HB270 - Data Center Impact Analysis & Report
Hearing Date: Economic Matters Committee, Thursday, January 23, 2025, at 1:00pm

Position: Favorable

Dear Chair Wilson, Vice-Chair Crosby and members of the Economic Matters Committee:

Waterkeepers Chesapeake and the below signed organizations respectfully request a FAVORABLE report on HB270 which requires an analysis of the likely environmental, energy, and economic impacts of data center development in the State, and generally relating to data centers.

The role of data centers in storing, managing, and distributing data has remained largely obscured from public view. Maintaining this insatiable information chamber uses vast amounts of energy and water, produces excess heat and noise, and releases extra carbon into the atmosphere. The cloud may be invisible, its impact on the environment and our communities is not. The rise of generative AI is driving the growth of data centers and increased demand for energy and water.

Data centers need to be kept cool to house the thousands of computers that hold all our data. Typically, water is the preferred method to cool these massive facilities. Total U.S. data center water usage is 1.7 billion liters per day, compared to the overall U.S. daily water consumption of 1.218 trillion liters per day. Much of that water use comes from electricity use, but about a quarter from using water for direct cooling.

Virginia, particularly Northern Virginia, hosts the largest data center market in the world with around 300 facilities and counting. The Financial Times reports that Virginia's data centers consumed at least 1.85 billion gallons of water in 2023, compared to 1.13 billion gallons in 2019.

On average, data centers' traditional cooling methods use 300,000 gallons of water each day. Traditional methods involve using conventional air conditioning equipment, large fan systems, and smaller fans inside the equipment to pull in cooler air and reject warm air. In addition to their high water usage and the chemical pollution caused by air conditioning coils, these methods are the least energy-efficient and increase operational costs, highlighting the need for more sustainable and efficient alternatives.

Although it is known that data centers use a lot of water, there are many gaps in the data and information currently available. This is partially because data center water usage is not as well studied as energy usage. Data centers are not always required to document their direct water consumption; less than one third of data centers measure their water consumption. And among the ones that do, it is suggested that water consumption in data centers is higher than what is reported.

Big data is a multi-billion dollar industry, yet these facilities are not being made to account for their impacts on our watersheds, nor are the laws sufficient to require them to reduce the impact. There are also numerous issues with local permitting processes granting these facilities the right to use our waters and hampering communities' ability to respond to proposed new developments. There is a great need for further studies to quantify the impact of these facilities, before they are constructed, as well as monitoring the ongoing impacts to our waters.

Waterkeepers Chesapeake and the below signed organizations urge state lawmakers to not allow this global industry consisting of the largest companies in the world to devastate our local rivers and aquifers. HB270 will give Maryland the information needed to craft regulations and oversight that will protect our water, air, natural resources and communities.

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