

**MOTION:**  
**SECOND:**

**March 27, 2025**  
**Regular Meeting**  
**Res. No. 25-00X**

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

**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**, this policy was based 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 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 “closed loop water and no water cooling systems” 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 an apparent conflict between the adopted priorities of the CESMP and the policies of the PW Digital Gateway special study area of the Comprehensive Plan; and

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**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

**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 projections of water use, there is ample capacity in the public water supply to accommodate foreseeable demand growth, 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 so most foreseeable data center development 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 to review and resolve the apparent conflict between water efficiency and energy efficiency, and to request that the Planning Office, in coordination with Fairfax Water and Prince William Water, analyze this and any other policies in the Comprehensive Plan to determine the trade-offs regarding water use, electricity use, and impacts to the Occoquan Reservoir to ensure that neither water resources, water quality, and energy efficiency is unduly affected; 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:

Nays:

Absent from Vote:

Absent from Meeting:

ATTEST: Clerk of the Sustainability Commission