



MEMORANDUM

DATE: November 12, 2025

TO: Fairfax County Board of Supervisors

FROM: Larry J. Zaragoza, DEnv, Chair *Larry J. Zaragoza*
Environmental Quality Advisory Council

SUBJECT: Plan Forward Review

This memorandum summarizes EQAC's comments on the September Plan Forward (Amendment 2022-CW-2CP) draft. In preparing these comments we have coordinated with the Planning Commission's Policy Committee to exchange ideas. EQAC greatly appreciates this coordination with the Planning Commission and looks forward to continued coordination.

EQAC appreciates that this draft reflects a significant effort and many significant improvements. The draft preserves the widely respected treatment of environmental water topics. The presentation of information on climate related information reflects consideration and incorporation of our comments, which we appreciate. The draft also includes essential principles that will be important for smart growth, which is important for the future of the county. As outlined below, we believe that a more complete, technically accurate, and understandable product would result from additional review. Unless otherwise specified, comments are directed to the Environmental Element of the Plan Forward effort.

General Comments:

1. **TIMELY UPDATES.** The last update to the comprehensive plan was in 1990. Waiting another 35 years would be far too long. The county should establish some triggers to undertake an update to either the entire comprehensive plan or parts of it. The triggers could be time (e.g., 5 years), staff recommendations, or community request.
2. **MODIFY REVIEW PROCESS FOR NEXT PHASE.** To provide meaningful comments, it is important to receive draft materials in a timely manner. The outreach efforts that took place last year invited participation, but for early meetings participants lacked proposals even though we were 2 years into a 3-year process! The issue papers provided in January of this year were helpful, but draft comprehensive plan language would have been more useful. When draft elements were presented in the Spring, the materials were incomplete, and staff noted that some comments had not been incorporated. The first "complete" draft was posted on September 10, 2025. As

Environmental Quality Advisory Council (EQAC)
c/o Office of Environmental and Energy Coordination
12000 Government Center Parkway, Suite 533
Fairfax, Virginia 22035
Phone 703-324-7136 TTY: 711
www.fairfaxcounty.gov/eqac/

communicated in the October Planning Committee hearing, the comment deadline did not provide sufficient time to review this significant and complex document.

3. **IMPROVING ORGANIZATION OF THE DRAFT.** The draft is not organized so that it is easy to find information. For example, information on reducing Greenhouse Gas (GHG) emissions is presented in Objective 1 and Objective 13. Objective 12 presents at least some information that is included in other Objectives. Moreover, the treatment of material is inconsistent as it sometimes provides guidelines and principles, and other times provides detailed information. The current schedule likely will not allow for fixing this issue, but it should be addressed in a future update.
4. **REVIEW AND APPROVAL.** The county has sought to speed up review and approval processes. Streamlining has resulted in shortening the time for public review, which makes it difficult to build support and consensus. At the same time, it seems that the timeframe for internal county reviews is even longer. Time is important to build community support in many cases, and the shortened reviews can undermine support for good proposals and leave county residents and businesses feeling that their views are not important to the review process.

Land Use

We agree with comments offered by Commissioner Cortina that the environment should be included with other criteria for development and redevelopment (e.g., site design, neighborhood context, transportation, public facilities, phasing of development, affordable housing, and heritage resources).

Data Centers (page 30-33)

1. **Land Use and Site Design:** Add a new bullet (recommended as the first bullet) to read: The siting of new data centers in a campus or technology center with other data centers and electrical substations is strongly encouraged. The use of a campus or technology center will allow for data centers to take advantage of the efficient use of data transfer infrastructure and electrical substations. If space is available, the collocation of Battery Energy Storage Systems (BESS) is encouraged. Electrical substations, climate control equipment, and onsite generators should be located on the interior of the campus so that building structures would reduce noise from the mechanical equipment.
2. **Item 4c should be rewritten, not struck.** LEED is avoided by many companies, usually because of expense. Many of the key companies in the data center industry have made commitments for 100% green energy. Those companies should share this fact so that their environmental accomplishments can be acknowledged. Because energy is such a significant cost, data centers have a strong incentive to be energy efficient and are widely recognized as energy efficient despite their high energy use. **Water Demand:** Evaporative cooling is the most cost-effective way to cool data centers, but data centers are avoiding evaporative cooling when water availability is an issue. Given that the industry is moving away from the use of water for evaporative cooling and given that Northern Virginia is subject to droughts, the use of water for evaporative cooling should be strongly discouraged when siting data centers.
3. **Air Quality:** The text should say how best available technology will be determined. Recommended language adjustment: “Best available technology, as determined by

county staff, for reducing noise and pollution (including nitrogen oxides, hydrocarbons, and GHG) for backup or primary power generators will be employed. Existing data centers seeking modifications or updating equipment should replace equipment with best available technology generators.”

4. By way of background, it is helpful to know that Tier 4 generators have the following benefits over Tier 2 generators: elimination of at least 90% of nitrogen oxides and particulate matter, 20 dB less noise, and greater fuel efficiency with lower GHG emissions. Tier 5 generators are required in at least some European applications, but Tier 4 is the US standard for primary power and is often used for emergency backup generators. VA DEQ staff recently noted by personal communication that they plan to issue a proposal that at least recommends that generators be Tier 4 generators, which would help to address the impacts of onsite generators.
5. Noise: Recommended revision: “Site design, building design, and any required mitigation measures are encouraged to reduce noise levels of data center operations, including generators, below minimum code limits, when located near residential areas and other noise-sensitive locales. Backup emergency generators should employ best available technology for reducing noise, especially when located near residential or other noise-sensitive uses. Noise studies should be required before construction with follow-up studies following construction, especially when data centers are located near residential areas or other noise sensitive environments.”

Environment

1. Page 3, 2nd paragraph: In our May 23 comments, we noted that the region has been reclassified for ozone, so we are now in attainment of the ozone standard. The text of paragraph 2 is in error as the region is in compliance with the standard.
2. Page 3, 4th paragraph: Given the high demand for electricity to power data centers (increasingly achieved by using fossil fuels in Virginia), greenhouse gas emissions associated with such energy generation and refrigerants that are potent GHG sources may well be a key driver of future increased GHG emissions.
3. Page 4, 1d: original language: Apply best available technology toward the minimization of emissions from stationary sources of air pollution. Recommend modification to: Apply best available technology toward the minimization of not only toxic contaminants but also GHG (including refrigerants that are potent GHG pollutants) emissions from stationary sources of air pollution.
4. Page 12: The citing of specific allowable noise levels in the draft seems inappropriate. Excessive noise not only impacts the quality of life but also can result in hearing loss and impact cognitive functioning. Rather than provide all this specificity in the Comprehensive Plan, the noise ordinances should be referenced, and the comprehensive plan should note that noise studies should be required when noise is a concern.

5. Page 15: Objective 8: This objective is titled to focus on pipeline ruptures, explosions and hazards from electrical transmission, but the majority of space is dedicated to Environmental Quality Corridors (EQCs). Perhaps EQCs should be a separate objective?
6. Page 16: We had previously recommended that EQCs be incorporated into maps so that the public could see where EQCs are located. In the absence of a map, the full scope of where EQCs are located will be underappreciated.
7. Page 20, 10c: Original language: “Encourage energy-conscious landscaping efforts such as the planting of trees to provide shading of buildings and parking lots during the summer months.” Suggest “Encourage energy-conscious landscaping efforts such as the planting of trees to provide shading of buildings and parking lots as well as reducing heat islands impacts.
8. Page 24: Policy b describes the use of LEED or other equivalent program. How would an equivalent program be determined? LEED certification is viewed as excessively expensive by many companies and is therefore avoided even by many companies with impressive environmental programs. It would be helpful to obtain metrics as to their use of green energy to power operations and water usage.

In closing, we thank you for your encouragement to engage in this critical activity. It is our hope that these comments will improve the Policy Plan as we view the Policy Plan to be a critical guide for the future of the county.

cc: Jennifer L. Miller, Deputy County Executive
John Morrill, Director Office of Energy and Environmental Coordination
Kelly Atkinson, Director Planning Division, Department of Planning and Development
Katherine Hermann, Assistant Director Planning Division
Christopher Herrington, Director Department of Public Works and Environmental Services
EQAC
Fairfax County Planning Commission