

Approved by EQAC, September 12, 2012

**FAIRFAX COUNTY ENVIRONMENTAL QUALITY ADVISORY COUNCIL
MINUTES**

DATE: Wednesday, June 13, 2012
TIME: 7:15 P.M.
PLACE: Hidden Oaks Nature Center, Annandale, VA

MEMBERS PRESENT

Larry Zaragoza (Vice Chairman, Mt. Vernon)	Frank Divita (Braddock)
Linda Burchfiel (At-Large)	George Lamb (At-Large)
Johna Gagnon (Lee)	Kat Pfleeger (Student Member)
	Rich Weisman (Sully)

MEMBERS ABSENT

Stella Koch (Chairman, At-Large)	Patricia Greenberg (Hunter Mill)
Frank Crandall (Dranesville)	Robert McLaren (At-Large)
Marie Flanigan (Providence)	Glen White (Mason)

STAFF

Kambiz Agazi	Noel Kaplan
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GUESTS

Jeff Allcroft
Joshua Fleitman
Judy Fraser (Fairfax City Environmental Sustainability Committee)
B. J. Hershey
Vicki Kaplan
Chris McGough (Fairfax City Environmental Sustainability Committee)
Steve Nicholson (FCPS Office of Design and Construction)
Elaine Tholen (FCPS Instructional Services)

1. Fairfax County Public School Briefings

A. Steve Nicholson, Coordinator of Capital Projects, Fairfax County Public Schools

Mr. Nicholson briefed the council on green building efforts for public school capital projects.

He noted that he coordinates sustainable design efforts for FCPS and integrates sustainable design concepts into additions, renovations and new schools. He indicated that 90% of his office's work consists of renovations. He stressed that "high performance schools" address more than energy savings; he noted that top design priorities are the provision of the best possible learning environment, including the noise environment, and achieving the best bang for the buck. Environment/energy and durability follow on the priority list.

Mr. Nicholson cited some of the benefits of high performance schools. He noted the multiple functions that schools serve and noted how design strategies need to consider these functions. He cited, as an example, the use of auditoriums for community meetings and noted that one design strategy focuses on providing heating/air conditioning/ventilation systems that are set up to condition only school auditoriums, gyms, cafeterias and administrative areas (thereby saving energy by not requiring school-wide conditioning for events taking place only in that/those area(s)).

Mr. Nicholson noted that FCPS is a member of The Collaborative of High Performance Schools (CHPS), which provides for the development of state-specific design criteria for schools. He noted his involvement in the development of Virginia's CHPS criteria, which were approved in 2011. He noted that FCPS is trying a number of CHPS-related design initiatives, including:

- Reflective roofs, which FCPS prefers to vegetated roofs because of maintenance considerations.
- A solar hot water heating system that is currently being tested with good results to date, as there have not been any maintenance problems.
- Natural lighting using glass—this has been successful at improving the learning environment, but the trade-off is that glass is not as good an insulator as other wall materials. Interior rooms have been successfully lit with Solatubes that convey natural light through a large tube into the occupied space—these are relatively inexpensive.
- Stormwater management – New regulations will be coming into effect, and FCPS is trying a number of approaches to address both water quality and water quantity concerns.
- Mechanical systems – energy recovery is stressed. As an example, there is a need to bring in and condition a considerable amount of air, and there is a need to exhaust as much air as is being brought in. Energy recovery units apply heat exchangers to absorb heat from exiting air in order to condition the incoming air, thereby reducing HVAC costs and sometimes allowing for downsized, less expensive HVAC units. He cited many other examples of measures that may have higher up-front costs but that have life-cycle benefits that assure long-term savings (e.g., variable frequency drives for large

motors; a ground source heat pump at the new Mason Crest Elementary School; magnetic bearing chillers; water source heat pumps; variable refrigerant systems requiring less ductwork (particularly useful in schools with little room for additional ductwork).

- Retention of existing building materials (e.g., cinder blocks), thereby reducing landfill waste.

He also noted the following process-related energy conservation measures:

- The use of in-house design teams with members on each team who have a broad range of expertise.
- Design and construction teams with field representatives on each construction site to ensure that contractors get things right the first time.
- The tracking of energy use to assess whether new systems are performing as planned.
- Smart metering and sub metering.
- Energy auditing.
- Training for use and maintenance (provided by manufacturing representatives).
- Energy service performance contracting, which can provide huge savings.

Mr. Nicholson noted that 107 schools have received upgraded lighting, windows and HVAC systems, resulting in energy savings equivalent to taking 5,365 cars off the road, the power used by 3,182 households, and 23,000 barrels of oil. He noted that, over the past five years, energy consumption has declined by 12%, despite a significant increase in enrollment. He noted that 52 schools in the system are ENERGY STAR rated, with somewhere between 10 and 25 additional schools eligible.

Rich Weisman asked if FCPS was tracking its carbon footprint. Mr. Nicholson indicated that he would find out and provide information to Noel Kaplan. [Subsequent to the meeting, Mr. Nicholson informed Mr. Kaplan that FCPS Energy Management does a carbon footprint analysis regularly.]

Mr. Weisman asked if building owners could learn from FCPS's efforts. Mr. Nicholson replied that there may be an ability to post information on the website but that this hasn't been done yet. Elaine Tholen noted that the FCPS's Get2Green website has a number of useful links.

Linda Burchfiel commended FCPS's long-range thinking regarding energy efficiency. Larry Zaragoza agreed and recommended that these efforts be highlighted in some way in the Annual Report on the Environment. Mr. Nicholson agreed to assist by meeting with Mr. Zaragoza and Mr. Reinsel.

Mr. Zaragoza asked if county capital facilities development projects could learn from FCPS. Mr. Kaplan reminded EQAC of the county's Sustainable Development Policy for Capital Facilities. Mr. Nicholson added that he was confident that county engineers are familiar with the energy conservation strategies that have been applied in county school facilities.

B. Elaine Tholen, Environmental Educator, Fairfax County Public Schools

Ms. Tholen focused on two FCPS efforts: The “Get2Green” effort and recycling efforts.

Ms. Tholen began with a short video presentation addressing environmental stewardship efforts in the public schools. She noted that environmental stewardship has been incorporated as one of three School Board goals, both in terms of literacy and action. She stressed FCPS’s commitment to ensuring that all students will develop a strong understanding of the need for an environmental stewardship ethic.

With respect to environmental education, Ms. Tholen’s presentation highlighted the following:

- FCPS’s many partnerships, including an official partnership with National Wildlife Federation called “Eco-Schools USA” and partnerships with George Mason University, the Fairfax County Park Authority, the Virginia Department of Forestry, the Chesapeake Bay Foundation, and many others.
- Related environmental literacy efforts at the state level, in other states and at the federal level.
- Progress that has been made in FCPS over the last year or so, including 45 National Wildlife Federation school habitats, 45 “Eco-Schools,” 60 additional school consults (which should lead to a considerable number of additional Eco-Schools in the future), 33 edible gardens, 1,700 staff members trained and a 200-member Blackboard website.
- The environmental curriculum throughout a student’s pre-K-12 experience.
- A focus on student initiative, involving students’ selection of projects, development of action plans, and implementation, with some staff help.
- Examples of student projects, including waste and energy audits, development of wildlife habitat and edible gardens, recycling, climate action, transportation and “green hour.”
- Provision of school utility bills to students so that they can learn from them.

Ms. Tholen noted that her liaison activities with other FCPS staff, including facility maintenance and nutrition. She also highlighted her work with teachers to assist them in using their outdoor time with students productively and to inform them of resources that are available to them (e.g., Meadowlark Gardens). She noted that she participates in regional consortia working on student environmental literacy, such as the development of the Mid-Atlantic Elementary and Secondary Environmental Literacy Strategy, and that she monitors the progress of national programs such as the U.S. Department of Education’s Green Ribbon Schools.

With respect to recycling, Ms. Tholen highlighted the following:

- A Potomac Disposal Services contract requires FCPS to reduce trash. A consultant visited over 170 schools to educate their staffs about recycling.

- Recycling efforts vary from school to school, with about 90% participating in some way. Some schools are doing a considerable amount of recycling, while others aren't.
- Ms. Tholen would like to see single stream recycling in all schools; however, the system isn't at this point yet.

George Lamb asked if there was a minimum requirement for recycling in each school. Ms. Tholen replied that every school must recycle, but no specific thresholds have been set.

Frank Divita asked who controls this. Ms. Tholen replied that there are many factors, including principals, maintenance staff training and teachers. She noted that Potomac Disposal Services has a recycling coordinator who visits schools to encourage recycling efforts.

Larry Zaragoza stressed a need for more publicity for Ms. Tholen's efforts regarding recycling, particularly to spur student-driven teams. He noted an effort at Herndon High School through which paper was collected from law firms and sold to support scholarships for students.

Ms. Tholen noted that there aren't recycling facilities on playing fields but that Langley High School has received grant funding to pilot a playing field recycling program.

Ms. Tholen concluded that FCPS is doing quite a bit more than it used to in regard to recycling but that the system is not perfect. In response to a question from Mr. Weisman, she noted that champions can make a big difference, and that such champions can be PTA, a parent, a principal or the school's environmental club.

After further discussion, there was a consensus among EQAC members that the council should support FCPS's efforts through recognition in the next Annual Report on the Environment.

2. Environmental Improvement Program Project Selection Criteria and Submission Requirements

Noel Kaplan provided an overview of the EIP, the proposed project selection process and proposed project evaluation criteria. He noted that copies of the draft proposed project scoring criteria and submission requirements document had been provided to each EQAC member. He and Kambiz Agazi asked the council for comments on these documents.

Frank Divita recommended that the scoring criteria be provided to agencies when soliciting proposals.

Linda Burchfiel expressed concern that the criteria may be geared too heavily toward cost benefits and questioned whether intangibles would count for enough. Larry Zaragoza expressed his view that the criteria needed to support a breadth of projects and not favor any one particular type of project (e.g., energy efficiency retrofits). He expressed concern that viable projects could

have little chance of success under the scoring criteria. Dr. Agazi replied that, consistent with a suggestion from George Lamb, staff planned to conduct a dry run of the criteria with the projects that had received funding (and projects that didn't get funding) to test out the criteria. He noted that, in the transmittal to agencies of the request for proposals, there would be a memo from Dave Molchany, a matrix for placing proposals into the proper format, and a copy of the project scoring criteria sheet.

Dr. Divita suggested that one of the requirements of funding should be the preparation of a project report at the end of the funding period documenting the efforts that were pursued and related successes. There was discussion of this idea and a general sense that there would be a need to demonstrate the success of this program, thereby encouraging continued funding for it.

Dr. Zaragoza expressed his view that proposed criterion #6 ("Project has a high probability of success") would be difficult to evaluate. After some discussion, a suggestion was offered to change this to "Appears to have necessary components to be successful."

3. Report and Recommendations from the Student Member Search Committee

Rich Weisman moved that EQAC recommend to the Board of Supervisors the appointment of Talia Schmitt as the EQAC Student Member for the July 2012-June 2013 term, with Adam Beissner as the alternate in the event that Ms. Schmitt cannot serve. Johna Gagnon seconded the motion, which carried by a unanimous vote of the members present.

Noel Kaplan indicated that he would contact Ms. Schmitt and arrange for her appointment by the Board of Supervisors.

4. Identification of Possible EQAC Legislative Positions for the 2013 General Assembly Session

EQAC discussed possible legislative recommendations that could be considered at the July or August EQAC meeting. Noel Kaplan noted that Larry Zaragoza had prepared a draft position statement supporting retention of the state's moratorium on uranium mining, as well as a draft update of a resolution that EQAC adopted in January.

Mr. Kaplan reviewed the schedule for consideration of legislative items, noting that he had received a short extension that would allow EQAC to adopt recommendations as late as its August 8 meeting. He also noted the required format for legislative proposals. After considerable discussion, three items were identified, by consensus, for consideration:

- A position statement supporting continuation of the state's moratorium on uranium mining. EQAC agreed to not update its earlier resolution but to structure the recommendation as a legislative proposal. Noel Kaplan was asked to find out if the Board of Supervisors had taken a position on this issue.

- Reiteration of EQAC's previous position statement supporting legislation to reduce the use of plastic disposable bags.
- A position statement supporting third-party power purchase agreements for renewable energy. Linda Burchfiel agreed to prepare this proposal and to coordinate as needed with county legislative staff on this idea.

A consensus supported the identification of the uranium mining position as EQAC's priority.

5. Preparation for the July 11, 2012 Joint Meeting with the Environmental Coordinating Committee

The following agenda items were identified:

- A briefing on the Energy Action Fairfax program.
- A briefing on the "Fairfax Forward" effort to consider changes to the processes through which the Comprehensive Plan can be amended.
- A briefing on the consideration of alternatives for new ramp connections between the Dulles Toll Road and Tysons Corner.

Mr. Kaplan was asked to request that presentations be limited to 20 minutes and that presentation/discussion times be included on the meeting agenda.

EQAC tentatively scheduled the following for its August 8 meeting: Fairfax County Park Authority natural resource management efforts (including invasives management); and the development of a new stormwater management ordinance. Later in the meeting, the South County energy triangle was added to the August 8 agenda.

6. Establishment of the 2012 Environmental Excellence Awards Nomination Review Committee

Linda Burchfiel, Bob McLaren and Jeff Allcroft agreed to serve on this committee and to present recommendations to EQAC no later than the August 8 meeting.

7. 2012 Annual Report on the Environment: Status Update

Rich Weisman, referring to EQAC's earlier discussion, volunteered to prepare a special "spotlight" section that would highlight some of the environmental efforts of Fairfax County Public Schools.

Noel Kaplan noted that all EQAC information requests had been sent to contributing agencies and that he would forward information to appropriate chapter authors as he received it.

8. Approval of the Minutes of the May 9, 2012 Meeting

Ms. Gagnon moved approval of the May 9, 2012 minutes with revisions recommended by Health Department staff. George Lamb seconded the motion, which passed by a unanimous vote of the members present.

9. Chairman's Items

Larry Zaragoza noted that he had been requested to have EQAC take a position on the Environmental Impact Statement for restoration efforts at Dyke Marsh. He noted that he had discussed this request with Chairman Koch, and that they concluded that EQAC typically does not take positions on site-specific issues and therefore should not do so for this issue. He noted, however, that individual EQAC members were free to comment as they see fit. Mr. Kaplan was asked to provide all members with a link to the website for the consideration of options for restoration of Dyke Marsh.

10. Council Member Items

Johna Gagnon noted that she attended a "New Trends in Green Development" summit that was held by the Southeast Fairfax Development Corporation. She noted that Noel Kaplan spoke at this summit.

Ms. Gagnon noted that, as reported at a meeting of the Fairfax Joint Local Emergency Planning Committee, the January pipeline leak at the Fairfax City tank farm was closed as of May. She noted that 7,550 gallons of product were removed.

Kat Pfleeger noted that this would be her last EQAC meeting. She thanked EQAC for the experience of serving as its Student Member. EQAC members wished her well with her studies at Stanford University.

Rich Weisman noted that he is a volunteer with Bikes for the World, a nonprofit organization with a mission "to collect unwanted bicycles and related material in the United States and deliver it at low cost to community development programs assisting the poor in developing countries or in the Washington DC metropolitan area." He noted that this organization leases space at the I-95 Landfill area for the storage and processing of bicycles and felt that a similar arrangement at the I-66 Transfer Station site would be beneficial. He asked for guidance on identifying someone who could assist in this regard. Mr. Kaplan indicated that he's forward Mr. Weisman's request to DPWES staff.

11. Staff Items

Noel Kaplan noted the following:

- The next Board of Supervisors Environmental Committee meeting is scheduled for October 2, 2012 at 2:00 PM in conference rooms 9 and 10 in the Government Center.
- The next Planning Commission Environment Committee meetings will be held at 7:00 PM on June 28 and July 12. Both meetings will focus on green building policy and implementation.
- The Department of Public Works and Environmental Services will hold a stakeholder meeting in late July on the development of a stormwater management ordinance. EQAC members will be notified of this meeting. EQAC agreed that a separate briefing to the council would be appropriate.

12. Adjournment

The meeting adjourned at 10:25 PM.