



Prince William County Board of Supervisors  
Planning Commission  
1 County Complex Court  
Woodbridge, VA 22192

February 16, 2022

Dear Chairman Wheeler, Board Members and Planning Commissioners,

We are writing concerning several land use proposals that, if adopted, would amount to the most impactful land use changes made in Prince William County (PWC) in decades. The Great Falls Group of Sierra Club<sup>1</sup> has grave concerns about these changes and their cumulative impacts on reducing greenhouse gas emissions, maintaining and improving water quality and protecting our state and federal public lands.

Each proposal will negatively affect the residents and their environment. But taken together, they constitute an about-face that threatens to transform Prince William County forever. This reversal undermines regional efforts to address the climate crisis, protect natural resources and preserve our public lands. These major “updates” portend to be a major downgrade.

Of concern are the following proposals:

1. **Digital Gateway:**<sup>2</sup> an amendment to Prince William’s comprehensive plan, led by landowners who want to sell their rural land to developers of data centers and other industrial uses for profit. The application would convert 2,139 acres of agricultural land along Pageland Lane adjacent to Manassas National Battlefield Park.<sup>3</sup> The proposed technology/flex zoning would allow land along Pageland Lane to be used for a wide variety of industrial uses, including warehousing, manufacturing and data centers.
2. **Data Center Opportunity Zone Overlay:**<sup>4</sup> a county-led effort to consider expanding data centers into the Rural Area of the county. One site that will most likely be included is 160 acres within the legislative boundary of Prince William Forest Park,<sup>5</sup> the second most pristine forest among national parks in the eastern United States. It is unknown at this point how much acreage and what areas will be targeted.
3. **A County-led Comprehensive Plan Update:**<sup>6</sup> which will dismantle the Rural Area and significantly increase density, sewer expansions and road planning, perhaps including the “Bi-County Parkway,” first

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<sup>1</sup> The Great Falls Group covers Prince William, Fairfax, Loudoun and parts of Fauquier Counties and has over 5,000 members.

<sup>2</sup> <https://egcss.pwcgov.org/SelfService#/plan/3ab68e66-cf4d-4240-84df-15aa8a9f2453>

<sup>3</sup> <https://www.nps.gov/mana/index.htm>

<sup>4</sup> <https://www.pwcva.gov/department/planning-office/data-center-overlay-district-comprehensive-review>

<sup>5</sup> <https://www.nps.gov/prwi/index.htm>

<sup>6</sup> <https://www.pwcva.gov/department/planning-office/comprehensive-plan-update?emci=033b6b0b-193c-ec11-9820-c896653b26c8>

proposed almost two decades ago. In addition, the Board of Supervisors has already approved several out-of-turn plan amendments that are undermining the current comprehensive plan.

**We urge you to:**

- Reject changes to the Comprehensive Plan that contribute to urban sprawl, environmental degradation and increases in carbon emissions. Instead, plan for transit and walkable communities, and encourage increased density near urban centers.
- Protect the two national parks that are threatened by these proposals.
- Slow down this fast-track process to allow the Board’s own study to be completed.
- Complete a thorough study on the impact of water quality, in partnership with those monitoring regional water quality. This should include understanding impacts of increases in impervious surfaces, erosion, flooding, and extreme weather events to streams and water bodies.
- Recognize how smart land use decisions can mitigate the effects of climate change.
- Evaluate the true long-term environmental and financial costs of reversing current Rural Crescent protections, and recommit to honoring its borders and the intent behind its creation.
- And take serious measures to address climate change by implementing policies to get to net-zero emissions in support of a clean energy economy.

## **THE RURAL CRESCENT AND CLIMATE CHANGE**

Just over two decades ago, when Prince William County experienced a period of rapid urban development, your predecessors on the Board crafted a visionary response. Recognizing the unique rural character of the region, they set out to protect that character by establishing an Urban Growth Boundary that provided a long list of benefits to the county and our environment. This boundary of nearly 80,000 acres confined growth to areas with existing infrastructure to support it, while keeping urban sprawl from spreading throughout the remaining rural land.

The Urban Growth Boundary does not preclude new data centers. Prince William County already has about 8,700 acres identified in its Data Center Opportunity Zone Overlay. As the county ordinance states the Data Center Opportunity Zone Overlay District was created to promote development of data centers “within areas of the County where there is existing infrastructure that could adequately support the proposed use. This District continues the County’s efforts to attract and advance high-tech industrial development while limiting negative impacts to communities.”<sup>7</sup> By limiting public infrastructure in the “protected” rural areas, the county curtailed significant increases in tailpipe emissions, commercial development and impervious surface while protecting tree canopy and open space. One can only imagine the impact on local air quality had the 1998 Board not had the fortitude to downzone the area.

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<sup>7</sup>[https://library.municode.com/va/prince\\_william\\_county/codes/code\\_of\\_ordinances?nodeId=CH32ZO\\_ARTVOVDI\\_PT509DACE\\_OPZOOVDI](https://library.municode.com/va/prince_william_county/codes/code_of_ordinances?nodeId=CH32ZO_ARTVOVDI_PT509DACE_OPZOOVDI)

At the same time, in the twenty years since the Rural Crescent was established, the county has not taken measurable action to cut its greenhouse gas emissions. Prince William County is the only major jurisdiction in northern Virginia without a climate action plan. Local land use decisions help drive our inability to meet the internationally agreed threshold of 1.5 degrees above preindustrial levels of global warming. The county needs both aggressive climate action and wise land use planning.

**Absent a climate implementation plan that is working to reduce total emissions, the existing protections in place for the Rural Crescent are the county's *de facto* climate action plan.**

The UN Secretary-General António Guterres has said the Intergovernmental Panel on Climate Change's<sup>8</sup> latest report was nothing less than "a code red for humanity." We are at imminent risk of hitting 1.5 degrees in the near term. The only way to prevent exceeding this threshold is by urgently stepping up our efforts. Ambitious and sustained reductions in emissions of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases could quickly improve air quality, and in 20 to 30 years global temperatures could stabilize as well.<sup>9</sup>

The Biden Administration has responded with a whole of government response that includes a "goal of conserving at least 30 percent of our lands and waters by 2030."<sup>10</sup> The Board should support this holistic approach. We have yet to see the climate emergency has not translated into action.

**We urge the Board to make implementing a climate action plan its top priority.**

While it has acknowledged that PWC "is already experiencing the impacts of a changing climate, including increases in temperature and sea-level rise and increased intensity and frequency of storms,"<sup>11</sup> no serious effort has been undertaken to reduce the county's contribution to regional total emissions. Similarly, the Board has endorsed the Metropolitan Washington Council of Governments' interim climate mitigation goal of 50 percent greenhouse gas emission reductions below 2005 levels by 2030, but **has no plan in place to help achieve that.** Further, it has directed "staff to incorporate into the Comprehensive Plan goals of 100% of Prince William County's electricity to be from renewable sources by 2035, for Prince William County Government operations to achieve 100% renewable electricity by 2030, and for Prince William County Government to be 100% carbon neutral by 2050." **Yet it has no blueprint or implementation plan on the horizon and no plans to address future increases in emissions from the private sector, which would see tremendous emissions gains under each of these proposals.**

Reversing the current comprehensive plan will be costly. In fact, the proposed land use changes will create a **climate double whammy** - both eliminating the climate emissions benefits the downzoned area affords and adding commercial and industrial and development without investing in renewable energy, energy efficiency or sustainable, smart growth planning principles. The result will be net increases in emissions and transmittal of long-term mitigation and infrastructure costs to the public. By permitting more intense uses such as the proposed "Digital Gateway" or increasing the size and scope of the Data Center Opportunity Zone Overlay district to replace farm land, PWC will incur the high costs related to

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<sup>8</sup> <https://www.ipcc.ch/assessment-report/ar6/>

<sup>9</sup> <https://news.un.org/en/story/2021/08/1097362>

<sup>10</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>

<sup>11</sup> <https://eservice.pwcgov.org/documents/bocs/agendas/2020/1117/13-D.pdf>

urban sprawl.<sup>12</sup> These include spending for long-term infrastructure such as transportation, water and sewer, public schools, and electric power, costs that are generally transmitted to the public.

PWC has 8,700 acres (3,000 undeveloped) in its industrial-zoned data center overlay district, more than it needs. Adding rural land to that district is short-sighted and unnecessary. Of particular concern is the fact that Prince William County appears to be moving toward making decisions about land use before its own study is complete and available to the public. **We ask that the Board reject changes to the Comprehensive Plan that nullify the land use planning that is in place.**

- *What total carbon emissions savings stemmed from the Board of Supervisors' wise decision twenty years ago?*
- *How will the Board incorporate its stated renewable electricity goal into its Comprehensive Plan?*
- *Has the county done an economic analysis of the long-term costs to provide anticipated public infrastructure investments?*

## **COSTS TO LOCALITIES and TAXPAYERS: Water Quality, Energy and Transportation**

### **WATER QUALITY**

Keeping the Rural Crescent intact is crucial to the protection of the Occoquan Reservoir Watershed, a key source of drinking water. Prince William County has the largest share of the Watershed a 40% and in 2015, 38% of that was forested lands. Today, the Basin has nearly six times as many people living within its boundaries as was originally recommended, and 43% of its population lives in Prince William County.<sup>13</sup> This makes PWC critical to at least maintaining the Basin's water quality, if not improving it. **The Board of Supervisors should heed the advice of its environmental and archeology staff that recommends the Digital Gateway project be rejected.** According to the Benjamin Eib, assistant chief of the watershed management branch:

Major impacts would include loss of extensive tracts of forest land, dramatic increases in impervious area, impact to numerous intermittent and perennial streams, steep slopes with highly erodible soils, wildlife habitat (including habitat for rare, threatened and endangered species) and potential impacts to wetlands...[T]he development of existing data centers has demonstrated that extensive mass grading and the nearly wholesale clearing and flattening of large parcels is the norm.<sup>14</sup>

Further, the 2021 update on water quality in the Occoquan Watershed released by the Occoquan Water Monitoring Program (OWMP) pointed to several areas of vulnerability. While in "reasonable health," the reservoir continues to be eutrophic and there are other concerns on the horizon. Also troubling is

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<sup>12</sup> <https://www.bloomberg.com/news/articles/2015-03-24/a-new-report-says-sprawl-costs-america-1-trillion-a-year>

<sup>13</sup> Updating the 2015 Land Use for the Occoquan Watershed, December 2021 Northern Virginia Regional Commission: <https://www.novaregion.org/DocumentCenter/View/13287/Occoquan-Watershed-Update-Whitepaper-December-2021-PDF?bidId=>

<sup>14</sup> [https://www.princewilliamtimes.com/news/county-s-environmental-staff-rejects-rural-crescent-data-center-plan-over-major-impacts-to-natural/article\\_6271b0b8-6295-11ec-b0f5-97cbf6e11e3b.html](https://www.princewilliamtimes.com/news/county-s-environmental-staff-rejects-rural-crescent-data-center-plan-over-major-impacts-to-natural/article_6271b0b8-6295-11ec-b0f5-97cbf6e11e3b.html)

the presence of sodium in some of the tributaries and near facilities.<sup>15</sup> Others include per- and poly-fluoroalkyl sulfonates (PFASs), endocrine-disrupting compounds (EDCs), and contaminants of emerging concern (CECs), the deleterious health impacts of which we are just beginning to understand.

OWMP reported that most other constituent concentrations have been controlled by best management practices, and that the establishment of the Resource Conservation area in Fairfax County has had significant positive impact on efforts to maintain water quality.<sup>16</sup> There is no doubt that the downzoned areas in Prince William have afforded the same protections. Proposed land use changes will increase nonpoint source pollution, impervious surface and sedimentation and will make it difficult to maintain reasonable health of the watershed and the reservoir.

- ***Is there enough water to divert for the data center cooling processes?***
- ***How would the county mitigate for increased salinity levels?***
- ***What will protect streams from degradation?***
- ***What is the true long-term cost of water degradation to the taxpayers?***
- ***What will be the impact of huge increases in impervious surface (concrete and asphalt)?***
- ***What will be the impact on Bull Run, Little Bull Run, Catharpin Creek and Occoquan Creek?***

## ENERGY

Data centers raise a long list of questions about energy consumption. To power them, electricity must be converted into heat, which then must be removed from the data center by cooling equipment that also runs on electricity. The percentage of electricity used in U.S. data centers is cooling and power provision systems (43%), servers (43%), storage drives (11%) and network (3%). Some of the world's largest data centers can each require more than 100 megawatts (MW) of power capacity—enough to power around 80,000 U.S. households (U.S. DOE 2020).<sup>17</sup>

Data centers and industrial properties must be sited carefully. In particular, data centers take up vast amounts of land and are intense users of energy. They produce thermal, particulate and noise pollution and employ backup systems powered by diesel fuel. They require an inordinate amount water in electricity generation and cooling and raise questions about water resource capacity and costs.

The more data centers, the more electricity needed, but with few exceptions, we do not know their energy usage or carbon footprint. Many companies have made commitments to resource renewable energy to power their data centers. Too often, those commitments are neither met by the company<sup>18</sup> nor required by the municipality.

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<sup>15</sup> An Analysis of the Occoquan Watershed and Reservoir System, Occoquan Watershed Monitoring Lab, April 15, 2021  
[https://doc-0s-48-apps-viewer.googleusercontent.com/viewer/secure/pdf/jlfr6d9sbv4vnsh983nk57pk25tu8g46/mf4ps2rhmmfhg140bn4bc22dk03gtok6/1643608725000/gmail/15166821347543718522/ACFrOgC0II5dP6aibDbDHE\\_F41oamVcF3BqP8RvSdHiBHqocyOPNZpLErntRQzfx1wpmTK-PhpYyssQRZDWh\\_cPL0d4zvffvplJ-1fqtDVjX6bc0EI6p5yLK1i9XM=?print=true&nonce=joout58r17f4s&user=15166821347543718522&hash=s8tc6dc6kkurs1jpomtk2cb0g8o9fbul](https://doc-0s-48-apps-viewer.googleusercontent.com/viewer/secure/pdf/jlfr6d9sbv4vnsh983nk57pk25tu8g46/mf4ps2rhmmfhg140bn4bc22dk03gtok6/1643608725000/gmail/15166821347543718522/ACFrOgC0II5dP6aibDbDHE_F41oamVcF3BqP8RvSdHiBHqocyOPNZpLErntRQzfx1wpmTK-PhpYyssQRZDWh_cPL0d4zvffvplJ-1fqtDVjX6bc0EI6p5yLK1i9XM=?print=true&nonce=joout58r17f4s&user=15166821347543718522&hash=s8tc6dc6kkurs1jpomtk2cb0g8o9fbul)

<sup>16</sup> An Analysis of the Occoquan Watershed and Reservoir System, Occoquan Watershed Monitoring Lab, April 15, 2021

<sup>17</sup> <https://energyinnovation.org/2020/03/17/how-much-energy-do-data-centers-really-use/>

<sup>18</sup> <https://www.greenpeace.org/usa/news/greenpeace-finds-amazon-breaking-commitment-to-power-cloud-with-100-renewable-energy/>

Change is already in motion, as the Board of Supervisors has begun approving Comprehensive Plan changes outside the overlay district in conflict with ordinance language. For instance, the siting of the Gainesville Crossing data center on I-66 and Pageland Lane has already resulted in clear cutting adjacent to Conway Robinson State Park. The John Marshall Commons Tech Park, another controversial proposal to expand outside of the overlay district last year, was delayed due to general concern over data center development.

And perhaps most troubling is the Independent Hill Small Area Plan located within Prince William Forest Park's Congressionally authorized boundary. This national park safeguards a 14,000-acre forest landscape and more than half of the Quantico Creek watershed. A bookend the Rural Crescent, Prince William Forest Park is a key source of baseline water quality data. It is home to more than 100 species of birds and rare bats. It provides unique recreational and natural resources to the region that contribute \$25 million per year to the local economy.<sup>19</sup> This proposal illustrates exactly why data centers should remain within the current overlay district and sequestered from natural resources.

- ***How much energy is needed to implement these changes to the comprehensive plan?***
- ***Is clean energy included in the comprehensive plan update?***
- ***How is the Board going to utilize renewable energy and energy efficiency?***

## TRANSPORTATION

Critical infrastructure generated by urban sprawl is transportation. PWC has not invested in urban transit that would support this kind of land use about-face. One can predict that the expansion of the Overlay District and the Digital Gateway will lead to investments in road-widening projects, increases in impervious surface and increases in transportation-related greenhouse gas emissions. This business-as-usual cycle of road projects mitigating for the effects of sprawl has to be broken.

In fact, the Digital Gateway proposal and the announced major update to the comprehensive plan could very likely lead to the resurrecting of an outdated proposal to build a "Bi-County Parkway" joining Prince William and Loudoun Counties, possibly including a trucking route to connect Dulles International Airport cargo facilities to Interstate 95. This idea would encourage more ill-sited development and reliance on automobiles. The onslaught to upzone tens of thousands of acres defy smart growth principles to increase density and affordable housing in urban centers, invest in transit, repurpose underutilized properties and prevent urban sprawl.<sup>20</sup>

Consider that such a highway:

- would not reduce commuter congestion on I-66 or Route 50, because most commuters travel east-west and the road would run north-south;
- would not provide better access to Dulles, because it runs to the western side and all the roads enter on the eastern edge of Route 28;

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<sup>19</sup> Remarks By Tanya M. Gossett, National Park Service Superintendent of Prince William Forest Park to the Prince William County Planning Commission Concerning the Independent Hill Small Area Plan/Comprehensive Plan Amendment #CPA2017-00008

<sup>20</sup> <https://www.southernenvironment.org/press-release/new-report-bi-county-parkway-would-increase-congestion-and-damage-manassas/>

- would not enhance economic development at Innovation or elsewhere in Prince William, but instead would encourage commercial developers to locate new jobs in Loudoun County
- is inconsistent with the county's stated long-term goals supporting the Rural Area.<sup>21</sup>

**We strongly urge that the Bi-County Parkway concept not be resurrected and that the focus remain on smart growth and reducing the county's reliance on automobiles.**

## **PARTNERS IN PROTECTING PUBLIC LANDS**

Virginia is a destination for well over 20 million annual visitors who seek educational, historical and recreational activities at properties managed by the National Park Service. These proposals threaten **Manassas National Battlefield Park** and **Prince William Forest National Park**, the largest national protected area in the Washington, D.C. metropolitan region. Nearly 1 million people visit these parks every year for their miles and miles of quiet trails, unblemished forests, unchanged historic landscapes, and restorative properties of nature away from the active pace of life in northern Virginia. These national resources contribute richly to the quality of life and the local economy.

Imagine a data center next to Yellowstone or adjacent to the National Mall. You probably can't. So why is it okay here? In fact, it is easy to imagine the visual impairment to the visitor experience at Manassas National Battlefield Park. The development could occur a stone's throw away from the Brawner Farm land and its trail system. Any big box constructed south and west will sit like a behemoth obstructing the character of the area and denying the visitor's clear view from Stuart's Hill, an interpretive center. Park authorities have expressed numerous concerns about proposed development adjacent to the park.<sup>22</sup>

Further, Conway Robinson State Park and the watershed that supports the Occoquan Reservoir, a key source of drinking water, are at risk as well. Incremental losses in farm land and forests are already putting pressure on the system's ability to maintain ecological balance and water quality.

We ask that you seriously consider the questions and concerns we have raised about the long-term environmental and climate impacts of the proposed land use changes. At a time when the deleterious effects of the climate crisis are at our doorsteps, you have an existential choice to make about the future of Prince William County. We look forward to working with you on these critically important issues.

Sincerely,

Ann Bennett

Land Use, Climate and Energy  
Great Falls Group of Sierra Club  
Virginia Chapter

Susan Bonney

Chair, Great Falls Group of Sierra Club  
Virginia Chapter

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<sup>21</sup> <https://pwconserve.wordpress.com/2016/02/16/the-bi-county-parkway-baaaaack-again/>

<sup>22</sup> December 3 letter from MNBP Superintendent Brandon Bies to Chairman Wheeler.