

How much water data center campuses demand and consume collectively in a region matters. And how and where the wastewater goes matters. In this location, the Project Arrowhead data center campus's withdrawals from the Floridan Aquifer could have negative impacts on adjacent agricultural irrigation operations. For example, an 80-acre irrigated agricultural field has a consumptive use of an average of 26 million gallons of water per year, or approximately 71,000 gallons of water per day (the water is only used during the growing season).

While the location of the proposed discharge is not clear, the discharge would likely account for a significant portion of any tributary or the Alapaha River's flow under normal conditions and an overwhelming majority of stream flow under low-flow conditions. We would expect peak discharges from the data center campus during late summer months when water and air temperatures are high, instream flows are typically low, and the local environment is already stressed. Without additional details, the wastewater discharge into any adjacent wetlands and/or the Alapaha River may not be appropriate for a facility of this size.

Not unlike our current drought conditions, the metropolitan Atlanta region and Georgia's agricultural sector's water supplies have historically been threatened by drought (e.g., the 2007 drought of record, the 2011-12 drought, and more recent "flash droughts").

Data centers utilize water in a variety of cooling technologies, mixing air conditioned and outdoor ("free") air, and managing humidity levels. Some cooling systems are more water intensive, like evaporative cooling. Others—like fully closed-loop air-cooled chiller systems—are less water intensive. Liquid or immersion cooling are the least water intensive. However, there is a general tradeoff: the less water intensive a cooling system, the higher energy intensive the data center. The Atlanta Regional Commission and many local governments currently advocate for or require "waterless" or closed-loop systems to minimize the impact of data center development on water resources.⁹

We do have some information regarding data centers' actual water demand and consumption. Google's *2025 Environmental Report* declares that their Douglas County facility demands as much as 444.1 million gallons per year, or about 1.2 million gallons per day, for cooling and general operations. This facility—and currently the only of its kind in Georgia—sources nearly all its evaporative cooling system water from reclaimed wastewater. The facility's evaporative cooling process results in a consumptive loss of 366.9 million gallons per year (or 1,005,205 gallons per day) from the Chattahoochee River basin.¹⁰

A recently proposed facility in Coweta County illustrates how water demands can evolve in the planning process. When initially proposed, the "Project Sail" data center campus would have consumed a significant volume of water. At peak operation and full buildout in 2036, the data center campus initially anticipated a demand of 9 million gallons of water per day, or about one-third of the amount of Chattahoochee River water that Coweta County Water & Sewer Authority is authorized to use per day (27 million gallons per day). Of that, the proposed facility anticipated an initial consumptive use of 6 million gallons per day at full buildout—this

⁹ Atlanta Regional Commission, "Data Center Trends in Metro Atlanta," (November 13, 2024). slide 19, <https://cdn.atlantaregional.org/wp-content/uploads/arc-board-datacenters-v7.pdf>

¹⁰ Google, *2025 Environmental Report* (June 2025), <https://sustainability.google/reports/google-2025-environmental-report/>, see page 110.