# COUNTY OF FAIRFAX ENVIRONMENTAL QUALITY ADVISORY COUNCIL (EQAC)

# MEETING MINUTES DATE: May 10, 2023

TIME: 7:16 p.m. – 10:10 p.m.

**LOCATION: 12000 Government Center Parkway** 

Fairfax, VA 22035 Conference Room 4/5

#### **EOAC Member Attendance**

Name	Present/	Name	Present/
	Absent*		Absent*
Larry Zaragoza	P	Renee Grebe	P
(Chair, Mount Vernon)		(Vice-Chair, At-Large)	
Johna Gagnon (Franconia)	A	Stella Koch (At-Large)	V
Richard Healy (Mason)	P	Jacob Hammond (Student Member)	P
Ken Gubin (Dranesville)	P	George Lamb (At-Large)	P
Ken Lanfear (Hunter Mill)	P	Bryan Campbell (Braddock)	P
Vacant (Providence)		Vacant (At-Large)	
Rich Weisman (Sully)	P	Clyde Wilber (Springfield)	P

<sup>\*</sup> P indicates present; A indicates absent; V indicates attended virtually

# **Staff Attendance**

Neely Law, Office of Environmental and Energy Coordination (OEEC)

Sara Girello (OEEC)

Kelly Zitzer (OEEC)

Joe Gorney, Department of Planning and Development (DPD)

Chris Herrington, Director, Department of Public Waste and Environmental Services (DPWES)

Brian Keightley, Director, Urban Forestry Division (UFMD), DPWES

Carmen Bishop (DPD)

Carly Aubrey (DPD)

Willie Woode, Northern Virginia Soil and Water Conservation District (NVSWCD)

## **Visitor Attendance**

James Coakley, Next Tier HD Greg Prelewicz, Fairfax Water Tyler Roy Brian Sterling

#### Call to Order/Remote Participation

Chair Zaragoza called the meeting to order at 7:16 p.m. and announced that Ms. Koch had requested to participate in the meeting remotely. Chair Zaragoza read the remote participation language requirements and asked Ms. Koch to state her name, location, and reason for remote

attendance. Ms. Koch shared that she was participating remotely from her home in Great Falls due to a temporary medical condition. Mr. Lanfear moved to allow Ms. Koch to participate remotely. Mr. Wilber seconded the motion, and it carried by a vote of 10-0, with Ms. Koch not yet able to vote and Ms. Gagnon being absent from the meeting.

### Agenda Items, Discussion, Decisions and Votes

1. <u>Presentation on Data Centers & Discussion on Proposed Memorandum of Recommendations</u>

James Coakley, Senior Managing Director of Next Tier HD presented information and background on data centers. Mr. Coakley explained why data centers are being constructed in the area and the issues associated. Mr. Coakley noted we are all becoming digital dependent and artificial intelligence and applications like TikTok are quickly adding to the need for data centers. He explained that 90% of the data in servers was created in the last year. There is \$234B under construction in 2023, with an expected increase of 34% per year. Data centers started in Northern Virginia primarily because May East is in Tysons, the hub for national networks. Ashburn is a hub now because of the fiber density which is a competitive advantage in attracting data center business. Mr. Coakley shared that new undersea cables are landing in the Norfolk area from Brazil, Europe, and the Middle East and are becoming a key pathway for the East Coast thru Ashburn. Mr. Coakley continued by explaining the size of the data centers is increasing. Mr. Coakley identified the following problems associated with data centers:

- The buildings are architecturally sterile with few windows or exterior embellishments. There are limited reuse options, and they are getting taller due to land costs, from one to three and five stories. There are also issues with water, power, and backup power.
- Concern about their ability to achieve carbon neutrality despite policy commitments to do so by 2030-2040
- The old-style data centers used considerable amounts of water: 22k gallons/MW.
   and the associated cooling towers require biocides to manage algae growth, earlier
   versions of which utilized sodium concentrations. Newer designs replace water
   side cooling with airside cooling, or adiabatic cooling that consumes 95% less
   water.
- Data centers require backup power due to service level agreements (SLAs) that penalize building owners for power outages, and the majority of data centers use reciprocating diesel power gensets. While some deploy dual fuel alternatives that can run on natural gas, there is a push to being in microgrids, fuel cells, solar and wind farms and even nuclear. Mr. Coakley mentioned that Microsoft is testing a fusion reactor at 50MW pilot program. This could replace carbon sources.
- The noise produced by data centers require fans to run constantly, however this can be managed by shielding and better technology.
- Mr. Lanfear mentioned that evaporative water cooling uses 90% due to evaporation, only 10% flows out. He said that supplying data center water means reevaluating all water-supply plans.

- Mr. Lamb asserted that carbon neutral is a fantasy based on current technology.
- In order for Fairfax County to entice data centers there is a need to consolidate warehouse space and be proactive with siting. Data centers can be constructed in urban areas with appropriate mitigation.
- Vice-Chair Grebe inquired about sustainability measures, specifically green power and asked how much is available. It was claimed that Kansas has many windmills.
- Ms. Koch thanked Mr. Coakley for the good background information and suggested EQAC be proactive about directing staff response versus awaiting the final report in December.
- Citizen Brian Sterling from the Mason District suggested EQAC take input from the public regarding data centers.
- The draft memorandum distributed by Chair Zaragoza to EQAC was not discussed. However, following this discussion, Chair Zaragoza will create and circulate questions for EQAC to send to county staff and Fairfax Water. This will then be reviewed by staff and used to update the draft memo. The draft memo will be used as input to the county review process established by Board action on May 9.
- 2. <u>Discussion on Letters of Support for County's Urban Forestry Inflation Reduction Act</u>
  <u>Grant Application and Charging and Fueling Infrastructure (CFI) Discretionary Grant</u>
  <u>Application)</u>

Chair Zaragoza noted that in addition to being asked to send a letter of support for the Urban Forestry Inflation Reduction Act Grant, EQAC had been asked to send a letter of support to the U.S. Department of Transportation for the Metropolitan Washington Council of Government's (COG) Charging and Fueling Infrastructure (CFI) Discretionary Grant application. Fairfax County is partnering with COG on the application.

Following discussion, Mr. Lanfear moved adoption of the letter with two modifications: "Board" in the first line of the letter changed to "Council" and the word "significant" removed from the second paragraph. Dr. Weisman seconded the motion. It carried by a vote of 11-0, with Ms. Gagnon being absent from the meeting.

Next, EQAC evaluated sending a letter of support to the U.S. Department of Agriculture Forest Service.

- Reviewed slides provided by email shared with EQAC in advance of the meeting.
- Brian Keightley, Director, UFMD, DPWES answered EQAC's questions about the grant cycle. He confirmed it is up to \$1B.
- Mr. Keightley explained the timing of the request based on the short timeline to submit request to the USDA Forest Service. Vice-Chair Grebe requested to support education and inclusive community engagement as a key part of the grant. Mr. Wilber had issues with editing and requested time for himself and Chair Zaragoza to edit while staying within the spirit of the letter.

Mr. Lanfear moved adoption of the letter. Vice-Chair Grebe seconded the motion. Mr. Lanfear accepted the change for Mr. Wilber and Chair Zaragoza to make edits within the spirit of the letter. It carried by a vote of 11-0, with Ms. Gagnon being absent from the meeting.

## 3. Discussion on EQAC's Charter

Mr. Healy presented background information related to charters based on his experience with the Tree Commission. Mr. Healy explained that the current EQAC charter was last updated in 1981 and mentioned that updating the charter is just a board issue, not an ordinance change. Mr. Healy suggested following the template provided for all boards. He expects the process will be straight-forward. Mr. Healy requested EQAC members send him any ideas for the update to be incorporated and will bring back to EQAC in July or August for review.

Staff will forward the model charter to EQAC members.

## 4. <u>Discussion and Updates on 2023 Annual Report on the Environment (ARE) to Include</u> One Fairfax

Mr. Lanfear described the new Word ARE template. The changes to the template will help to improve accessibility. Mr. Lanfear asked EQAC to note that figures and tables will be submitted at the end of the chapters and editors will insert them into the right place. Ms. Koch suggested making sure we are communicating the content effectively.

There was then Council discussion about addressing One Fairfax within the ARE Dr. Law requested that each EQAC chapter author work with county staff to consider incorporating One Fairfax into the ARE. Dr. Law explained that not every department has fully solved equity but are working on ideas that may be useful for EQAC as we develop our recommendations.

The ARE discussion concluded with an update of the chapter review schedule.

## 5. Discussion on 2023 Legislative Proposals

EQAC discussed the following potential legislative proposals:

- Living shorelines—Opinion varied on need to further discuss living shorelines with Mr. Wilber based on recommendations from Legislative Committee in 2022.
- Green banks—legislative language may be needed to allow resiliency projects to be served by a green bank. Staff will be working on these issues, EQAC will likely be supportive.
- Solar siting—discussion with NVSWCD about solar on farmlands. Many legislators in VA are working on the issue. It was suggested not to undertake such legislation at this time. It might be appropriate to add language supporting

solar on buildings and medians. Also, there is an issue with siting solar on State facilities. This has been solved by Fairfax and could be modeled for VA.

Chair Zaragoza requested that a representative from the Office of the County Attorney attend a future meeting to discuss living shorelines.

## 6. Approval of April 12, 2023 Meeting Minutes

Mr. Lanfear moved adoption of the minutes. Vice-Chair Grebe seconded the motion, and it carried by a vote of 8-0-2, with Mr. Wilber and Mr. Campbell abstaining, Ms. Koch not present for the vote, and Ms. Gagnon absent from the meeting

#### 7. Chair's Items

Chair Zaragoza announced that EQAC would be meeting with Planning Commission's Environment Committee in September.

## 8. Council Member Items

Most council members had nothing to report this month, with Mr. Wilber sharing that there is a May 16<sup>th</sup> advanced living shoreline hearing on Doe Creek.

## 9. Staff Items

Dr. Law explained that the Environmental Excellence Award nomination period has been launched. She shared that EQAC received 23 student member applications. She requested that EQAC review the Climate Dashboard and provide comments.

Ms. Girello mentioned that the June agenda will include a landscape and screening ordinance amendment. She shared that zMOD was accepted by Board. She concluded by saying that the Park Authority joint meeting will be November 8<sup>th</sup> in the Herrity Building.

### 10. Adjournment

The meeting ended at 10:10 p.m. following a motion for adjournment by Mr. Lanfear, which was seconded by Dr. Weisman and carried by a vote of 10-0-0, with Ms. Koch not present for the vote and Ms. Gagnon absent from the meeting.