

into tributaries of the Flint River. The developers of a campus that will one day cover 7 million square feet appeared to be in violation of both Georgia and federal law, yet enforcement actions by the City of Fayetteville and the Georgia Environmental Protection Division have resulted in only limited improvements in water quality with the site reverting to significant polluted discharge during some rain events.

Because land clearing and additional impervious surface as contemplated at any data center campus—including Project Arrowhead—will concentrate the timing and volume of stormwater, robust stormwater management is necessary to mitigate sedimentation, temperature and other pollutants of concern, and their impacts on the Alapaha River.

5. Recommendations:

Based on our collective experience and involvement with data center project proposals, and given the uncertainty of how the design and operation of Project Arrowhead will advance and evolve, the GWC makes the following recommendations:

1. 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. 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 temperatures are high, instream flows are typically low, and the local environment is already stressed. Without additional details, a wastewater discharge into any adjacent wetlands and/or the Alapaha River may not be appropriate for a facility of this size.
2. The Georgia Environmental Protection Division (EPD) has the authority to include specific conditions in water withdrawal permits. In this case, EPD should include specific drought conditions on withdrawal amounts based on adjacent groundwater and surface water levels. Additionally, EPD should require a drought contingency plan.
2. The Georgia EPD—when evaluating the water withdrawal permit—must conduct an aquifer drawdown study to assess impacts on surrounding users (i.e. adjacent agricultural withdrawals). EPD has conducted similar studies and evaluations, most recently in conjuncture with groundwater withdrawal permits adjacent to the Bryan County Hyundai Motor Group Metaplant America (HMGMA).
3. As noted above, dozens of Georgia municipalities, county commissions and regional planning commissions have developed ordinances and codes to guide the development of data centers and cryptocurrency operations. Among the recommendations and requirements: waterless, closed-loop data center cooling systems use significantly less water than evaporative cooling systems. All local governments should consider requiring closed-loop cooling and clearly defining the process. We have experienced instances where “closed loop” cooling terminology has been proposed AND the water demands remain significantly higher than other closed loop systems that we are aware of. If a local government elects to require closed loop cooling, then we recommend the following definition: