

2024's Worst Offenses Against GEORGIA'S WATER



GEORGIA'S RIVERS

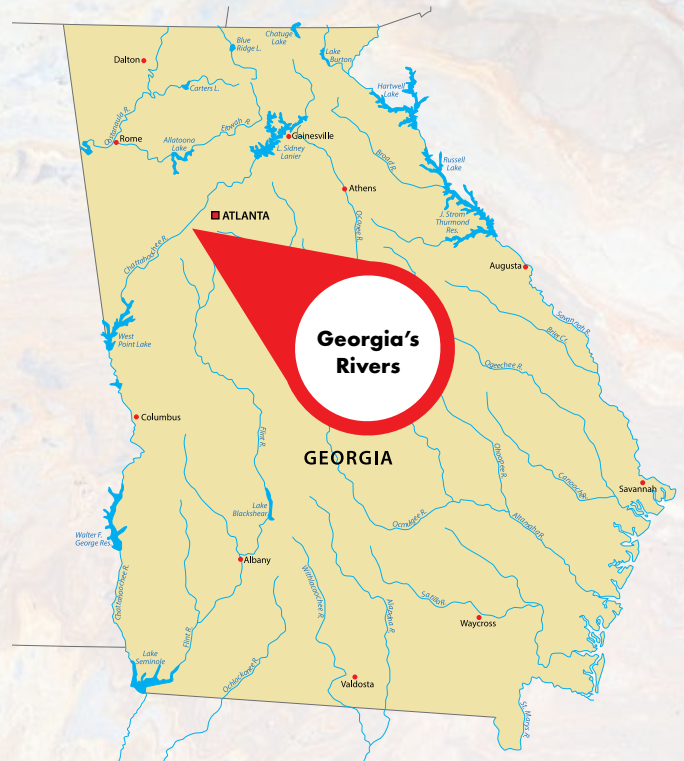
Data Centers Sap Energy Grid, Stress Water Supplies

INTRODUCTION

In 2018, in the never-ending quest to make Georgia the “top state to do business,” the General Assembly passed a bill providing tax breaks for data centers willing to locate in Georgia. At the time, the incentive was seen as a way to court this growing industry. Data centers are large, climate-controlled facilities necessary for managing, processing, and storing digital data. They make it possible for us to send and receive e-mails, share photos electronically and store our data in the “cloud.” They also use significant amounts of electricity and water. Electricity powers data center computers; water feeds the center’s cooling systems. The largest centers can demand up to a million gallons of water a day and sap more than 200 megawatts of electricity from the grid—enough power to serve more than 80,000 homes. And since the tax break was enacted, data centers have proliferated in Georgia. This year, Georgia Power Company told the Public Service Commission that projected load growth had jumped to levels 17 times greater than originally forecast and that 80 percent of that increase was due to data centers. During this legislative session, the General Assembly passed a measure that would have suspended the data center credit and formed a commission to review the incentive and its consequences, but Gov. Brian Kemp vetoed the bill. With the tax credit in place through 2031, it’s likely more are on the way. By 2030 the number of centers in the U.S. is projected to double. In the face of a climate crisis and water scarcity, how they are powered and cooled here in Georgia will have global implications.

THE WATER BODY

A little understood fact about Georgia’s rivers: they mean power. Water is essential to energy production at fossil-fuel and nuclear power-generating facilities. Indeed, some 17 percent of Georgia’s water demands are dedicated to energy production, with virtually all of that water being pumped from the state’s rivers. Factoring in electricity generated at the state’s hydro-power dams, about 94 percent of the state’s power depends on Georgia’s rivers. Of course, these rivers are also essential for drinking water, agricultural production and industry. Georgians use some 1.3 billion gallons of water daily in homes and businesses, some 1.4 billion gallons a day for



In 2023, the Atlanta market ranked sixth nationally in terms of data center inventory. The proliferation of these storage centers for our digital data following passage of a 2018 tax break has stressed the state’s water and energy supplies. Georgia Power Company has reported that 80 percent of increases in projected power demand growth are attributed to data centers. The company plans to fill the need in part with energy from coal-fired power plants similar to Plant Bowen pictured here.

agricultural purposes and 721 million gallons is employed daily for manufacturing and industrial purposes. Georgia's economy dries up without its rivers. Managing demands placed on these water sources is critical for the long-term sustainability of both our rivers and our society.

THE DIRT

"Unintended consequences" These are words heard at the Georgia General Assembly as often as "taxes" and "budgets." Legislators pass laws with good intentions, but once put into practice, unforeseen complications arise.

Such is the case with the state's tax break for data centers which included breaks for risky cryptocurrency mining data centers. The tax breaks have made Georgia a data center destination, with the Atlanta market ranking sixth nationally in 2023 in terms of data center inventory while Georgia ranks second nationally in the number of cryptocurrency centers in operation.

The unexpected suck on the state's power grid has frustrated the state's transition to a cleaner renewable energy portfolio.

After emergency approval from the Public Service Commission, Georgia Power, which had previously announced plans to retire its coal-powered plants, said the new data center demands will have to be met by energy produced at several coal and gas-powered plants.

Meanwhile, data centers stress local water supplies. Typically, these centers demand between 500,000 and 200 million gallons of water annually. In Douglas County, a Google data center diverts about 30 percent of the effluent from Douglasville-



Georgia's rivers like the Chattahoochee River, shown here adjacent to Plant Wansley in Carroll County, are critical to the state's power supply. Factoring in electricity generated at the state's hydro-power dams, about 94 percent of the state's power depends on Georgia's rivers.



Two new nuclear reactors at Plant Vogtle on the Savannah River which came into operation during the last year were expected to meet the state's immediate power demands, but the state's new data centers have forced regulators to approve additional power production to be met with coal and fossil fuel plants.

Douglas County Water and

Sewer Authority's wastewater treatment facility for reuse as cooling water. The innovative water reuse program helps limit demand on potable water, but still consumes about 305 million gallons annually—water that would otherwise be discharged to the Chattahoochee River and an amount that is equal to about seven percent of the Authority's daily drinking water production.

With Gov. Kemp's veto, we can expect more big box data centers to arrive in Georgia. Nationally, by 2030, more than \$156 billion in new data center construction is expected, and the growth will only complicate water and energy planning at local levels.

WHAT MUST BE DONE

Georgia must pause tax incentives for data centers and initiate a state-wide analysis of data center infrastructure needs. The state should require data centers to disclose energy and water use, meet minimum standards for energy and water efficiency, invest in renewable energy and storage to meet power needs, and equitably share the cost of energy infrastructure with already existing power customers.

FOR MORE INFORMATION

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