



Saving Water in

# Georgia

From the expanding Atlanta metropolitan region suburbs to the world-class golf courses on the Atlantic Coast, Georgia's economy depends upon a consistent supply of fresh water. Though Georgia has a humid climate and a statewide annual rainfall of 51 inches, periodic water shortages have become a fact of life for the state's residents. Such shortages are triggered not only by occasional droughts, but also by uncertain aquifer supplies and a dwindling number of new surface water sources available to satisfy the state's growing population.

## POPULATION PRESSURE

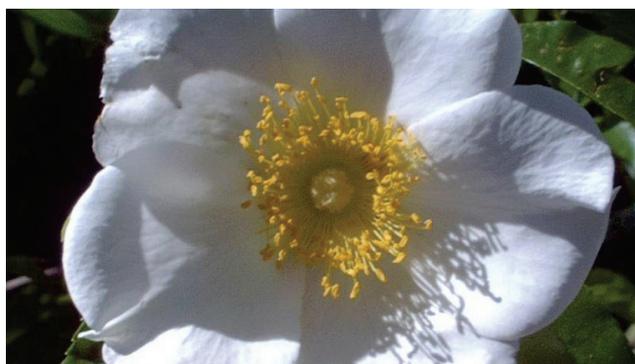
While Georgia's population grew modestly during most of the 20th century, it has recently boomed. Georgia was the seventh fastest-growing state in the nation from 2000 to 2010, growing by more than 18 percent. If current trends continue, Georgia will reach 14.4 million residents by 2030.

About half of the state's residents live in the rapidly growing Atlanta area. The city has a small surface water supply relative to its size. As a result of this supply and demand imbalance, Atlanta is disproportionately affected by water shortages—a condition likely to worsen as the city continues to grow.

## WATER SUPPLY

Like other southeastern states, Georgia relies heavily on ground water to meet its population's needs. The state's southern half lies above the 100,000-square-mile Floridian aquifer—one of the world's most productive groundwater resources and a principal water supply for Georgia and other southeastern states.

Even though Georgia's high average rainfall is usually enough to recharge its aquifers, the combination of recent droughts and increased demand have strained the state's groundwater resources. For example, unsustainable pumping rates have significantly



lowered water pressure in the aquifer underneath the City of Savannah and raised concerns about saltwater intrusion into fresh drinking water. Surface water supply is largely limited by rainfall levels and Georgians' ability to efficiently capture and manage this important resource.

## SOLUTIONS FOR THE FUTURE

Georgia has implemented a number of successful water efficiency projects to reduce demand on water sources, from the top levels of government to its neighborhoods.

The Georgia Water Stewardship Act of 2010 requires builders to install water-efficient fixtures in all new residential and commercial construction statewide. It also requires individual water metering in new multi-

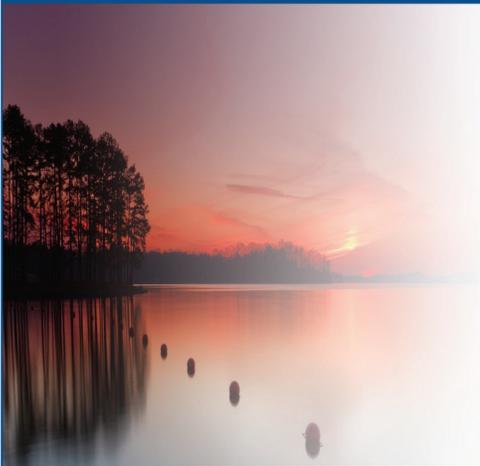
unit buildings so that residents of each unit will know how much water they use and have a financial incentive to conserve.

The Cobb County Water System in suburban Atlanta is a multi-year U.S. Environmental Protection Agency WaterSense® Promotional Partner of the Year award winner, thanks to its promotion of WaterSense labeled products, support of the WaterSense labeled new homes program, and ongoing commitment to water efficiency. After Cobb County Water System started a water efficiency program in 2005, the county saw its per capita water use drop from 126 gallons per person per day to 113 gallons per person per day in 2010. What's more, a 2010 survey conducted by Cobb County Water System found that more than 80 percent

of respondents were familiar with WaterSense, compared to just 10 percent a few years earlier.

Cobb County isn't the only Georgia community committed to water efficiency. Atlanta's Brown Village saw water consumption drop by more than 6.1 million gallons per year after distributing water-efficient toilets, showerheads, and tips to 340 residents. In Chatham County, residents saved more than one million gallons of water in one year after replacing 600 water-wasting toilets with more efficient models. Continued efforts such as these will help Georgians use water more efficiently and ensure sufficient supply for generations to come. For more information on WaterSense labeled products and new homes, or other water-saving tips, visit [www.epa.gov/watersense](http://www.epa.gov/watersense).

### Lake Lanier, Georgia



In 2007, Georgia marked the 50th anniversary of the construction of Lake Lanier, a reservoir on the Chattahoochee River situated northeast of Atlanta. Originally constructed for power production, flood control, and downstream navigation, the lake has become the primary source of water for Atlanta, which presents a significant problem for the future security of the city's water supply.

Drought conditions from 2007 to 2009 dropped lake levels to their lowest since its construction. Given that a hot day can evaporate about 200 million gallons of water from the lake—paired with the constant demand from Atlanta—Lake Lanier faced a real risk of being drained completely.