The Fairfax County Tree Commission
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035
703.324.1770

October 6, 2023

TO: Carmen Bishop, Deputy Zoning Administrator
Katherine Hermann, Branch Chief, Environmental Policy and Plan Development Branch
Fairfax County Department of Planning and Development

Sent by email to: Carmen.Bishop@fairfaxcounty.gov and
Katherine.Hermann@fairfaxcounty.gov

RE: Data Centers in Fairfax County

Dear Ms. Hermann and Ms. Bishop:

Thank you for reaching out to me to see if the Tree Commission would wish to comment on the recent Board Matter on environmental concerns around data centers in Fairfax County. Commission members took up the topic at our meeting on October 5, 2023. We hope these remarks will contribute to the information you are gathering for your upcoming report to the Board of Supervisors.

The data center industry continues to grow rapidly in Virginia, with data centers increasingly seeking to locate in Fairfax County.[1] Because data centers come with unwanted and harmful environmental impacts that affect trees, the Tree Commission recommends that the Board of Supervisors (BOS) expeditiously take action to evaluate and address the significant environmental consequences data centers introduce. Specifically, these impacts can affect forest cover, tree canopy, and the county's ability to mitigate climate change through the carbon that trees sequester.

---

[1] Fairfax County currently has 11 data centers with at least five in the planning stages (see https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/documents/pdf). The county is likely to continue to attract data centers due to economies of scale and the region's concentration of internet capabilities.

Environmental Concerns Related to Data Centers[2]

Data centers have been getting larger and larger, and are situated on increasingly expansive campuses, resulting in forest fragmentation and loss of forest cover and natural areas, and that in turn threatens wildlife habitat and water quality. The building of data centers typically results in significant increases in impervious surfaces and stormwater runoff, increased salt in winter, and adverse impacts on streams and wetlands both during and after construction.[3] All of these effects typically can be mitigated by retaining healthy trees and tree canopy.

Another concern is that data centers require significant amounts of energy, and their needs are already stressing the power grid and threatening Virginia's ability to meet climate change goals.[4] Of particular concern to the Tree Commission is that data centers often require devoted substations and transmission lines to receive bulk electricity, and creating those can destroy forest cover (as well as disrupt local communities and neighborhoods).

BOS Actions to Date

On May 9, 2023, the BOS asked staff to research the environmental issues raised by data centers and to identify ways to mitigate such effects, including through the Comprehensive Plan and the Zoning Ordinance.[5] Staff has been asked to complete its report by the end of 2023. The Tree Commission strongly supports this effort as well as the development of clear guidelines for data center siting, permitting, and operation in order to protect trees. Staff has reached out to Tree Commission Chair, Cindy Speas, to discuss the May Board matter, which has led to this letter.

Tree Commission Recommendations

The Tree Commission recommends the following six items:

- **Mitigate Environmental Impacts.** The BOS should implement a plan to mitigate the cumulative environmental impacts, including tree canopy loss, of data center developments affecting Fairfax County;

- **Eliminate By-right Zoning for Data Centers**. The BOS should eliminate by-right zoning for data centers and require all new data centers to be subject to an approval and permitting

---

[2] *See also* comment letters submitted to the BOS by the Fairfax County Environmental Quality Advisory Committee at www.fairfaxcounty.gov/environment-energy-coordination/sites/environment-energy-coordination/files/assets/eqac%202023%20data%20centers%206%2015%2023%20final%20ada_a-1a.pdf and letter from the Sierra Club Great Falls Group to the BOS and Planning Commission: "The Need for Strong Guidelines for Data Centers,' July 26, 2023.

[3] *See, e.g.*, https://www.fredericknewspost.com/news/environment/pollution/quantum-loophole-pauses-construction-following-numerous-environmental-violations/article_c8d747db-0b52-5cf9-9999-1e8a4c311ad5.html.

[4] *See, e.g.,* https://www.virginiamercury.com/2023/05/03/dominion-projects-new-gas-plants-advanced-nuclear-will-be-needed-to-meet-soaring-demand/#:~:text=In%20the%202023%20IRP%2C%20Dominion,two%20coal%2Dfired%20plants%20running

[5] *See* https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/documents/pdf/5-9-2023-board-matter.pdf

process that includes potential tree canopy loss, providing the public with adequate and timely notice of all data center applications, as well as the opportunity to review application materials and comment at Planning Commission and BOS public hearings on the applications;

- **Require a Larger Tree Canopy Requirement for Data Centers**. The BOS should address the adverse consequences of data centers on tree cover by requiring them to maintain a tree canopy exceeding the 10% currently required in industrial zones;

- **Mitigate Adverse Water Quality Impacts of Data Centers.** The BOS should address the adverse water quality and stormwater runoff consequences of data centers by requiring them to expand the site's tree canopy requirements, as well as minimize impervious surfaces, retain stormwater runoff on site with low-impact landscaping methods such as rain gardens, bioretention systems, and conservation landscaping where appropriate;

- **Require Appropriate Boundaries.** The BOS should require reasonable setbacks be maintained between data center sites and parks, natural areas, schools and residences, including through the use of native trees and shrubs;

- **Require Environmental Impact Statements.** The BOS should require that new data center applicants submit an environmental impact statement detailing the potential environmental consequences of the proposed plans (including effects on tree canopies) and how these effects will be mitigated.

The Tree Commission hopes that the development of data centers will be good for the county economically, but not have a negative impact on our trees, natural resources, the environment and the health and well-being of our residents. Thank you for your hard work on bringing these issues to the Board of Supervisors.

 Sincerely,

Please email TreeCommission@fairfaxcounty.gov for official signed version of letter.

Cindy Speas, Chair
Fairfax County Tree Commission

cc: Board of Supervisors
        Office of the Fairfax County Executive
        Fairfax County Planning Commission
        Tracy Strunk, Director Department of Planning and Development
        John Morrill, Acting Director Office of Energy and Environmental Coordination
        Chris Herrington, Director of Department of Public Works and Environmental Services
        Brian Keightley, Director of Urban Forest Management Division