’ populations.

Rome: Ground Zero

Rome, Georgia, is at the center of the controversy between the state and its western neighbor, Alabama. Rome lies in the northwest portion of the state at the confluence of the Etowah and Oostanaula Rivers, which form the Coosa River. The Coosa flows 320 miles diagonally across the state of Georgia through Alabama and empties into Mobile Bay.

The Coosa has the largest diversity of freshwater snails in the world and is valued as habitat for a variety of endangered species. In addition, like most rivers, the Coosa was a major component of early transportation and a cog in the wheel of economic development in northwest Georgia and Rome in particular. Rome, however, not only received the benefits, it also absorbed the costs associated with the confluence.

Early in Rome’s history, paddle boats plied the river, loading cotton at Rome and delivering it to port in Greensport, Alabama. Return trips brought passengers and goods to the town. During times of floods, though, Rome found itself under water, as the Coosa would overflow its banks and flood

downtown. To correct the problem, at first downtown streets were raised to the second floor of most stores. In the 1930s, the U.S. Army Corps of Engineers constructed levees at downtown Rome on both sides of the Oostanaula. The Etowah was controlled by a dam that created Lake Allatoona, north of Atlanta. Conceived in the late 1940s as an answer to Rome's flooding problem, Lake Allatoona also serves as one of many reservoirs that supply drinking water to a growing metro Atlanta region.

Also competing for the use of the Coosa's water are major industries located along the river—including Georgia Power's Plant Hammond, a coal-fired facility, and Inland Container's paperboard facility—which are large consumers of water. Diversions for these industries can reduce the amount of water further downstream in Alabama.

Atlanta currently draws 70 percent of its drinking water—about 250 million gallons a day—from the Chattahoochee River, and it releases nearly the same amount of treated wastewater in a day. As Atlanta learned in last summer's drought, in-stream flows from the Chattahoochee are insufficient to provide water in times of drought, much less to handle expected growth. In the late 1980s, therefore, Georgia contemplated constructing a new reservoir, West Georgia Regional Reservoir along the Talapoosa River, a tributary of the Coosa. The West Georgia Reservoir was to serve as another source of water for burgeoning Atlanta's metropolitan region. Alabama filed suit to stop the construction of the dam, out of concern for reduced stream flow for their state.

ACTing Up

Federal legislation is required to create and administer interstate river basin compacts, and only a handful or so of interbasin river compacts exist. Therefore, the three states are forging new ground in attempting to come to an agreement over fair allocation of shared water supplies. To manage the dispute between Georgia and Alabama, Congress authorized the creation of the ACT River Basin Compact in 1997. The governor of each state was designated a voting member, and a federal negotiator was designated as a non-voting member. Georgia, mindful of Atlanta's growth, wanted to ensure water needs are addressed out to 2050. Three years and \$20 million later, no agreement is near.

Further complicating negotiations over water allocation is the lack of a drought management plan for Georgia. During the ongoing negotiations, Alabama has asked that Georgia sign a basin-wide drought-management plan before the allocation dispute is settled. This, however, is a Catch-22 for Georgia, which insists on signing such a plan only after the states arrive at agreement on flow levels and allocation. From Georgia's perspective, this makes a great deal of sense. Any drought management plan must depend on flow and in-stream requirements for downstream users. If Georgia agrees to guarantee a certain streamflow, the state could be at a serious disadvantage within two years after the allocation decision is made.¹

Economic Angle

Another serious obstacle to forging a tri-state agreement is the lack of sound economic projections of the costs and benefits of various

alternatives. Consider the estimated recreation dollars brought in by Lake Weiss, a hydroelectric impoundment that straddles the Alabama and Georgia state line about 15 miles west of Rome. Studies show that Lake Weiss contributes \$201 million in recreational income from out-of-state fishers and boaters to the regional economy. An additional \$1.25 million is generated from local use.² Since the lake is fed by the Etowah River, releases from Lake Allatoona affect the quality and quantity of water in Lake Weiss. Georgia state officials have proposed diverting 150 million gallons per day from Lake Allatoona by 2050 to meet metro Atlanta's needs.

Reliable projections for water use are also necessary to design and implement a sound drought plan. The state of Georgia suffered \$739 million in agricultural losses in 2000 alone. Furthermore, crop production is down 39 percent as a result of the drought.³

Drought conditions were so bad that the Georgia General Assembly rushed through legislation to pay farmers in the Flint River basin not to irrigate crops. This emergency funding was not planned in the state's budget, and legislators don't really know how this will be paid for. To generate research and discussion on the water issue, the General Assembly created the Flint River Regional Water Planning and Policy Research Center at Albany State University.

Georgia and Alabama have reached a tentative agreement on water management. Atlanta can draw water from both Lakes Allatoona and Carters, both within the ACT basin; and when the city is finished with the water, it can return the water to the Chattahoochee River located within the ACF

basin. Rome, though, can be adversely harmed since all water from the lakes comes from upstream rivers. It's not clear why Alabama has agreed to the interbasin transfer since it's obvious Alabama and Lake Weiss will be impacted from reduced flows.

Paying the Price

Water resource managers in the tri-state region have failed for a number of reasons in their efforts to come to an agreement. They have not developed a watershed management plan, and they have not been able to agree on how to enforce a plan. If the three states involved in this dispute are to settle their differences, they will have to think outside the box.

The states should therefore consider alternatives to the traditional ways of approaching interstate watershed issues based on market forces. These include:

- Establishing a water permit trading program. Georgia Power and its sister company Alabama Power both draw water from the Coosa River basin. A permit scheme would allow both companies to trade surplus water and could benefit the river and downstream users. Georgia Power could sell the balance of its unused water withdrawal to Alabama Power. In turn, Alabama Power can benefit from increased water withdrawal from this credit. Electrical generation facilities already have precise accounting of the water used, so enforcing and trading water can be done to the last drop.
- Creating a water marketing program that facilitates full-cost pricing

for drinking water and sewage treatment within municipal regions. The customer in established service areas would pay the actual price of sewerage and water service rather than having the city or county subsidize water utility companies with tax-generated funds.

- Implementing full-cost pricing for new sewer and water lines, especially in rapidly growing regions like Atlanta. Full-cost pricing would allow utilities to recoup expenses directly for water infrastructure rather than hiding the real costs through bond issues and local sales and property taxes. Under this model, all new development must pay the actual cost for running water lines to the new site, not the subsidized or average cost pricing that most municipalities require.

- Privatizing existing water systems. This would also generate more-efficient management and develop new conservation technology.

When people pay for water they use, they decide when and how much they consume. This would encourage conserving water at every turn. Now homeowners turn on the tap and let it flow without much thought as to how much water is actually being consumed, except in times of drought, when government enforces water conservation and fines businesses and individual consumers for wasteful practices such as watering lawns. Full pricing would change that, without draconian political measures that coerce landowners to do what the city says.

Political decisions are not an answer to providing sufficient water supplies for residents of the Southeast. A more market-based approach to the equitable allocation of water can solve some of these problems. The lack of clear ownership and the lack of clear property rights within water resources translates to greater water use and wasteful water use.

The powers-that-be in these three states need to pursue sensible options without penalizing downstream users. In addition, a market-based strategy, in which the water that people use is accurately reflected by price, can go a long way toward minimizing water allocation problems. The future of all three states and their rapidly urbanizing areas lies in the hands of a very small group of people. The options they choose will set the path for the future.■

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NOTES

1. Georgia Farm Bureau, ACT-Tri-State River Basin <<http://www.gfb.org/legis/actwater.htm>>.
2. Jason Landers, "Plan Would Cost Jobs, Start Civil War," *Rome News-Tribune* (November 14, 1999).
3. Oliver Yates Libaw, "Water Wars: Drought Ridden Southeast Battles over Use of Rivers" <<http://abcnews.go.com>>, August 14, 2000.