

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE/ENVIRONMENTAL QUALITY
ADVISORY COUNCIL
WEDNESDAY, SEPTEMBER 14, 2005**

COMMITTEE MEMBERS PRESENT:

Walter L. Alcorn, At-Large
John R. Byers, Mount Vernon District
Frank A. de la Fe, Hunter Mill District
James R. Hart, Commissioner At-large
Nancy Hopkins, Dranesville District
Kenneth A. Lawrence, Providence District
Laurie F. Wilson, At-Large

COMMITTEE MEMBERS ABSENT:

NONE

**ENVIRONMENT COMMITTEE/ENVIRONMENTAL QUALITY ADVISORY COUNCIL
(EQAC) MEMBERS PRESENT:**

Frank Crandall
Diana Handy
Stella Koch
George Lamb
Bob McLaren
Chet McLaren
Eleni Orphanides
Rachel Rifkind

PLANNING COMMISSION STAFF PRESENT:

Barbara J. Lippa, Executive Director, Planning Commission Office
Linda Rodeffer, Planning Commission Office

**DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENT SERVICES STAFF
PRESENT:**

Jimmie Jenkins, Acting Director
Michelle Brickner, Director, Site Development Services (SDS)
Shannon Curtis, Stormwater Planning Division (SWPD)
John Friedman, Land Development Services (LDS)
Laura Grapu, SWPD
Jan Leavitt, Code Analysis, LDS
James Patteson, Director, LDS
Fred Rose, SWPD
Valerie Tucker, Environmental and Site Review Division (ESRD)

DEPARTMENT OF PLANNING AND ZONING STAFF PRESENT:

John Bell, Engineer III, Planning Division (PD)
Noel Kaplan, Senior Environmental Planner, PD
Pamela Nee, Chief, Environment and Development Review Branch (EDRB)
Mary Ann Welton, Environmental Planner, PD/Staff Liaison, Fairfax County
Wetlands Board

OTHERS PRESENT:

Kambiz Agazi, Environmental Coordinator, Office of the County Executive
Deborah Reyher, Wedderburn Neighbors/OPCA
Sally Ormsby, Northern Virginia Soil and Water Conservation District
Stefanie Smith, Elm Street Development
Cathy Saunders, Friends of Burke's Spring Branch/McLean Citizens Association (MCA)
Andrienne Whyte, MCA/McLean Land Conservancy
Michael Rolband, President, Wetlands Studies and Solutions, Inc.
Laura Giese, Wetlands Studies and Solutions, Inc.
William Nell, Wetlands Studies and Solutions, Inc.
Beth Sprenkle, Wetlands Studies and Solutions, Inc.
Taylor Sprenkle, Wetlands Studies and Solutions, Inc.

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Planning Commission Vice-Chairman John R. Byers constituted the meeting at 7:05 p.m. in the Board Conference Room at 12000 Government Center Parkway, Fairfax, Virginia, 22035, pursuant to Section 4-102 of the Commission's *Bylaws & Procedures*, and indicated that the first order of business was to elect a committee chairman.

Commissioner de la Fe MOVED TO NOMINATE WALTER L. ALCORN, COMMISSIONER AT-LARGE, AS CHAIRMAN OF THE 2005 ENVIRONMENT COMMITTEE.

The motion was seconded by Commissioner Hart and carried unanimously. Vice Chairman Byers then turned the chair over to Chairman Alcorn.

As the first order of business, the Committee agreed to hold a public information workshop with the Environmental Quality Advisory Council (EQAC) on September 28, 2005, prior to the scheduled public hearings by the Planning Commission on October 5, 2005 and the Board of Supervisors on October 17, 2005 on the proposed Public Facilities Manual (PFM) Amendment on Drainage Divides.

Chairman Alcorn said tonight's discussion would focus on suggestions, ideas, and observations concerning stream protection issues.

Stella Koch, EQAC, said that she would like to see the committee develop tools for classifying streams.

Commissioner Lawrence said he would like to see tools designed to take into account that some streams became perennial only at certain points. Commissioner de la Fe commented that there were sometimes problems classifying a stream when it was a manmade wet pond. Frank Crandall, EQAC, pointed out that most streams originated with a spring, such as Burke's Spring Branch that had a spring house around it which had been built in 1807. He said the various invertebrates and plant species living in the stream were testimony to its perenniality, but that it failed to make the score on the scientific protocol for the simple reason that the flow disappeared under a gravel bed in between rain storms. He noted an acre of buildable land was gained for every 220 feet a stream was declassified; therefore, the development community was very interested in this subject.

Bob McLaren, EQAC, said an intermittent stream needed to be protected because if headwaters were destroyed there could be far reaching impacts downstream to an area that was clearly perennial. He said this was a problem that needed to be addressed.

Mr. McLaren and Ms. Koch responded to questions from Chairman Alcorn and Commissioner Hart about the definition of intermittent and perennial streams. Commissioner Hart asked if additional text in the Chesapeake Bay Preservation Ordinance was needed or if the Public Facilities Manual (PFM), or some other vehicle more specific than the Comprehensive Plan, was needed to ensure protection of streams.

Ms. Koch commented that she hoped the committee could come up with a mechanism for protecting intermittent streams. Mr. Crandall pointed out the Chesapeake Bay Preservation Ordinance protected perennial streams and if Environmental Quality Corridor (EQC) standards were applied consistently, it would provide some, but not broad, protection.

Summarizing, Chairman Alcorn said that stream protection could be addressed through the EQC policy in the Comprehensive Plan, the Chesapeake Bay Preservation Ordinance, the PFM, and watershed management plans that were being developed.

Noel Kaplan, Planning Division, Department of Planning and Zoning, distributed an excerpt of the Environment Policy Plan of the Comprehensive Plan, Objective 9: "Identify, protect and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County." (A copy of the excerpt is in the date file.) He reviewed the current policy pertaining to the EQC and said that the Zoning Ordinance defined the 100 year floodplain as applying to any stream that collected 70 acres or more of drainage. He provided an overview of the history of the EQC policy and how it was applied prior to the revision of the Policy Plan beginning in the late 1980s. He noted that the floodplain was the core of the stream valley EQC system and that EQC designations were typically not pursued in headwaters areas unless specific soil types were present in these areas. Mr. Kaplan pointed out the Policy Plan had been revised in the late 1980s and although there was still some prescriptive language in it, it was primarily focused on function and that land could be included in the EQC system if it would achieve certain purposes. He said that representations that were made at the time of

consideration of the revised policy made it clear that the objective of this revision was not to create a vast extension of the network but rather to provide flexibility.

For example, he said if an environmentally sensitive area was present upstream of the 70-acre drainage point on a property that was subject to a zoning application, the protection of this area could be negotiated.

For example, he said if a valuable corridor of over 70 acres became available for development, its protection could be negotiated.

In response to a question from Ms. Koch, Mr. Kaplan said that because EQC was a Plan policy, not an Ordinance requirement, it could not be applied to by-right development unless there was some kind of discretionary review process underway.

Commissioner Lawrence commented that several possibilities had been previously mentioned to protect streams such as identifying springs and seeps, protecting headwaters, and applying EQC policy to cases where headwaters could be identified. Commissioner Alcorn said that because more was known about streams since the EQC policy had last been updated, further revision might be warranted.

Michael Rolband, President, Wetlands Studies and Solutions, Inc., said the focus seemed to be on buffers, but that most stream erosion occurred because of the stormwater management policy. He said the one thing that could be done which would apply to both by-right development and rezoning applications would be to change the stormwater management requirements. Ms. Koch agreed and said the volume of water entering streams had the biggest impact on erosion and sediment deposition.

Mr. Rolband, pointed out that increased parking rates increased impervious surface and said perhaps a certain amount of pervious surface could be required for parking lots. He noted that although this would not solve the problem, it would make a small contribution and could be done without a lot of controversy. He also suggested the possibility that bonus density could be given to a property owner if he voluntarily provided a 50 foot buffer.

Michelle Brickner, Site Development Services, Department of Public Works and Environmental Services (DPWES) said DPWES was working with a consultant to get six additional low impact development (LID) practices included in the PFM to provide more options for meeting BMPs and stormwater management requirements: (1) vegetative roofs; (2) bio-retention basins; (3) bio-retention swales, (4) porous pavers; (5) vegetative tree box holders; and (6) afforestation and

reforestation. In addition, she said an Adequate Outfall Committee was developing recommendations which would be available soon. She said the one-year detention requirement had been considered in the context of adequate outfall and that an Adequate Outfall Committee was developing recommendations which should be available soon.

Commissioner Hart suggested that when the proposed Zoning Ordinance amendment on parking requirements was advertised that it allow flexibility to consider imposing minimum requirements for pervious surfaces.

Ms. Koch pointed out that these two issues, increasing parking requirements and protecting pervious surfaces, were competing goals.

Mr. Crandall noted that removal of vegetative buffers resulted in an increase in impervious surface which had a far-reaching impact on streams and floodplains.

Ms. Koch said a matrix would be helpful to identify issues and analyze solutions.

Adrienne Whyte presented six issues that were of concern to the McLean Citizens Association and the McLean Land Conservancy: (1) PFM requirement prohibiting developers from getting BMP credits on individually or private owned lots; (2) County standard easement language; (3) rules for declassification of streams and resource protection areas and the improvement of the Chesapeake Bay Preservation Ordinance and PFM; (4) bonus densities for floodplains, RPA, etc.; (5) protection of intermittent streams from by-right development; and (6) stream restoration. (A copy of her presentation is in the date file.)

Ms. Brickner said in addition to getting the six new LID practices in the PFM, pending projects included a review of adequate outfall standards by the Engineering Standards Review Committee and detention requirements during construction.

Responding to a question from Chairman Alcorn, Ms. Brickner explained that consideration was being given to requiring an adequate outfall analysis as part of Phase I controls which included grading, subdivision, and site plans because drainage patterns might be different and the amount of runoff could be increased during construction which could require detention during Phase I. Addressing a concern raised by Ms. Whyte, Ms. Brickner said the reason for conservation easement limitations on individual lots was due to enforcement issues. She cited two examples; the first of which was a recent case where a conservation easement had been recorded but there was no usable area for the homeowner because the easement literally went up to the house. She said in the second case a whole street of homeowners had cleared their conservation easement.

Addressing another concern raised by Ms. Whyte concerning easement language, Ms. Brickner acknowledged that it was contradictory but explained that it was necessary because if a storm sewer was located in a floodplain, it had to be maintained which might require digging and therefore would not be left perpetually undisturbed. Responding to a question from Ms. Whyte,

Ms. Brickner said the words "or near" could not be deleted because a ten foot storm drainage easement was not large enough to maintain a storm sewer.

Bob McLaren made the following comments: "or near" was too vague and needed to be refined; several tools had been mentioned to protect streams and although none of them solved the

problem, they could mitigate the impact; total volume, a major component of erosion which needed to be fixed, could be addressed by infiltration measures and buffering; perhaps a 100 foot buffer was not needed in the area of headwaters; and eliminating density bonuses did not always mean more impervious surface in a dense community.

Ms. Koch suggested that preservation areas for headwaters be identified and prioritized. Fred Rose, Stormwater Planning Division, DPWES, said that watershed planning analysis included the possibility of prioritizing the entire watershed areas, noting that the worst conditions in the Difficult Run watershed had been in headwater areas. He said a strategy should be developed to address and mitigate this situation.

After discussion about the definition of headwaters, Mr. Crandall said that if headwaters were spring fed, watershed area calculations were irrelevant and that lateral flow, where the water table was a bit above the stream, was different from a spring which came up through rock fractures from deeper layers. He said he was skeptical about the idea of basing something simply on watershed area calculations. Bob McLaren commented that identifying spring fed waters was easy but that identifying lateral flow and seep areas would be more difficult.

Mr. Rolband commented that for infill development where stormwater management was in place, existing conditions could be used as a base condition to decide what was an allowable flow rate. He said the design should be based on a forested condition instead of existing conditions which was a very simple thing to do. Ms. Brickner noted that staff would consider this when reviewing detention requirements.

Mr. Rolband stated that although volume could not be controlled, its cause could be determined. He suggested as an adequate outfall measure, allowable flow rates be reduced pro rata in the one and a half, two, and ten year storms, based on an increase in volume, so approximately the same amount of work was going into the stream and, therefore, would cause the same amount of energy and erosion problems. He said many developers would be willing to accept that as a solution to determine adequate outfall.

Bob McLaren stated that if conservation easements could be attained more easily, it would greatly help. Commissioner Lawrence pointed out that easements should be enforceable. Ms. Whyte stated that the County Attorney's Office had been most cooperative in the enforcement of easements. Commissioner Lawrence said it would be beneficial if the matrix could include, in addition to tools, techniques which could be used to address different situations.

Chairman Alcorn suggested that he, Ms. Koch, and anyone else interested, work with Mr. Kaplan on the development of a matrix which would identify the pros and cons of different tools and techniques discussed tonight to determine what solutions would be the most effective and have the best chance for implementation. He said the matrix should also include the status of any proposed or pending changes relating to the declassification process.

Mr. McLaren suggested that EQAC form a subcommittee to work on the matrix and meet again with the Planning Commission's Environment Committee to review it.

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The meeting was adjourned at 8:16 p.m.
Walter L. Alcorn, Chairman

For a verbatim record of this meeting, reference may be made to the audio recording which can be found in the Office of the Planning Commission of Fairfax County, Virginia.

Minutes by: Linda B. Rodeffer

Approved: October 19, 2005

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission