

**FAIRFAX COUNTY ENVIRONMENTAL QUALITY ADVISORY COUNCIL
MINUTES**

DATE: Wednesday, May 13, 2015
TIME: 7:00 P.M.
PLACE: Noman M. Cole, Jr. Pollution Control Plant, Lorton, VA

MEMBERS PRESENT

Stella Koch (Chairman, At-Large)	Rick Healy (Mason)
Larry Zaragoza (Vice Chair, Mt.Vernon)	George Lamb (At-Large)
Matthew Baker (Student Member)	Ken Lanfear (Hunter Mill)
Linda Burchfiel (At-Large)	Paul Pitera (Braddock)
Johna Gagnon (Lee)	Rich Weisman (Sully)

MEMBERS ABSENT

Frank Crandall (Dranesville)	Alex Robbins (Providence)
Robert McLaren (At-Large)	Clyde Wilber (Springfield)

STAFF

Kambiz Agazi	Noel Kaplan
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GUESTS

R. Christian Jones	Bob Popovics
Mike McGrath	Chris Popovics

1. Tour of the Noman M. Cole, Jr. Pollution Control Plant

Mike McGrath, Director, Wastewater Treatment Division, Department of Public Works and Environmental Services, led EQAC on a tour of the facility.

2. Briefing on the Gunston Cove Study from Dr. R. Christian Jones, Director, Potomac Environmental Research and Education Center, and Professor, Environmental Science and Policy, George Mason University

Professor Jones provided an overview of the Gunston Cove study and water quality and ecological trends in Gunston Cove. He noted that the program was initiated in 1983 and

that EQAC was instrumental in getting the program started. He described monitoring efforts, noting that chemical monitoring has been performed since 1983 and biological monitoring since 1984.

Professor Jones began his presentation with an overview of the hydrologic and ecologic setting of Gunston Cove and the tidal Potomac River. He highlighted the importance of submersed aquatic vegetation (SAV, or submersed microphytes), noted that SAV had largely disappeared from the area as long ago as 1939, and discussed how nutrient inputs from a growing human population had spurred phytoplankton blooms, inhibiting the re-establishment of SAV. He identified phosphorus as the limiting nutrient in this system and emphasized the importance and demonstrated benefits of phosphorus load reductions.

Dr. Jones identified the major sources of phosphorus to the tidal Potomac and Gunston Cove as the Blue Plains and Noman Cole treatment facilities and described efforts to reduce phosphorus loadings dating back to the 1970s, even with significant increases in treated wastewater volumes. He noted that monitoring results in Gunston Cove showed a significant reduction in total phosphorus, starting in 1989. He noted that chlorophyll *a* levels have decreased substantially over the same period.

With respect to SAV, Dr. Jones stressed that the primary requirement for the return of SAV is light availability throughout the water column, and he noted the impacts of algae, inorganic particles and dissolved substances in inhibiting light transmission. He described the monitoring of the transparency of the water column and noted that the monitoring had identified a steady improvement in water clarity since 1995. He added that SAV colonization showed increases starting around 2000.

He concluded that the Gunston Cove Study had documented the partial restoration of the cove and attributed this recovery to decreased phosphorus loadings from the Noman Cole facility, which have resulted in a decline of phytoplankton growth, a corresponding improvement in water clarity and re-establishment of SAV beds to a substantial portion of the cove. He concluded that there has been an apparent regime shift from phytoplankton dominance to a “partial” SAV dominance.

The following issues were addressed during the Q&A:

- Dr. Jones has not seen evidence of degradation in Gunston Cove resulting from increased sediment loads from development. There has been scouring by flow and by tidal action, and the Cove has not been getting more shallow over time, at least in the areas being monitored.
- Dr. Jones discussed the role of invasive species in helping the recovery of native species. He noted that the perception regarding hydrilla has changed over time, with its benefits more widely recognized. He indicated that hydrilla is still common. He suggested that there may be a similar perspective relating to snakeheads, as the presence of snakeheads has not altered the fish composition of Gunston Cove significantly.
- Dr. Jones indicated that he is seeing a continued improvement in SAV with improving water clarity.

- Dr. Jones has seen a slight upward trend in water temperature. Stella Koch suggested that this could be related to impervious cover. Dr. Jones suggested that temperature changes may be more dramatic in embayments than in the main stem of the river, as the embayments are shallower and have greater temperature stratification.
- Dr. Jones noted that Gunston Cove is a unique place to study the effects of sewage treatment improvements at the Noman Cole facility, indicating that this relationship is more difficult to study for Blue Plains due to its outfall into the Potomac River and the numerous other sources of inputs into that system.

3. 2015 Annual Report on the Environment:

- Identification of authors for remaining sections
- Scheduling of EQAC reviews of chapter/section drafts

Noel reviewed the chapters/sections of the report for which there had not yet been volunteers. Ken Lanfear noted that, in his capacity as content editor of the report, he would be looking at: consistency between the summary and detailed report sections and the “so-what” factor. He indicated that he would need a minimum of one week to edit each chapter/section. Stella Koch requested that chapter authors afford Ken with at least two weeks for these reviews. For the co-author of the Land Use and Transportation chapter, George Lamb indicated that he would reach out to Alex Robbins to see if he would be interested. Rick Healy indicated that he would consider serving as copy editor. Paul Pitera offered to coordinate the preparation of the Scorecard section. Noel Kaplan agreed to circulate a template for the Scorecard section to all members, along with the in-progress schedule for reviews of chapter/section drafts.

4. Appointment of an Environmental Excellence Awards nomination review committee

Linda Burchfiel, Bob McLaren and Rich Weisman volunteered to serve on this committee. The deadline for nominations is June 1, and the committee will need to complete its work no later than August 12.

5. Discussion regarding notification to EQAC of certain development proposals

Noel Kaplan noted the recent transmittal to Stella Koch of comments on a particular zoning application from a member of the Tree Commission, and it raised a question of when EQAC would want to be notified about particular development applications that may have environmental policy implications. There was consensus that EQAC would be interested in hearing about cases involving Environmental Quality Corridor encroachment requests that would be considered under the portion of the EQC policy addressing disturbances and mitigation/compensation and requests with associated Resource Protection Area Exception requests.

6. Scheduling of EQAC agenda items and site visits:

Items for inclusion on the agenda of the June joint meeting with the Environmental Coordinating Committee were confirmed as follows:

- Status report on the development of an energy dashboard
- Fairfax Forward update
- Noise Ordinance update
- Briefing on wastewater management

7. Approval of meeting minutes: Deferred

8. Chairman's items:

- Board of Supervisors Environmental Committee meeting on May 19.

9. Council member items

- Rick Healy noted his appointment as EQAC's representative to the Tree Commission
- Rich Weisman noted the upcoming bike-to-work day
- Johna Gagnon noted her representation of EQAC on the Fairfax Joint Local Emergency Planning Committee.
- Johna Gagnon noted documents relating to the fall cankerworm issue.

10. Staff items

- Energy strategy for the county government is in progress.
- EQAC legislative positions need to be finalized by August.
- A record number of student member applications have been received (a total of 60), with more than half coming from three schools (Lake Braddock, Thomas Jefferson and Langley).
- Status of the development of a revised Noise Ordinance.
- Native plant guides provided by Laura Grape per EQAC's request.
- Upcoming meetings of the Planning Commission Environment Committee.

11. Adjournment: 10:45 P.M.