

**MOTION: FREED**

**March 27, 2025  
Regular Meeting  
Res. No. 25-009**

**SECOND: BEETON**

**RE: RECOMMENDATIONS ON WATER AND ENERGY USE BY DATA CENTERS**

**ACTION: APPROVED**

**WHEREAS**, the Community Energy and Sustainability Plan (CESMP) was adopted by the Board of County Supervisors on October 24, 2023; and

**WHEREAS**, high priority climate and resiliency actions B3 and B4 of the adopted CESMP encourage and promote energy efficiency in buildings; and

**WHEREAS**, the PW Digital Gateway special study area of the Comprehensive Plan was adopted by the Board on November 1, 2022; and

**WHEREAS**, policy DGWS 1.2 of this study area is to “encourage efficient water usage for data center development within the Study Area, such as utilized “closed loop water” or “no water” cooling systems... encourage development to further minimize water consumption through the use of recycling water”; and

**WHEREAS**, according to staff, this policy was based in part upon comments from Fairfax Water, who had concerns about the impact of cooling discharge from water-cooled data centers and other industrial discharges have on an increasing potential source of salt, typically sodium, into the Upper Occoquan Service Authority (UOSA) wastewater treatment plant and Occoquan Reservoir; and

**WHEREAS**, Fairfax water requested that the County encourage air-cooling of data centers or the adoption of other site specific measures to reduce sodium and bromide concentrations in industrial wastewater before it enters the public sanitary sewer system; and

**WHEREAS**, the use of “no water cooling systems” specified for the Digital Gateway study area are not the most energy-efficient cooling systems; and

**WHEREAS**, there is an energy and water use trade-off between evaporative and closed loop cooling systems, i.e., evaporative systems use more water and less energy, and closed loop systems use more energy but less water; and

**WHEREAS**, there is now a possible conflict between the adopted priorities of the CESMP and the policies of the PW Digital Gateway special study area of the Comprehensive Plan, and this possible conflict should not be replicated in the future; and

**WHEREAS**, protecting groundwater and human health is key to resilience and equity, which are key factors in the Community Energy and Sustainability Master Plan (CESMP); and

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**WHEREAS**, data centers are among the highest sources of water demand in Prince William County; and

**WHEREAS**, large-scale water withdrawals from the same aquifers used by private well owners could put those private water supplies at risk, as well as wetlands and surface waters that are hydraulically linked to the aquifers; and

**WHEREAS**, according to Prince William Water's water demand projections, there is sufficient capacity in the public water supply to accommodate growth in accordance with the adopted Comprehensive Plan and Land Use Policies as well as MWCOG projections, including from data centers; and

**WHEREAS**, the Data Center Opportunity Zone Overlay District is virtually all within or adjacent to the service territory of Prince William Water, and most foreseeable data center development in the Overlay District could be supplied by Prince William Water rather than private wells;

**NOW, THEREFORE, BE IT RESOLVED**, that the Sustainability Commission does hereby request the Board obtain an analysis of the trade-offs regarding water use, electricity use, impacts to the Occoquan Reservoir, and greenhouse gas emissions, to ensure that these impacts are balanced; and

**NOW THEREFORE BE IT FURTHER RESOLVED** that the Sustainability Commission recommends that the use of groundwater for data center applications should not be permitted.

**Votes:**

**Ayes:** By Acclimation

**Nays:** None

**Absent from Vote:** Commissioners Dr. Joseph Boutte, Stephanie Johnson

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ATTEST: \_\_\_\_\_  
*Salita Gray*  
**Clerk of the Sustainability Commission**