

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE/
ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEETING
THURSDAY, APRIL 30, 2009**

COMMITTEE MEMBERS PRESENT:

Walter L. Alcorn, At-Large
Jay P. Donahue, Dranesville District
Earl L. Flanagan, Mount Vernon District
James R. Hart, Commissioner At-Large, Chairman
Kenneth A. Lawrence, Providence District
Timothy J. Sargeant, At-Large

COMMITTEE MEMBER ABSENT:

Frank A. de la Fe, Hunter Mill District

ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEMBER PRESENT:

Stella Koch, At-Large, Chair

DEPT. OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES STAFF PRESENT:

Michelle Brickner, Assistant Director, Land Development Services (LDS)
John Friedman, Director, Code Analysis Division (CAD), LDS
Judith Cronauer, CAD, LDS
Shannon Curtis, Stormwater Planning Division

OTHER STAFF PRESENT:

Noel Kaplan, Planning Division, Department of Planning and Zoning
S. Robin Ransom, Assistant Director, Planning Commission Office
Kara A. DeArrastia, Deputy Clerk to the Planning Commission

OTHERS PRESENT:

Michael Rolband, President, Wetland Studies and Solutions, Inc.
Budd Titlow, E²M - Engineering Environmental Management Inc.

ATTACHMENTS:

(1) PowerPoint Presentation

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Chairman James R. Hart called the meeting to order at 7:06 p.m., in the Board Conference Room, 12000 Government Center Parkway, Fairfax, Virginia 22035.

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Judith Cronauer, Code Analysis Division (CAD), Land Development Services (LDS), Department of Public Works and Environmental Services (DPWES), delivered a PowerPoint presentation, as shown in Attachment (1). The slides addressed the following topics:

- Estimated Cost per Pound of Nutrient or Sediment Removed
 - Structural best management practices (BMPs) versus riparian forest buffers
- Staff Estimated Level of Effort (hours)
 - 2,080 annual hours = 1 staff member
- Reforestation
 - Alternative regulatory vehicle
 - Plan B evaluation:
 1. Cannot require reforestation of Resource Protection Areas (RPAs) unless development encroaches into the RPA.
 2. Expand the RPA to include upstream areas, which would require 100-foot minimum buffer width and include more stringent requirements for RPAs.
 3. Implement riparian buffer regulations upstream of RPAs, although reforestation could not be required and this was limited to regulating only greater than 2,500 square feet of disturbance.
 4. Continue implementation of the Comprehensive Plan amendment that encourages preservation of buffer areas upstream of RPAs and the new Tree Conservation Ordinance for preservation of headwater stream buffers.
- Staff's Recommendation
 - Continue implementation of Comprehensive Plan amendment and Tree Conservation Ordinance for preservation of headwater stream buffers
 - Do not implement a regulatory approach due to the following reasons:
 - Insufficient resources due to current economic climate
 - Limitations regarding enabling authority to require reforestation
 - Regulating only land disturbance of greater than 2,500 square feet
 - Impact to homeowners

Ms. Cronauer noted that staff's recommendation would be presented to the Board of Supervisors' (BOS) Environmental Committee on June 15, 2009. She said this presentation should also include the recommendations of this Committee and the Environmental Quality Advisory Council (EQAC).

Concluding her presentation, Ms. Cronauer reviewed the final slide that summarized the workgroup's progress to-date on developing a framework for the regulatory approach. She then asked for guidance from this Committee on what she should present to the BOS Environmental Committee on June 15.

In response to a question from Commissioner Lawrence, Ms. Cronauer said the Tree Conservation Ordinance required developers to preserve a certain amount of existing vegetation where feasible, which might apply to riparian buffer areas.

Answering a question from Commissioner Lawrence, John Friedman, Director, CAD, LDS, DPWES, explained that the Tree Conservation Ordinance required developers to meet the tree preservation target, which equated to the percentage of the property that was covered by tree canopy at the time of plan submission.

Chairman Hart said he thought that the BOS supported a regulatory approach. He commented that regulating drainage areas of 50 acres, which would be the least expensive approach, did not appear to accomplish the intended goal of preserving headwater stream buffers. Chairman Hart expressed support for implementation of riparian buffer regulations, as depicted in Number 3 under the Plan B evaluation on the "Reforestation" slide. He said the Committee should relay to the BOS that a regulatory approach was worth pursuing, but due to budget constraints, it should be re-examined in one to two years.

In reply to questions from Commissioner Lawrence, Mr. Friedman noted that the preservation of a certain amount of existing treed areas on-site, as required by the Tree Conservation Ordinance was used as a starting point goal. He said treed areas located along headwater streams would likely be preserved under the Ordinance. He pointed out that since trees sought water they tended to grow near water.

Stella Koch, At-Large, Chair of EQAC, said she believed that an undisturbed forested area over time was more cost effective than a developed area since it required no maintenance and provided environmental benefits.

Responding to a question from Ms. Koch, Ms. Cronauer said staff had examined the costs to remove nutrients and sediments from structural BMPs and riparian forest buffers based on a water quality perspective.

Ms. Koch expressed concern about staff's analysis of the nutrient and sediment removal costs because it did not consider the health or biology of streams and riparian buffers.

Commissioner Flanagan said he supported staff's recommendation to rely on the Tree Conservation Ordinance for the preservation of headwater stream buffers because it would have the least impact on the budget. He suggested that the financial impacts of the four Plan B alternatives be considered in making a recommendation to the BOS.

In response to questions from Chairman Hart, Mr. Friedman indicated that under the new Tree Conservation Ordinance, the minimum tree canopy requirement for low-density areas had been increased. He said if a development site was completely devoid of trees, a specific percentage of the site had to be planted with trees to meet the 20-year canopy goal. Mr. Friedman explained that by-right redevelopment must meet the applicable tree canopy requirement and developers might be eligible for a tree canopy credit multiplier if trees were preserved in preferential areas.

Chairman Hart commented that riparian buffer regulations would improve upon the Tree Conservation Ordinance in mitigating the environmental impact of by-right redevelopment of unforested properties.

Commissioner Sargeant explained that the immediate goal was to inform property owners and potential developers about the importance of riparian buffers and protecting or utilizing them in a positive and environmentally sensitive way. He suggested that language be incorporated into the Environment Policy Plan Element of the Comprehensive Plan that provided incremental

approaches to this issue, such as actions to incrementally improve, protect, preserve, and enhance buffers and utilize them as funding became available.

Ms. Koch said it was important to first make a public statement conveying the County's belief that riparian buffers were valuable and headwater streams benefited from them. She suggested that the next step be to inform the public that the current economic situation would postpone the restoration of riparian buffers in the County. Ms. Koch also indicated her support for Commissioner Sargeant's suggestion.

Answering questions from Chairman Hart, Commissioner Sargeant said that the proposed riparian buffer regulations could be described to property owners in a way that kept them on alert and allowed them to seek further guidance if needed. He noted that the Committee could still recommend the range of the drainage area and buffer width.

Michelle Brickner, Assistant Director, LDS, DPWES, reminded the Committee that the County Attorney's Office had indicated that the County did not have the authority to require reforestation of RPAs unless the encroachment was greater than 2,500 square feet. She said this implied that a property owner or developer could proceed to destroy the buffer on a property in 2,500-square foot increments before or after filing a building permit. She noted that this issue raised the question of whether the County should expand the RPA and place the burden of a 100-foot minimum buffer width on property owners.

Commissioner Lawrence commented that the County needed to declare that it held riparian buffers to be of value although the scope and set of circumstances had not yet been defined.

Commissioner Alcorn expressed support for a public outreach and education effort and recommended that it focus on owners of developed private lots that encroached into riparian buffers.

Chairman Hart asked if the Committee could submit a legislative initiative before the 2010 Virginia General Assembly to prohibit Fairfax County property owners or developers from disturbing riparian buffers in a Resource Management Area in less than 2,500 square foot increments. Mr. Friedman replied that this was possible. Chairman Hart suggested that this legislation limit the cumulative amount of the clearing of vegetation on a property so that it would be prevented from occurring in incremental amounts.

In reply to questions from Ms. Koch, Shannon Curtis, Stormwater Planning Division, DPWES, explained that six watershed management plans, which had been completed and approved by the BOS, addressed the restoration of particular degraded buffer areas on watershed sites. He noted that staff was currently developing management plans for the remaining watersheds in the County and policy recommendations had been separated from the planning process for both groups of watersheds.

Ms. Koch said this workgroup should consider recommending an amendment to the Policy Plan that encouraged restoration of riparian buffers. Noel Kaplan, Planning Division, Department of

Planning and Zoning, pointed out that existing Policy Plan language strongly supported commitments to restoration of degraded stream channels and riparian buffer areas and he, therefore, said that a Policy amendment would be unnecessary. Commissioner Alcorn concurred and explained that when the Policy Plan had been amended to strengthen Plan guidance regarding the protection and restoration of stream channels and associated riparian buffer areas, it was intended to be a first step toward additional regulatory, outreach, or other related measures to further implement this policy. He proposed that a snappy buzzword be used in the watershed planning process to assist in the public education and outreach effort of riparian buffer regulations.

Commissioner Flanagan said the Committee needed to define the distance upstream of RPAs where riparian buffers should be protected and determine how to map these areas. Ms. Brickner replied that based on the opinion of the County Attorney's Office, the County's authority to regulate the protection of headwaters outside of RPAs was extremely limited.

Michael Rolband, President, Wetland Studies and Solutions, Inc., suggested that staff request the County Attorney's Office to investigate the City of Alexandria Article XIII Environmental Management Ordinance, noting that it required as part of its general performance requirements for Chesapeake Bay Preservation Areas, the preservation or establishment of a 50-foot wide vegetated area on the outward edge of an intermittent stream or wetland. He added that the Ordinance, however, did not require reforestation. Discussion about the City of Alexandria Ordinance ensued with input from Mr. Kaplan, Mr. Rolband, Ms. Brickner, and Ms. Cronauer.

Chairman Hart said staff should consider whether Fairfax County could implement regulations that were similar to the City of Alexandria. Mr. Rolband noted that the City of Fairfax had also implemented riparian buffer regulations. He said regulation was necessary to ensure the protection of streams since public education might not be sufficient.

Chairman Hart reviewed the bullets on the "Staff's Recommendation" slide. He said reliance on the Comprehensive Plan Policy amendment and the new Tree Conservation Ordinance for the preservation of headwater stream buffers would be a reasonable approach if no other actions were taken at this time. He noted that the issue of insufficient resources needed to administer and enforce a regulatory approach could be re-examined when the economic situation improved. Chairman Hart explained that the issues regarding the County's authority to require reforestation and regulate land disturbance less than 2,500 square feet could be presented to the BOS as legislative changes to be addressed separately and at a later time when appropriate. He said that all County regulations had some impact on property owners and it was the role of the Planning Commission and ultimately the BOS to decide how to mitigate the impacts and weigh the associated costs against the benefits.

Commissioner Alcorn said he was opposed to recommending the regulatory approach at the present time because it probably would not be approved by the BOS. He suggested that the Committee consider how to effectively conduct outreach and educate the public on the preservation of riparian buffers and to build support for this initiative.

Commissioner Lawrence expressed support for a phased approach that began with reliance on the Tree Conservation Ordinance, continued with public education and outreach, and concluded with a regulatory approach when funding was available and public support was achieved.

Chairman Hart reiterated that the Committee should relay to the BOS that the regulatory approach should only be postponed to allow the BOS to address the lack of resources and other related issues and encourage the public to become educated about riparian buffers.

Commissioner Donahue suggested that the Committee forward a recommendation to the BOS so that the Committee could learn its preferred position and obtain further guidance.

Commissioner Sargeant recommended that the following options be presented to the BOS: 1) investigate the City of Alexandria's regulatory approach to determine whether it would be applicable in Fairfax County, 2) explore the legislative authority initiatives, and 3) establish a phased approach for implementation that began with public education on the values of riparian buffers.

Responding to a question from Commissioner Donahue, Ms. Koch indicated that the City of Alexandria was significantly denser and had considerably less open space than Fairfax County and some of its streams were paved. Mr. Rolband pointed out that Alexandria also did not have many streams.

Commissioner Alcorn suggested that the Committee forward a strong recommendation to the BOS to help lay the groundwork for the regulatory approach and ensure a successful ordinance adoption.

Commissioner Lawrence said if a phased approach was recommended, the Committee should indicate that the first step, which recognized the effect of the new Tree Conservation Ordinance, was necessary although it would not sufficiently support the regulatory approach.

In response to a question from Chairman Hart, Ms. Koch noted that EQAC would discuss the issues raised during this meeting and she would present to the Committee the outcome of that discussion.

Replying to an inquiry from Chairman Hart, Robin Ransom, Assistant Director, Planning Commission Office, explained that if the Committee voted on this issue at its next meeting on May 28, this would give the Committee enough time to forward a recommendation to the full Planning Commission for vote at its meeting on either June 10 or 11, prior to the BOS Environmental Committee meeting on June 15.

It was the consensus of the Committee that a recommendation should be prepared in advance of the next meeting scheduled for May 28, 2009, at 7 p.m. in the Board Conference Room.

In response to a question from Ms. Ransom, Chairman Hart said the memorandum outlining the recommendation should be sent from the Committee rather than staff, and that it should be circulated among Committee members prior to the May 28th meeting.

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The meeting was adjourned at 8:08 p.m.
James R. Hart, Chairman

An audio recording of this meeting is available in the Planning Commission Office, 12000 Government Center Parkway, Suite 330, Fairfax, Virginia 22035.

Minutes by: Kara A. DeArrastia

Approved: May 28, 2009

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission



PC Environment Committee Meeting

April 30, 2009



Agenda

- Cost Information
 - Cost per pound of nutrient or sediment removed
 - Staff effort
- Reforestation
 - Alternative regulatory vehicle
 - Plan B
- Staff's recommendation regarding a regulatory approach to riparian buffers upstream of RPAs
 - Tree ordinance and Comprehensive Plan policy
 - Costs regarding implementation by staff
 - Code limitations
 - Impact to homeowners
- Workgroup recommendation

Estimated Cost per Pound of Nutrient/Sediment Removed

DEVICE	TOTAL PRESENT COST (LAND INCLUDED)	COST PER LB. OF TN REMOVED	COST PER LB. OF TP REMOVED	COST PER LB. OF SEDIMENT REMOVED
STRUCTURAL BMPS	\$19,600-\$94,800	\$240-\$880	\$1,410-\$3,950	\$6.70-\$22.70
RIPARIAN FOREST BUFFER	\$105,000	\$1,570	\$5,250	\$42.70

Staff Estimated Level of Effort (hours)

DRAINAGE AREA IN ACRES	NOTIFICATION (\$)	MAPPING (one time effort in hrs)	Review¹ (annual effort in hrs)	Inspection² (annual effort in hrs)	Enforcement (annual effort in hrs)	TOTAL ANNUAL EFFORT (hrs)
10	\$3,900	8,400	1,332	1,599	2,534	5,465
30	\$1,400	3,200	474	570	917	1,961
50	\$450	1,300	153	183	285	621

1. Assume 5% of all effected properties would propose development.
2. Assume 1% of effected properties are involved in an alleged violation.
3. Assume 35-foot buffer width throughout the county.
4. Does not account for updates to maps.

Reforestation

- Cannot require as an RMA performance criteria
 - Alternative regulatory vehicle (not advisable)
 - Plan B evaluation
 1. Require reforestation of RPA (cannot require unless development is encroaching into RPA)
 2. Expand the RPA (other lands) to include upstream areas (must establish 100-foot minimum buffer width and include the more stringent requirements for RPAs)
 3. Implement riparian buffer regulations upstream of RPAs (no reforestation and limited to regulating only greater than 2,500 square feet of disturbance)
 4. Rely on the Comprehensive Plan Policy amendment that encourages preservation of buffer areas upstream of RPAs and the new tree conservation ordinance for preservation of headwater stream buffers

Staff's Recommendation

- Rely on the Comprehensive Plan Policy amendment and new Tree Conservation ordinance for preservation of headwater stream buffers
- Do not implement a regulatory approach
 - Insufficient resources (staff time and funding) to implement regulatory approach to riparian buffers (current economic climate)
 - Limitations regarding enabling authority to require reforestation
 - Regulating only land disturbance of greater than 2,500 square feet (limited effectiveness)
 - Impact to homeowners (existing backyards, encroaching structures)

Workgroup Discussions

- Use drainage area to establish how far upstream (range?)
- Permit the following uses in buffer area
 - Minor additions (similar to RPA requirements).
 - Loss of buildable area (similar to RPA requirements)
 - Other exceptions, exemptions and allowed uses provided in the RPA requirements.
 - Better water quality benefits (with reservations, accommodate other functions of riparian buffer as well).
 - Tree preservation (mature stand of trees can be saved in lieu of buffer).
 - Trails and paths.
 - Accessory uses to residential structures that do not require a building permit (small sheds, fences).
- Buffer width should be a minimum of 35 feet, but consider wider width in certain areas such as the WSPOD (range?)
- Reforestation (not possible to require)