

**FAIRFAX COUNTY PLANNING COMMISSION  
ENVIRONMENT COMMITTEE  
THURSDAY, JANUARY 25, 2007**

**COMMITTEE MEMBERS PRESENT:**

Walter L. Alcorn, At-Large  
Frank A. de la Fe, Hunter Mill District  
James R. Hart, Commissioner At-large  
Nancy Hopkins, Dranesville District

**COMMITTEE MEMBERS ABSENT:**

None

**OTHER COMMISSIONER PRESENT:**

Rodney L. Lusk, Lee District

**PLANNING COMMISSION STAFF PRESENT:**

S. Robin Hardy, Assistant Director, Planning Commission Office  
Linda Rodeffer, Clerk, Planning Commission

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

Frank Crandall, Dranesville District  
Robert McLaren, Lee District

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

Carey F. Needham, Building Design Branch, Planning and Design Division  
Michael Knapp, Urban Forest Management

**DEPARTMENT OF PLANNING AND ZONING STAFF PRESENT:**

Noel Kaplan, Senior Environmental Planner, Planning Division (PD)  
John Bell, Planner III, PD  
Pamela Nee, Chief, Environment and Development Review Branch, PD  
Deborah Albert, Planner, PD  
Mary Ann Welton, Environmental Planner, PD  
Jennifer Bonnette, Planner, PD

**OTHERS PRESENT:**

Mark Headly, Wetland Studies and Solutions, Inc.  
Ben Rosen, Wetland Studies and Solutions, Inc.  
Taylor Sprenkle, Wetland Studies and Solutions, Inc.  
Richard Gonzales, Citizen  
Luis Gonzales, Citizen  
Mark Riso, National Association of Industrial and Office Properties

Chairman Walter L. Alcorn convened the meeting at 7:03 p.m. in the Board of Supervisors' Conference Room, Fairfax County Government Center, 12000 Government Center Parkway, Fairfax, Virginia 22035.

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Commissioner Hart MOVED THAT COMMITTEE MINUTES OF JUNE 1, 2006 BE APPROVED. Commissioner Hopkins seconded the motion which carried unanimously

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Chairman Walter L. Alcorn noted that the purpose of the meeting was to discuss stream and buffer area protection and restoration and the draft Plan Amendment concerning air quality and green building issues.

Noel Kaplan, Senior Environmental Planner, Planning Division, Department of Planning and Zoning, summarized the efforts to date concerning stream and buffer area protection/restoration:

- The project to remap resource protection areas (RPAs) several years ago had raised many concerns about perennial stream designation and reclassification;
- A matrix had been developed to identify development related actions that could be taken to support stream protection;
- DPWES Stormwater Planning Division staff undertook a mapping effort to determine the impact of expanding buffer areas and headwaters in designated watersheds, including vacant and utilized parcels. Remapping showed that there was significant potential for headwaters stream protection; stream miles could be increased by 50 percent; and most of the impact would be on residential development.
- A decision was made not to pursue a regulatory focus but to strengthen Policy Plan language explicitly recommending protection of headwaters streams by either applying the EQC language to headwaters areas or focusing on water quality policies to provide support for protection and restoration of headwaters streams.

Mr. Kaplan distributed a document entitled "Stream and Buffer Area Protection/Restoration," outlining proposed Policy Plan Amendment options to strengthen policy in headwaters areas, a copy of which is in the date file.

Mr. Kaplan reviewed three past zoning cases in which the proposed policy would have had an impact. The first example was the Warren property located between Lee Highway and Government Center Parkway in the Difficult Run headwaters area. He said protection had been extended up into the central headwaters system but more of the channel could not be preserved due to site design issues. Mr. Kaplan said this example illustrated how Area Plans text could

provide additional protection. He noted that staff did not think there was justification to recommend denial based on the small tip of the headwaters stream not being protected.

Mr. Kaplan said the second example was the Dorforth property which was also located close to the Government Center in the Springfield District near Route 50 and Fair Oaks Mall. He explained that several streams ran through the property which was located in the headwaters of the Big Rocky Run sub-watershed of the Cub Run watershed. He said staff had negotiated protection of two major stream valleys but that the developer would not agree to anything more and had ultimately persuaded staff that because the portion in question was located in a limited drainage area and was an intermittent stream, it could not be called EQC. Mr. Kaplan said if additional Plan guidance had existed that explicitly supported headwaters stream protection it would have been possible that a third stream could also have been protected.

Mr. Kaplan said the third case study was the Greenspring Village site located in the Lee District between the Franconia-Springfield Parkway and Old Keene Mill Road. He said the main stream along the western property boundary was Accotink Creek with extensive steep slopes and a stream that bisected the site from southeast to northwest. He pointed out that EQC was located in part of the stream system, but not entirely. Mr. Kaplan noted that buffering and protection along the central stream to the south existed but not to the north and he also referenced another stream in the northeastern corner of the site that had neither been identified as an EQC nor a protected area. He said the development plan had shown a stormwater facility although it had not been clear what the needs were in the area. He suggested that if a facility in that location would provide more benefit to downstream resources, it could be considered to be an appropriate location, but if not it might be better to do a localized stormwater treatment. Mr. Kaplan explained that if policy had existed calling for headwater protection, a better job could have been done to keep the lot lines farther away from the channel.

Mr. Kaplan said it had been difficult finding examples where headwaters had not been protected and, although others may exist, it was not a common occurrence. He said a policy change would, however, strengthen the negotiation process.

Responding to a question from Commissioner Hopkins, Mr. Kaplan said headwaters were the uppermost reaches of a watershed or a sub-watershed, generally with intermittent and in some cases ephemeral streams with definable channels with limited drainage areas that fed into a larger system. He added that EQC policy had been very effective in preserving larger stream systems. He said in the past a more mechanistic approach to delineation had been taken, but when the Policy Plan had been amended in 1989, it became less mechanistic and based more on the value of the system, such as meeting functions of the EQC. He said that, in response to concerns raised by the development community at the time about the expansion of the EQC, staff's position had been that the system was being refined, not expanded.

In response to a question from Commissioner Hart about how owners could determine if their property was located in an environmentally sensitive area, Mr. Kaplan said that the EQC designation was made during the zoning process through negotiations between the County and the developer, based on Plan policy, not regulation. He said staff would be happy to meet with

owners to give them an idea of the protection recommended, but pointed out that a final determination would depend upon the details of the proposal.

Commissioner de la Fe noted that it was possible that headwaters protection could also be obtained in instances other than the zoning process. He cited an example in the Hunter Mill District in which a developer needed to request permission from the Park Authority to tap into the sewer system for by-right development and as a result stream protection had been negotiated.

Frank Crandall, Dranesville District EQAC member, said review of stream protection should not only take place in zoning cases but also in by right and single parcel infill redevelopment because in many cases, the footprint of a dwelling was expanded or impervious surface was added. He said perhaps this could take place during the site review process.

Chairman Alcorn said at the last meeting of the committee on June 1, 2006, it had been pointed out that since many of the affected properties were in stable residential neighborhoods, they would not be subject to any kind of a review. He said outreach would be an effective tool to help owners understand that the choices they made in their backyards had a real affect on stream quality and what they could do to improve it. Mr. Crandall said owners could be encouraged to protect and maintain stream quality if they were given incentives for doing so.

Mr. McLaren commented that public outreach should be encouraged but had to be supported, noting that most of the large conservation organizations such were not interested in small causes.

Responding to a question from Mr. Kaplan, Chairman Alcorn said that Option 1, on page 3 of 9, and Option 2, on page 9 of 9, of the draft Policy Plan Amendment regarding stream and buffer area protection and restoration, should be as consistent as possible and both should be advertised. (A copy of the draft amendment is in the date file.)

Commissioner Hart said the advertisement of the proposed amendment should be as broad as possible to allow flexibility to incorporate suggestions that may be made at the public hearing.

In response to a question from Mr. Kaplan, Chairman Alcorn requested that the final version of the draft amendment be reviewed by the committee and then presented to the full Planning Commission for a recommendation to the Board of Supervisors for authorization to advertise it.

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Chairman Alcorn noted that the second item on the agenda was the draft Policy Plan Amendment on Air Quality and Green Buildings. Mr. Kaplan noted that a draft staff report for a Policy Plan amendment addressing air quality and "green building" issues had been distributed to the committee on January 18, 2006. (Copies of Mr. Kaplan's PowerPoint presentation and the draft staff report are in the date file.)

Mr. Kaplan said the purpose of the amendment was to strengthen air quality guidance in the Comprehensive Plan in support of a number of initiatives and to incorporate support for "green

building" practices into the Plan. He explained that green building practices were those which supported minimization of negative environmental impacts of buildings and because both issues were closely related, staff had added a section entitled "Resource Conservation and Green Building Practices."

Mr. Kaplan reviewed environmental initiatives, including an Environmental Coordinating Committee Air Quality Subcommittee Report; a Tree Action Plan endorsed by the Board of Supervisors; the Environmental Improvement Program; a regional effort to support application of green building practices; and a resolution adopted by Council of Governments calling on local governments to develop policies, regulations, and incentives to further green building design for private and public sector development.

Mr. Kaplan explained that the proposed amendment would implement the recommendations made in the Environmental Coordinating Committee Air Quality Subcommittee Report by updating and strengthening the introductory text in the Air Quality Section to provide a better context for current and proposed air quality policies. He noted that the new text emphasized air quality approaches that could conceivably be applied during the planning and development review processes. He said these included land use approaches; transportation strategies; tree preservation, planting and landscaping practices; energy conservation; green building practices; support of episodic measures by eliminating or postponing activities on Code Red days; use of better landscaping equipment; and public outreach.

In response to a question from Commissioner Hart, Mr. Kaplan said that the proposals were policy ideas and that implementation issues had not yet been addressed.

Mr. Kaplan noted that the green building concept was a complement to site design and was important because buildings used a significant amount of energy and contributed to greenhouse gas emissions. He said benefits of green buildings practices included efficient use of natural resources such as water and energy; improvement of indoor air quality; and increased worker productivity. He pointed out that green building did not necessarily mean that there would be better site design or utilization of low impact development techniques.

Mr. Kaplan explained that Leadership in Energy and Environmental Design (LEED) was a green building rating system that was widely accepted and applied in the United States. He said it was a comprehensive system developed by the U. S. Green Building Council, based on a consensus approach of stakeholders. He noted that although not completely accurate, the terms LEED and green building were often used interchangeably. He said that LEED certification was based on a threshold number of credits with different levels of certifications. He pointed out that rating systems had been established by the U. S. Green Building Council for new construction and major renovations; commercial interior projects; core and shell projects; and existing building upgrades and operations. Mr. Kaplan also noted that other systems were being developed for homes and neighborhood development.

Mr. Kaplan said LEED categories included sustainable sites; water efficiency; energy and atmosphere; materials and resources; indoor environmental quality; and innovation and design

process. He explained that the Energy Star program, a partnership between the U. S. Environmental Protection Agency and the U. S. Department of Energy, was another green building practice which focused on energy conservation. He noted that the Energy Star program had a number of components such as "Designed to Earn the Energy Star" recognition based on building design plans, "Energy Star Qualified Homes" certification; and certification of energy efficient appliances, equipment, fixtures, and building components.

Mr. Kaplan said the proposed draft amendment recommended replacing the existing generic language related to energy and water conservation with more specific and defined guidelines to encourage the application of energy conservation and other green building practices; provide incentives for LEED or Energy Star certification; encourage professionals with accreditation in green building practices to serve on development teams; define green building practices; and include a definition for green building in the Glossary Section of the Plan.

Mr. Kaplan emphasized that the proposed amendment would set the policy context for negotiations of green building commitments during the zoning process. He said although discussion had begun about proffer language, implementation recommendations during the zoning process had not yet been developed and that incentives had not been identified. He noted the potential application of Area Plan text supporting green building practices, particularly in growth centers where density could be tied, in part, to green building design. He also noted that a recommendation had been made to the Tysons Corner Task Force to think about green building design with the hope that density option incentives could be provided.

Mr. Kaplan explained that although extensive coordination with the development industry had not been made, the National Association of Industrial and Office Properties supported the green building concept as a policy incentive but not as a mandate. He noted that the Northern Virginia Building Industry Association would be introducing this topic at a Chapter meeting in February.

Mr. Kaplan noted that the residential development criteria referenced solar orientation, landscaping, and site design techniques, but did not address energy conservation in terms of how buildings were designed. He said because there might be opportunities to pursue Energy Star commitments through proffers, the environmental component of the criteria should be reviewed.

Commissioner de la Fe said although he liked the idea of including these green building recommendations in the Policy Plan, he had qualms about requiring specific certification such as LEED. Mr. Kaplan replied that the proposed amendment encouraged the application of energy conservation and other green building practices and to provide incentives, where appropriate, to get commitments for certification. Commissioner de la Fe said it might not be prudent to tie green building to density.

Mr. Kaplan responded to questions from Commissioner Hart about providing incentives for green building and from Commissioner Hopkins about use of green building techniques for parking structures.

Mr. Crandall pointed out that green site design and green building design were different. He suggested looking at green development in a more holistic way such as tree preservation, both of which affected air quality and stormwater management.

After a brief discussion, it was decided that the next step in the process would include presentations from the U. S. Green Building Council, Energy Star, and the building industry. Mr. McLaren also suggested touring a green building project to see how techniques had been applied.

Chairman Alcorn said it was very important to collect data as green buildings were developed to determine the impact on maintenance costs, water quality, and other issues.

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The meeting was adjourned at 8:17 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 Planning Commission Office.

Minutes by: Linda B. Rodeffer

Approved: March 29, 2007

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Linda B. Rodeffer, Clerk  
Fairfax County Planning Commission