



County of Fairfax, Virginia

MEMORANDUM

DATE: May 23, 2025

TO: Kelly M. Atkinson, Director
Planning Division, Department of Planning and Development

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

SUBJECT: Comment on the Plan Forward Environmental Element

This memo and its attachment summarize comments for the Environmental Quality Advisory Council on Plan Forward.

While some of our previous comments have been addressed in the draft materials, others have not. In general, the transportation and healthy communities elements are helpful and read well. The environmental element lacks balance as it includes rich discussion of water and natural resources but is lacking important information on GHG reduction efforts, resilience, and zero waste (zero waste is not even mentioned yet it is expected to require substantial facilities when implemented). There is no discussion to indicate if there are concerns with the indoor environment, especially lead and vapor intrusion. There are also technical issues with some of the information such as the description of ozone trends and the statement that trees improve air quality (in reality, poor air quality can kill trees and other vegetation). It is hard to tell if previous comments that were not incorporated have been lost in the editing. Given the availability of draft language, the attachment includes recommendations for locations where comments can be accommodated.

We believe that the Environmental Element has been more challenging to prepare given the many departments responsible for addressing
We thank you for your consideration and welcome questions.

cc: Phillip A. Niedzielski-Eichner, Chair, Fairfax County Planning Commission
Mary Cortina, Fairfax County Planning Commission
Jennifer L. Miller, Deputy County Executive
John Morrill, Director, Office of Environmental and Energy Coordination (OEEC)
Christopher Herrington, Director, Department of Public Works and Environmental Services (DPWES)
Environmental Quality Advisory Council

Introduction

Page 1, 2nd paragraph 8th line,

After such as, insert green space

Outreach and Process

The plans for Plan Forward provided substantial resources that were placed into outreach, but that outreach seemed to be designed to make it hard to provide for meaningful engagement. The Plan Forward effort has been underway for 3 years, but materials have not been made available until April 1 (Environmental Element). As outlined on the Plan Forward Website, outreach included:

- Phase I Outreach (understand): Included a survey, kickoff meeting and virtual meetings. Generally, this was seeking input from the public. Efforts to reach out to many parties was clear but there was little for people to react to as many residents and businesses have little appreciate for the role of the policy plan or what the current plan contains.
- Phase II (Contribute): Phase II provided issue papers for the public to review and provide comment. This was clearly a significant improvement over Phase I as at least some issues were included in the issue papers even though it was hard to see how this information would fit into plan revisions.
- Phase III (Collaborate): This phase provides an opportunity to review draft element plan language. Comments on all elements will be due by May 30 with some elements being released earlier (e.g., Environmental Element was released on April 1), and others were not release until after May 1. The Planning Commission's Policy committee hosted a meeting to discuss the Environmental Element on April 3. At that meeting it was clear that the draft did not reflect important input from at least some other departments, and we were told that we would see another draft by the end of the month, and we had expected another discussion to be held to discuss the draft language in May. On Sunday, May 4, the Chair of the Planning Commission shared that there would be a meeting to discuss an updated Environmental Element draft.

As the above description shows, the different elements of the policy plan have not been available for review until early April and the update to the environmental element has not yet been made available as of May 19, which makes it difficult for bodies and organizations to review and comment. Given the limited time available for review of the environmental element in conjunction with other relevant elements, the roughness of the draft circulated, and the many concerns with the draft, additional time for review of an updated draft is

recommended so that the public would have at least a month from the release of an updated draft to comment. This additional review might not have been needed if the outreach had provided an opportunity to build agreement on the updates to the plan. Instead, the outreach sought community input in the absence of proposed changes

Background information needs revision

Suggested adjustments are provided below for the 3 categories of environmental concerns.

Also, the description of environmental standards (e.g., air) is incomplete and leaves the impression that there are significant gaps.

Environmental concerns are grouped into three broad categories:

- **Environmental pollution:** This category includes guidance for both existing environmental pollution and steps that must be taken to avoid further environmental contamination. Addressing environmental pollution generally focuses on meeting environmental standards. Environmental contamination can be a concern for air, surface water, ground water, soil and toxic vapors from contaminated soils/groundwater. Noise and light pollution are also sources of environmental contamination.
- **Climate related threats to the environment:** This category provides guidance for creating resilience to flooding, providing appropriate engineering structures for unstable soils, and ensuring that utilities can operate in the event of an emergency are all examples of steps that are being taken to make Fairfax County more resilient to the impacts of climate change. Because increases in Greenhouse Gases (GHG) from anthropogenic activities are causing increases in temperatures, along with many other impacts, Fairfax County is taking reasonable steps that are like those of other local government agencies to reduce GHG emissions.
- **Natural Resources:** This category provides guidance to preserve and enhance the environmental resources of the county through Environmental Quality Corridors (EQCs), healthy vegetation and soils, conservation easements, mitigation of development impacts, and minimizing disproportionate impacts.

The draft environmental element identifies some of the relevant laws/regulations that provide for protection against environmental contamination. However, there are significant gaps. For example, the criteria pollutants for which there are National Ambient Air Quality Standards are noted but all other toxic air pollutants are ignored (note that according to DEQ, Northern Virginia is now in compliance with the ozone

standard). The language should be modified to state that Fairfax County works with Virginia and federal partners to provide an environment that meets standards so that health and the environment are not threatened by environmental contamination.

The policies listed below may be reflected in county policies or guide case-by-case situations as land is developed or redeveloped. These policies should be applied as appropriate to both private and public development. Development proposals should identify environmental assets and constraints, and incorporate site design with mitigation measures consistent with the guidance contained in the element to reduce impacts on the environment.

Media	Pollutants/Contaminants	Primarily Responsibility
Air	Criteria Pollutants (Ozone, nitrogen dioxide, Sulfur oxides, particulate matter (2.5 and 10 µm), lead, carbon monoxide. Air toxics (toxic contaminants that are not criteria pollutants)	Virginia has been delegated responsibility for development of plans and implementing measures to meet standards, which are reviewed and approved by EPA. Virginia is delegated responsibility for implementation of the CAA and RCRA.
Water	Contamination releases to surface water are regulated under the Clean Water Act (CWA) and RCRA.	Virginia is delegated responsibility for implementation of the CWA and RCRA.
Soil	Facilities are prohibited from releases of contamination	Unpermitted releases may trigger enforcement actions under the CAA, CWA, RCRA, Superfund or other laws.
Indoor Vapors	Toxic indoor vapors result from the contamination of soil/groundwater from contaminants that vaporize into indoor air, which includes sources like leaking underground petroleum tanks.	Multiple federal laws may be applicable to address contamination impacting indoor air.

Generally, the CAA, CWA, RCRA, and most other environmental laws apply to operating facilities. Superfund is often referred to as the environmental law of last resort because it is employed to address environmental contamination that perhaps cannot be addressed under another law. In contrast to the other federal environmental laws listed above, the federal Superfund program is not delegated to states. Thus, public health and the environment are protected from environmental contamination by multiple laws.

The conclusion that “the conversion of land to urban uses and our dependence on the automobile have resulted in unacceptable amounts of pollution” is not supported. According to DEQ, Northern Virginia complies with all National Ambient Air Quality Standards (NAAQS). However, there is other contamination from a variety of sources that has resulted in contamination that threatens health and the environment. For example, levels of PFAS exceed safe levels and there multiple 303d impaired water bodies due to PCB contamination.

The paragraph on the bottom of page 2 on GHG should be modified to highlight the importance of electric vehicle (cars, buses and heavy-duty trucks), which provide a more energy efficient use of fuel, provide no local emissions, such as VOCs and nitrogen oxides (which form ozone and are toxic themselves).

Page 2:

The language on compliance with the ozone standard is problematic given the recent reclassification (see: <https://www.govinfo.gov/content/pkg/FR-2025-04-04/pdf/FR-2025-04-04.pdf>, page. 14730) of the Washington Metropolitan Region, which includes Fairfax County, by EPA. The language on compliance with the ozone standard is not accurate. Recommend something along the lines of: The region has been hovering near the standard of 70 ppb (Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) about 15 years. The region was recently reclassified as being in attainment by EPA. As outlined in other areas, a more general statement that the county works with the state and federal government to meet all environmental standards so that health and the environment will be protected.

Last paragraph, 3rd line from the bottom. “Synthetic refrigerants” should be changed to “fluorinated refrigerants.”

Page 3:

Policy b. Tree planting is advocated because trees help with heat islands. Trees and other vegetation are impacted by pollution as are humans. The secondary NAAQS are intended to protect vegetation and sometimes other things. There are many examples of how air pollution has killed vegetation (e.g., orange trees were eliminated in Orange County (California), all vegetation near the Sudbery Smelter died) and there are controlled studies showing how plants are adversely impacted by air pollution.

Tree planting is not a good strategy to improve air quality. Trees and vegetation, like humans, are impacted by air pollution. Trees emit VOCs, which contribute to ozone formation. Plants absorb nitrogen dioxide from the air but nitrogen dioxide levels above the standard are toxic to plants.

Policy c. After “green building practices” insert “use of low-embodied carbon materials in building/construction projects”)

Policy d. This policy lacks context. Efforts to reduce episodic pollution are generally tied to commitments to take episodic action as outlined in the State Implementation Plan to comply with NAAQS. If other episodic measures are envisioned, some reference would be helpful.

Policy e. This policy should be amended to require the use of electric landscaping equipment to the extent allowed by law. The City of Alexandria has a trade in practice where fossil fuel powered equipment can be exchanged for electric equipment.

Another policy should probably be added to address contamination other than NAAQS pollutants.

Also, indoor air should be covered either under air or another place because it can pose a threat that must be addressed to protect health.

Page 4: Policy 2 d: PFAS should be incorporated into permits where PFAS is present, especially PFAS sources. Also monitoring of cooling system discharge should be required when large volumes of water are employed for cooling.

Page 6: Policy b: 8th bullet on tree canopy: This language is weak. Suggest: Require preservation of the tree canopy to the extent allowed by law during development, redevelopment and road construction. To the extent that tree canopy is lost, tree loss should be compensated by planting trees in heat islands, especially where vulnerable communities reside.

Policy d, first bullet: Permits should be required for releases of stormwater or discharges to wastewater from sources so that sources do not contaminate surface or groundwater.

Page 7, policy g: Remediation should be to at least standard levels or if no standard exists, meet acceptable risk-based levels that conform with EPA or ASTM recommendations.

Page 8: 1st paragraph, the reference to the deteriorating Potomac River Estuary and Chesapeake Bay is confusing. A lot has been done to clean up the water and most believe that significant progress has been made over the past 50 years. This paragraph needs some thoughtful consideration and revision. Also, why will more intense storms lead to more pollutants entering waterways?

Given the restrictions on the use of an RPA, the county should seek to acquire RPA land before development, which would avoid the confusion that so often arises when a waterfront property owner unknowingly violates the law (e.g., by removal of noxious weeds without a permit or other actions). Continuing to develop parcels where a property owner owns the land and pays the taxes is likely to continue to invite violations of the Chesapeake Bay Ordinance, which is unclear to most waterfront property owners. If water access is desired ownership of a path could be provided to reach a pier or dock when permitting is feasible.

Page 9: Noise: previous comments have summarized EQAC comments on noise. This section is confusing as noise is not limited to transportation noise. Again, this language does not address preserving low levels of noise but allows noise levels up to the standard and the noise levels of 45 dBA would be disturbing to residents seeking to rest.

Page 11: Climate Resilience is fundamentally different from naturally occurring soils that require additional engineering to provide stability for structures. With increasing temperatures, the measures required for resilience will increase. Naturally unstable soils are not created by temperature changes and may not be affected by climate change.

Climate resilience must provide for resilience to storms, flooding and sea level rise. This resilience must provide for management of wastewater in the event of power failures, emergency shelters for people and pets, and planning for possible climate related emergencies. While there are many county responsibilities, residents can also take steps to prepare for climate emergencies and the county can help. The focus on climate in the Environmental Element is strikingly limited and incomplete and is way out of balance with the detail provided for water and environmental resources.

If poor soils are covered in land use, referencing land use would seem appropriate.

Objective 7: The issue of possible rupture of gas and petroleum lines is not necessarily tied to flooding. This language would seem to be appropriate in Objective 8.

Objective 9: As stated in previous comments, the EQCs should be mapped and shared on a website, perhaps in the JADE system, so that their location is known.

Page 16: under Policy c: second bullet at the top of the page, the use of decorative artificial turf grass should be minimized.

Page 16, Objective 11, Policy a: As previously requested, planning for trails, roads, and bike trails should all have appropriate environmental assessments to ensure that threatened and endangered species are not adversely impacted or there are other impacts.

Page 17, Objective 12, Policy c: add noise to the reviews and ensuring appropriate mitigation.

Policy, 4th bullet (renewable energy), The wording of this recommendation is soft. If we want to ever reach renewable energy goals, we need more onsite renewable energy. It is feasible as demonstrated by county projects. Now onsite renewable energy needs to be extended to the private sector. This bullet should also include battery storage, which is also required in the Virginia Clean Economy Act.

Page 18, first bullet, add water efficient plumbing fixtures to the examples.

Page 19, Objective 13 policy e: The promotion of green building standards is weak-as there is no commitment or target. In Fairfax County transportation is the leading source of GHG followed by building energy use. In the absence of unlimited renewable energy, reducing energy use by buildings will be important to reaching GHG reduction goals.

During the April Planning Commission meeting staff agreed to include language so that new and renovated construction will provide for the stations to charge EVs AND the infrastructure (e.g., piping for electrical wires) to expand the number of charging stations. For multifamily buildings, plans should provide for at least one charging station for each unit or parking space (whichever is less) because eventually all cars are likely to be electric. In the absence of such planning, buildings will need to be torn apart to accommodate the electrical infrastructure needed.

Policy g. Should the language be modified to accommodate hydrogen fueling infrastructure and fuel cell electric vehicles?