

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

COMMITTEE MEMBERS PRESENT:

Frank A. de la Fe, Hunter Mill District
Jay P. Donahue, Dranesville District
James R. Hart, Commissioner At-Large, Chairman
Kenneth A. Lawrence, Providence District
Timothy J. Sargeant, At-Large

COMMITTEE MEMBERS ABSENT:

Walter L. Alcorn, At-Large
Earl L. Flanagan, Mount Vernon District

ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEMBER PRESENT:

Stella Koch, At-Large, Chair
Robert McLaren, At-Large

STAFF PRESENT:

Pamela Nee, Planning Division (PD), Department of Planning and Zoning (DPZ)
Noel H. Kaplan, PD. DPZ
Bernie Suchicital, Zoning Evaluation Division, DPZ
Judy Cronauer, Land Development Services, Department of Public Works and
Environmental Services

PLANNING COMMISSION OFFICE STAFF PRESENT:

Sara Robin Ransom, Assistant Director
Linda B. Rodeffer, Clerk

OTHERS PRESENT:

Michael Rolband, Wetland Studies and Solutions, Inc. (WSSI)
Ben Rosner, WSSI
Harrison Glasgow, Fairfax County Park Authority

ATTACHMENTS

- A. Stream and Buffer Area Protection and Disturbances in the City of Alexandria and Arlington County
- B. EQC Disturbances: Potential framework for development of a policy or standard Approach
- C. Strawman draft Plan Amendment to address EQC disturbances

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Chairman James R. Hart called the meeting to order at 7:02 p.m., in the Board Conference Room, 12000 Government Center Parkway, Fairfax, Virginia 22035.

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Commissioner De la Fe MOVED THAT THE MINUTES OF MAY 28, 2009 AND JUNE 11, 2009 BE APPROVED.

The motion was seconded and carried unanimously.

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REVIEW AND FOLLOW-UP OF THE JUNE 11, 2009 COMMITTEE MEETING

Noel Kaplan, Planning Division, Department of Planning and Zoning, identified what he wanted to cover at this meeting and explained that, at the suggestion of Park Authority staff, he would use the term "EQC disturbance" in lieu of "EQC encroachment." He reviewed the topics discussed at the June 11, 2009 meeting:

- Need for EQC disturbance policy guidance;
- Timeline for policy review;
- Stakeholder/notification list;
- Approaches used by Loudoun and Prince William Counties in Virginia and Montgomery and Prince George's Counties in Maryland;
- Draft framework for development of a policy for the Committee's consideration;
- EQC value categories and their potential for application in policy guidance.

Mr. Kaplan reviewed the policy, regulations, and practices of Arlington County and the City of Alexandria for the protection of environmentally sensitive areas and proposed disturbances, as shown in Attachment A. He noted that all area jurisdictions had a similar approach to disturbances by first stressing avoidance, followed by minimization and mitigation. He also noted that, while the City of Alexandria did apply some quantitative considerations to its review process, all of the localities surveyed ultimately based their decisions on qualitative, site-specific circumstances, applying professional judgment.

At the request of Commissioner Flanagan, Mr. Kaplan said he had contacted Daniel Moore, the Northern Virginia liaison with the Division of Chesapeake Bay Local Assistance, Virginia Department of Conservation and Recreation, about this issue. He said Mr. Moore told him that as long as the County followed the required approach under the state's Chesapeake Bay regulations for exception reviews, the Division would have no concerns about the approach taken to proposed disturbances in Resource Protection Areas. He added that Mr. Moore was not aware of other localities that had established policies beyond their Bay Ordinances along the lines of the EQC policy and that he had no suggestions regarding other localities that we should contact for guidance. He said this information had been confirmed by the Deputy Director of the Division.

In response to a question from Commissioner Sargeant, Mr. Kaplan said the only State standards he was aware of that applied to mitigation measures were permitting requirements for restoration projects.

Commissioner Lawrence commented on the possibility of basing the policy on the premise that avoidable impacts would only be supported if there was a clear long term net benefit. He said each case should be looked at individually because a deeper level of discourse might be necessary in certain cases. Mr. Kaplan said that was the reason he had concerns about an overly quantitative approach

Michael Rolband, Wetland Studies and Solutions, Inc., explained that the City of Alexandria had required a cash payment for Base Realignment and Closure (BRAC) development on top of an intermittent stream at Mark Center and that Loudoun County had required additional mitigation measures to construct a baseball stadium on top of a stream. Committee members and Mr. Rolband discussed the environmental impact of the stadium construction.

Mr. Rolband responded to questions from Chairman Hart about the amount of the cash payment and mitigation required in the Alexandria case.

Stella Koch, Chairman of the Environmental Quality Advisory Council (EQAC), said Congress was considering revisions to Section 117 of the Clean Water Act that might include a cap and trade provision. She explained that urban streams tended to lose with cap and trade programs and that the County needed to be very careful about implementing them. She said Virginia tended not to protect habitat but that Montgomery County did.

Following a discussion about allowing monetary payments for EQC disturbances, Chairman Hart said he had reservations about such a policy. Commissioner de la Fe said money should not be looked at as an alternative but as a last resort.

FORMULATION OF POLICY GUIDANCE REGARDING EQC DISTURBANCES

Objective 2, Policy d., Policy Plan, Environment Section

Mr. Kaplan explained that Attachment B provided a possible framework for development of a policy to address EQC disturbances and that this framework had been provided to facilitate discussion of draft Plan text, as shown in Attachment C. He stressed that the draft Plan text presented in Attachment C was not a staff proposal but was instead a first cut at a possible approach for consideration as a "Strawman." He stated that he had received numerous comments about this draft during an internal staff review, that additional comments were expected, and that this draft could, therefore, be expected to evolve over time. He was, however, interested in the committee's view as to whether it would be appropriate for him to build a strawman document around this draft or something close to it.

Mr. Kaplan stated that Objective 2: Policy d. in the Environment Section of the Policy Plan effectively established that ponds in EQCs can be considered if they met one of two criteria: (1) they provided a regional benefit or (2) were located in areas with a significant degradation of the EQC. He said both of these policies were outdated and recommended that the regional pond criteria be deleted and replaced with guidance that stormwater management in EQCs should meet one of two conditions: (1) be consistent with recommendations of a watershed management plan adopted by the Board of Supervisors or (2) be more effective in protecting downstream resources than would otherwise be provided by stormwater management measures outside of the EQC. Mr. Kaplan said another suggestion in the draft would support a regional design of any stormwater management facilities located in EQCs.

Responding to a question from Ms. Koch, Mr. Kaplan noted that the issue in the Aerospace application had been filling in an area of the EQC, not stormwater management.

Chairman Hart asked if EQC disturbance should be consistent with the bullets in Policy d., not one or the other. After discussion, Mr. Kaplan suggested the following language for the second bullet: "They will be more effective in protecting downstream resources and better support the goals of the watershed management plan than stormwater management measures that would otherwise be provided outside of EQCs."

Commissioner Lawrence suggested that the conditions be divided into three bullets, since the second bullet consisted of two equal conditions. Mr. Kaplan said he would consider this suggestion.

Commissioner Hart suggested the following editorial changes to Policy d.:

- Second bullet: change "...that would otherwise be provided" to "that otherwise would be provided"
- Last sentence: change "EQCs should typically be designed..." to EQCs typically should be designed..."

Robert McLaren, At-Large member, EQAC, expressed concern about the proposal to add guidance supporting a regional design for any facility constructed in an EQC, noting that this may increase the extent of disturbance in the EQC. Mr. Kaplan noted that there were benefits and drawbacks to this approach and that he would look at this again, particularly in recognition of related text that had been suggested that would focus on the effectiveness of the facility in protecting downstream resources; he acknowledged that this suggestion may obviate the need for a policy focusing specifically on a regional design.

Objective 9, Policy a., Policy Plan, Environment Section

Mr. Kaplan noted that an initial concern regarding the EQC policy was whether or not the policy accurately reflected, in the introductory language, all of the purposes of the EQC system. He noted the exercise that the committee went through to identify potential EQC values and functions and indicated that he cross-checked the results of this exercise against the purposes of

the EQC system as identified in the Plan text. He stated that, in his opinion, the purposes in the current plan for including land in an EQC fell short, particularly in regard to hydrologic benefits. Therefore, he suggested the following changes to the purposes of the EQC system as identified in Policy a:

- Connectedness – Add “and/or conserve biodiversity”
- Aesthetics – Add “and Passive Recreation” to this category
- Add another category: “Hydrology/Stream Buffering/Stream Protection”

Mr. Kaplan said the next set of suggested changes in the draft Strawman amendment document began with the words “Modification to the boundaries so delineated...” on page 3 of the document (Attachment C). He noted that the current policy said an area could be taken out of the EQC if it did not meet any of the stated purposes. He recommended adding that disturbances could be considered if necessary to provide access to a buildable portion of a site or an adjacent parcel.

Responding to a question from Chairman Hart, Mr. Kaplan said parking would be covered in the third category of disturbances, “Other Disturbances.”

Commissioner de la Fe suggested changing the second sentence of this section to state that disturbances “may be” appropriate instead of “are” appropriate because he wanted to discourage transportation improvements in EQCs. Mr. Kaplan said although there was a caveat stating that such disturbances should be minimized, he had no objection to this change.

Mr. Kaplan said the last paragraph on page 3 concerned stream stabilization and restoration or enhancement, which was not addressed in the current Policy language.

Mr. Kaplan said the most critical change with the draft Strawman amendment document was “Other Disturbances” addressed in the next to the last paragraph of the document on the top of page 4. He noted that language was being suggested stating that other disturbances should only be pursued in extraordinary circumstances and only where the disturbances would, in conjunction with mitigation/compensation measures, result in a clear net environment benefit as well as net benefits relating to most, if not all, of the applicable EQC purposes as listed earlier in the policy. He stated that the “clear net environmental benefit” language would allow for the consideration of the broader site context in addition to the EQC. He stressed his view that, consistent with the committee’s guidance, this language would establish an intent to consider such disturbances only in extraordinary circumstances and that a high standard would be established for the consideration of such disturbances.

Mr. Rolband commented on the environmental value of mitigation measures.

Ms. Koch expressed wholehearted support for the language recommended by Mr. Kaplan for other disturbances. She also said she did not think parking should be mentioned.

After a brief discussion about the Strawman draft language proposed by Mr. Kaplan for other disturbances, it was agreed to change “pursued in extraordinary circumstances” to “considered in extraordinary circumstances...”.

Responding to a question from Commissioner Lawrence, Mr. Kaplan agreed to provide more detail about the purposes of EQCs.

It was the consensus of the committee that the framework and draft Strawman text presented by Mr. Kaplan was the course it wished to pursue.

Mr. Kaplan asked the committee to provide him with comments or suggestions about stakeholder involvement.

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The next meeting was scheduled for September 24, 2009 at 7:00 p.m.

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The meeting was adjourned at 8:14 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: Linda B. Rodeffer

Approved: September 24, 2009

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission

Stream and Buffer Area Protection and Disturbances: Alexandria, Virginia

Stream and Buffer Area Protection: Regulation and Policy

Environmental Management Ordinance--Chesapeake Bay Preservation Area Overlay District

- State minimum Resource Protection Area designation.
- Additional water quality performance criteria for intermittent streams and most nontidal wetlands: Protection of water quality functions required through the provision of a 50-foot vegetated area around these features or an equivalent combination of a smaller vegetated area and structural controls.
- Allowed and exempted uses identified.
- Exceptions allowed, but limited in extent (see below).
- In light of the extent of redevelopment that can occur in RPAs in Alexandria, Water Quality Impact Assessment reviews have a larger role than exceptions (see below).
- Additional criteria govern redevelopment in RPAs.

Floodplain Ordinance

- Restricts activities in 100-year floodplains.
- Variances and waivers can be granted by the City Council, but prohibitions on increases in 100-year water surface elevations in floodways (and ½ foot maximum increases elsewhere in the 100-year floodplain) remain.

Master Plan

- Broad support for protection of stream valleys and other environmentally-sensitive areas, but Plan does not define areas beyond those identified in the Environmental Management Ordinance and Floodplain Ordinance.

Disturbances: Policies and Practices

- Exception proposals must be reviewed by the Planning Commission; however, there have been no such proposals considered yet as they are strongly discouraged by staff.
- Some development and redevelopment proposals are reviewed administratively; there have only been a limited number of such proposals.
- Most RPA reviews focus on allowed redevelopment and water quality impact assessment reviews.
 - More detailed information required for "major" assessments (5,000 square feet or more of land disturbance in an RPA).
 - Review criteria stress minimization of impacts to RPAs, including the provision of BMPs to reduce pollutant loadings.
 - Mitigation measures (e.g., buffer area restoration) are typically sought by city staff and the Planning Commission.
 - Reviews are typically favorable where a net environmental benefit can be demonstrated.
 - Staff relies heavily on DCR/DCBLA's Riparian Buffers Modification & Mitigation Guidance Manual to guide decisions on RPA mitigation efforts.
- While both quantitative and qualitative factors are considered during reviews, particularly as they relate to mitigation (e.g., pollutant loading reductions associated with various levels of buffer area restoration), decisions on disturbances and water quality impact assessments are ultimately based more on a consideration of site-specific circumstances and professional judgment rather than quantitative criteria.
- Both staff and the Planning Commission are vigilant in protecting RPAs—discretion and flexibility are applied cautiously.

Stream and Buffer Area Protection and Disturbances: Arlington County, Virginia

Stream and Buffer Area Protection: Regulation and Policy

Chesapeake Bay Preservation Ordinance

- State minimum Resource Protection Area designation expanded to include:
 - All natural stream channels and man made open channels depicted by the county's GIS
 - Contiguous slopes of 25% or greater located adjacent to the landward boundary of the RPA buffer
 - Contiguous slopes of 15% or greater located adjacent to the landward boundary of the RPA buffer in certain areas (currently the Potomac Palisades area).
- Allowed and exempted uses identified.
- Some RPA buffer modifications allowed.
- Exceptions allowed (see below).

Floodplain Management Ordinance

- Restricts activities in 100-year flood areas
- Waivers can be issued, largely based on health, safety and land use considerations
- Affected areas largely within RPAs; little development would be allowed in affected areas even absent this ordinance.

Comprehensive Plan

- Policies generally support stream valley preservation and improvement.
- Broader buffer area guidance beyond Chesapeake Bay Preservation Ordinance is not applied; Plan policy reinforces the ordinance (which itself is quite broad in its definition of RPA) as opposed to augmenting it with broader guidance.

Disturbances: Policies and Practices

- Some exceptions are reviewed administratively—most notably expansions to existing nonconforming structures (e.g., decks and additions)
- Other exceptions are considered by the Chesapeake Bay Ordinance Review Committee (appointed by the County Manager) at a public hearing
- Findings based on state requirements identified for the granting of exceptions.
- Only a few exception requests (10 or less) considered each year.
- Most exception requests propose only minor encroachments
- Review efforts focused on avoiding unnecessary encroachments and minimizing the extent of any encroachment needed to provide for a reasonable use of a property.
- Compensatory measures (e.g., additional plantings; LID stormwater management practices) are typically sought by the county.
- No county experience with proposals for large disturbances.
- There are no objective or quantifiable criteria incorporated into the exception review process—there is reliance on consideration of site-specific circumstances and professional judgment.

Stream and Buffer Area Protection and Disturbances: Loudoun County, Virginia

Stream and Buffer Area Protection: Regulation and Policy

Zoning Ordinance

- Floodplain Overlay District limits uses within 100-year floodplains.
- Scenic Creek Valley Buffer requires building setbacks along all waterways with drainage areas greater than 640 acres (150-250 feet, with SWM/BMP reductions).
- Steep Slope Standards prohibit most land disturbing activities in areas with slopes greater than 25%; Development on slopes between 15% and 25% allowed with consideration of proposed disturbances and mitigation measures.
- Also Mountainside Development Overlay District.
- River and Stream Corridor Overlay District (RSCOD) overturned, but county is considering adoption of a Chesapeake Bay ordinance.

Revised General Plan

- RSCOD guidance still valid and still applied during the zoning process. Recommends protection of: rivers and streams draining 100 acres or more; 100-year floodplains; and 25%+ slopes starting within 50 feet of streams and floodplains to 100-foot maximum from stream or floodplain. 50-foot management buffer area (transitional—not a no-build area) included around floodplains and adjacent steep slopes. The 50-foot management buffer area is flexible and can be reduced if other RSCOD elements are not adversely impacted and performance standards are maintained. 100-foot minimum stream buffer area applied where other features are narrow.
- Uses in RSCOD policy area limited to those supporting biological integrity and health of the corridor.
- Transportation crossings, utilities, SWM facilities, public lakes and ponds, paths/trails, passive recreation and active recreation (including athletic fields) also allowed in floodplains upstream of the 640 acre drainage threshold.
- Plan supports protection of streams above the 100-acre drainage area threshold and no net loss of wetlands.

Disturbances: Policies and Practices

- Regulatory requirements not structured for consideration of trade-offs.
- Environmental Plan issues weighed along with a broader set of considerations.
- County generally successful at protecting RSCOD elements, including the minimum 100-foot stream buffer area. Most compromises focus on the 50-foot management buffer area; county has been successful at protecting stream buffer area components—staff unaware of disturbances.
- General Plan criteria for management buffer area reductions but not for disturbances to stream buffer areas (beyond list of allowed uses).
- Staff typically identifies efforts to minimize impacts to the corridor and compensatory enhancements—typically reforestation, removal of invasives, and low impact development practices.
- No net loss of wetlands pursued, stressing on-site mitigation as a preference.
- Staff will often report on acreages of proposed corridor impacts and restoration efforts, but there are only general criteria to judge the sufficiency of buffer area enhancement efforts.
- No objective checklist or quantifiable system—reliance on consideration of site-specific circumstances and professional judgment.

Stream and Buffer Area Protection and Disturbances: Montgomery County, Maryland

Stream and Buffer Area Protection: Regulation and Policy (Environmental Guidelines)

- Stream buffers recommended along all perennial and intermittent streams, with the latter defined broadly to include any stream with a defined channel or bed that flows at least once per year.
- Variable width buffer, ranging from 100-200 feet on each side of the stream, with wider widths along more sensitive systems (e.g., designated Trout Waters).
- 25% + slopes included where they begin within 200 feet of the stream.
- Entirety of 100-year floodplain included.
- Minimum 25-foot buffers required around nontidal wetlands—expansion up to 100 feet for steep/highly erodible soils; minimum 100-foot buffers around Wetlands of Special State Concern.
- Additional buffer areas can be applied to protect rare, threatened or endangered species or other species of concern.
- More stringent buffer area requirements within four defined “Special Protection Areas.”

Disturbances: Policies and Practices

- Environmental Guidelines generally limit disturbances to locationally-necessary infrastructure and bikeways/trails.
- However, temporary E&S controls in unforested areas can be considered, as can be stormwater management/best management practice facilities where location in the buffer is needed to maximize their effectiveness, subject to consideration of several case-by-case factors (e.g., conditions in the buffer area, protection of additional buffer area to compensate for disturbance).
- Flexibility to consider, on a case-by-case basis, other small disturbances where “consistent with a comprehensive approach to protecting areas that are critical to preserving or enhancing streams, wetlands, and their ecosystems.”
- Avoidance, minimization, protection of the most sensitive areas and compensation all considered.
- Avoidable disturbances to buffer areas generally not supported—trade-off proposals generally not considered.
- Where avoidable disturbances are considered, the core of the resource (i.e., the stream or wetland) is generally not compromised but the buffer width is reduced or averaged.
- Like-kind trade-offs typically sought (e.g., reforestation to compensate for clearing)
- Otherwise, professional judgment is applied in determining whether or not a developer’s proposal should be accepted.
- No formal objective checklist or quantifiable system —reliance on consideration of site-specific circumstances and professional judgment. By practice, compensation begins at two for one with equal resource value.

Stream and Buffer Area Protection and Disturbances: Prince George's County, Maryland

Stream and Buffer Area Protection: Regulation and Policy

Subdivision Regulations

- Minimum 50-foot buffers from each bank of a perennial (or intermittent) stream.
- Planning Board discretion to expand buffers to include 100-year floodplains, adjacent slopes of 25% or greater (15% or greater where soils are highly erodible), and additional areas.
- 25-foot buffers required around nontidal wetlands.
- Regulatory changes in process to standardize approaches countywide per current practice (to clarify consistency of application inside and outside of the Patuxent River watershed).

Chesapeake Bay Critical Areas

- Minimum 100-foot buffer from mean high tide line (primary buffer).
- Slopes of 15% or more and wetlands incorporated into the buffer area as well (secondary buffer).
- Regulations being updated.

Approved General Plan

- Environmental Overlays reflecting regulated areas along rivers and streams are identified on the Plan map.
- Support for preservation, protection and enhancement of green infrastructure elements and surface and groundwater features.

Countywide Green Infrastructure Plan

- Green Infrastructure Plan identifies strategies aimed at protecting ecologically valuable areas, with policy statements supporting consideration during the development review process—focus of policy statements is largely on consideration of regulated areas.

Disturbances: Policies and Practices

- Subdivision Regulations require buffer area preservation “to the fullest extent possible” in the Patuxent River watershed; regulatory changes would apply this guidance countywide.
- “Variation request” proposals (similar to variances) currently required outside of the Patuxent River watershed.
- Plan policy calls for strict limits on development impacts to regulated areas, subject to mitigation efforts as close to the areas of impact as possible.
- Three-tiered sequence for considering impacts: (1) avoidance; (2) minimization; (3) mitigation (preferably close to the areas of impact; not pursued for minor encroachments).
- Professional judgment is used in evaluating current conditions of affected areas and whether or not the benefits of mitigation packages outweigh the loss of streams/buffers.
- No checklist or quantifiable system is currently in use—reliance on consideration of site-specific circumstances and professional judgment.

Stream and Buffer Area Protection and Disturbances: Prince William County, Virginia

Stream and Buffer Area Protection: Regulation and Policy

Chesapeake Bay Preservation Area Overlay District

- Resource Protection Areas designated per state requirements.
- Allowed and exempted uses follow state guidelines.
- Exceptions allowed (see below).

Flood Hazard Overlay District

- Focus on flood protection and not environmental considerations.
- A number of uses allowed in “flood fringe” areas.
- RPA exceptions required, through, where floodplain uses are also proposed for RPAs.

Comprehensive Plan

- Policy supports provision of minimum 50-foot buffer areas along streams that are not otherwise protected under the Chesapeake Bay program.
- Focus during zoning process is on intermittent, rather than ephemeral, streams.
- Adjacent wetlands and slopes of 25% or greater are also recommended for inclusion in buffer areas.
- Plan policy also discourages development within 100-year floodplains associated with perennial streams and adjacent steeply sloping areas (15%-25% and greater in areas with highly erodible soils, highly permeable soils or marine clay soils).

Disturbances: Policies and Practices

- Administrative RPA exceptions for specific circumstances.
- Chesapeake Bay Preservation Area Review Board approval required for other exceptions.
- Findings based on state requirements identified for the granting of exceptions.
- Key considerations in exception reviews include: condition(s) of RPA area(s) proposed for encroachment; proposed post-development condition of the RPA(s); proposed improvements to the RPA, including square footage of encroachment vs. square footage of protection and restoration
- RPA exception requests consider some quantitative criteria but are generally based on a qualitative professional judgment as to whether the proposed outcome is preferable environmentally to a strict application of the RPA requirements.
- Environmental Constraints Analyses required for zoning applications—ID sensitive environmental resources.
- Environmental factors weighed along with a broader set of considerations.
- Protection of sensitive areas is generally expected, but there is flexibility, particularly on sites that are heavily constrained, and negotiations do occur in regard to unregulated sensitive areas.
- A positive environmental balance is sought, although there are no objective or quantifiable criteria—there is reliance on consideration of site-specific circumstances and professional judgment.

DRAFT - 6/29/09

**EQC Disturbances: Potential framework for development of
a policy or standard approach**

Revisions to the 6/11/09 first-cut "thinking out loud" draft from Noel Kaplan

Policy/practice relating to unavoidable disturbances:

Recognize that the following types of disturbance may be unavoidable. The general policy/practice would be to allow these disturbances as long as they minimize impacts to the EQC:

- Infrastructure lines/easements (primarily sewer, but could include others)
- Storm sewer outfalls
- Road crossings where there are no reasonable alternatives to providing access to a buildable part of a site or adjacent parcel
- Public roads identified in the Comprehensive Plan
- Trails that are identified in the Comprehensive Plan or that would otherwise further Plan policies, that are identified in other county-adopted documents, or that have otherwise been approved by the county, and connections from any of these trails to development areas
- Stream stabilization/restoration efforts, using natural channel design methods to the greatest extent possible as well as native species of vegetation, where needed to improve the overall ecological condition of the stream.
- Stream buffer restoration efforts, using native species of vegetation.
- Removal of non-native invasive species of vegetation.

Policy/practice relating to stormwater management facilities:

Key questions that could be incorporated into policy/practice:

- Is/are the facility/ies designed to provide a regional benefit?
- Is/are the facility/ies consistent with recommendations of a watershed management plan that has been adopted by the Board of Supervisors?
- What are the habitat, hydrologic, water quality and other values provided by the EQC(s) and can/will these be replaced, enhanced and/or compensated for (including a consideration of downstream benefits) by the proposed facility/ies?
- Is/are the facility/ies designed to minimize adverse impacts to the EQC(s)?
- Will the facility/ies be more effective in protecting downstream resources than alternative SWM measures that could be reasonably pursued outside of the EQCs?
- Can the facility/ies be designed to provide both environmental and development design/aesthetic benefits (e.g., a passive recreation focal point for a development)?

Policy/practice relating to other proposed disturbances:

PC Environment Committee discussions:

- Limit to extraordinary circumstances
- Establish one or more policy thresholds based on circumstance
- Objective vs. subjective measures
- Need for consideration of ecological services provided by EQCs, particularly as they relate to the quality of the stream

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- To what extent, if any, should non-environmental considerations factor into decisions regarding proposed disturbances? (e.g., affordable housing, athletic fields)

Key questions that could be incorporated into policy/practice:

- **Would it be appropriate for the policy/practice to be based on the premise that avoidable impacts could only be supported if there was a clear net long-term benefit to most, if not all, EQC value categories (and stream quality in particular)?**
- What habitat, hydrologic, water quality, air quality/climate, land use and other values would be lost as a result of the proposed disturbance?
- What habitat, hydrologic, water quality, air quality/climate, land use and other values would be gained as a result of the proposed trade-off?
- What habitat, hydrologic, water quality, air quality/climate, land use and other opportunities would be lost if the proposed disturbance was to be denied?
- What alternatives are there to the proposed disturbance/trade-off, and what would be the implications of these alternatives to the EQC values noted above?
- What impacts to the EQC would be temporary impacts that could be restored/improved?
- What quantifiable measures could be established that could be incorporated into the decision-making process?
 - Wetland acreage lost vs. restored
 - Tree cover lost vs. restored
 - EQC acreage disturbed and restored under various alternatives
 - RPA acreage disturbed and restored under various alternatives
 - Acreage outside of EQCs and/or RPAs that is preserved
 - Riparian buffer acreage disturbed, restored and/or added under various alternatives
 - Linear feet of stream disturbance and/or restoration
 - Stormwater management/water quality benefits
 - Stream quality

MODIFY:

Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment Section, page 7, as follows:

Objective 2: Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.

Policy d. Preserve the integrity and the scenic and recreational value of ~~stream valley~~ EQCs when locating and designing storm water detention and BMP facilities. In general, such facilities should not be provided within ~~stream valley~~ EQCs unless they ~~are designed to provide regional benefit~~ meet one of the following conditions:

- They are consistent with recommendations of a watershed management plan that has been adopted by the Fairfax County Board of Supervisors;
or
- They will both: (1) be more effective in protecting downstream resources than stormwater management measures that would otherwise be provided outside of EQCs; and (2) replace, enhance and/or be provided along with other efforts to compensate for any of the EQC purposes, as described in Environmental Objective 9, Policy a below, that would be affected by the facilities or unless the EQCs have been significantly degraded.

When facilities within the EQC are determined to be appropriate, encourage the construction of facilities that minimize clearing and grading, such as embankment-only ponds, or facilities that are otherwise designed to maximize pollutant removal while protecting, enhancing, and/or restoring the ecological integrity of the EQC. In addition, stormwater management facilities that are provided in EQCs should typically be designed to provide regional benefits.

MODIFY:

Fairfax County Comprehensive Plan, 2007 Edition, Policy Plan, Environment Section, pages 14 through 15, as follows:

Objective 9: Identify, protect and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County.

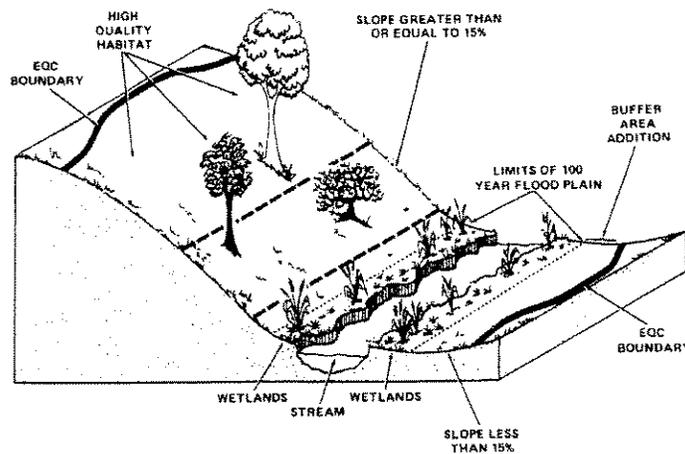
Policy a: ~~For ecological resource conservation,~~ Identify, protect and restore an Environmental Quality Corridor system (EQC). (See Figure 4.) Lands may be included within the EQC system if they can achieve any of the following purposes:

- Habitat Quality: The land has a desirable or scarce habitat type, or one could be readily restored, or the land hosts a species of special interest.
- "Connectedness": This segment of open space could become a part of a corridor to facilitate the movement of wildlife and/or conserve biodiversity.
- Aesthetics and Passive Recreation: This land could become part of a green belt separating land uses, providing passive recreational opportunities to people.

Strawman draft Plan Amendment to address EQC disturbances—First cut
July 29, 2009

- Hydrology/Stream Buffering/Stream Protection: The land provides, or could provide, protection to one or more streams through: the provision of shade; vegetative stabilization of stream banks; moderation of sheet flow stormwater runoff velocities and volumes; trapping of pollutants from stormwater runoff and/or flood waters; flood control through temporary storage of flood waters and dissipation of stream energy; separation of potential pollution sources from streams; accommodation of stream channel evolution/migration; and protection of steeply sloping areas near streams from denudation.
- Pollution Reduction Capabilities: Preservation of this land would result in significant reductions to nonpoint source water pollution, and/or, microclimate control, and/or ~~reductions in noise.~~

The core of the EQC system will be the County's stream valleys. Additions to the stream valleys should be selected to augment the habitats and buffers provided by the stream valleys, and to add representative elements of the landscapes that are not represented within stream valleys. The stream valley component of the EQC system shall include the following elements (See Figure 4):



A TYPICAL ENVIRONMENTAL QUALITY CORRIDOR

Source: Fairfax County Office of Comprehensive Planning

FIGURE 4

5

Strawman draft Plan Amendment to address EQC disturbances—First cut
July 29, 2009

- All 100 year flood plains as defined by the Zoning Ordinance;
- All areas of 15% or greater slopes adjacent to the flood plain, or if no flood plain is present, 15% or greater slopes that begin within 50 feet of the stream channel;
- All wetlands connected to the stream valleys; and
- All the land within a corridor defined by a boundary line which is 50 feet plus 4 additional feet for each % slope measured perpendicular to the stream bank. The % slope used in the calculation will be the average slope measured within 110 feet of a stream channel or, if a flood plain is present, between the flood plain boundary and a point fifty feet up slope from the flood plain. This measurement should be taken at fifty foot intervals beginning at the downstream boundary of any stream valley on or adjacent to a property under evaluation.

Modifications to the boundaries so delineated may be appropriate if the area designated does not benefit any of the EQC purposes habitat quality, connectedness, or pollution reduction as described above. In addition, some disturbances intrusions that serve a public purpose such as unavoidable public infrastructure easements and rights of way are appropriate. Disturbances for access roads should not be supported unless there are no viable alternatives to providing access to a buildable portion of a site or adjacent parcel. The above disturbances ~~Such intrusions~~ should be minimized and occur perpendicular to the corridor's alignment, if practical.

In general, stormwater management facilities should not be provided within EQCs unless they meet one of the following conditions:

- They are consistent with recommendations of a watershed management plan that has been adopted by the Fairfax County Board of Supervisors;
- or
- They will both: (1) be more effective in protecting downstream resources than stormwater management measures that would otherwise be provided outside of EQCs; and (2) replace, enhance and/or be provided along with other efforts to compensate for any of the EQC purposes, as described above, that would be affected by the facilities

When facilities within the EQC are determined to be appropriate, encourage the construction of facilities that minimize clearing and grading, such as embankment-only ponds, or facilities that are otherwise designed to maximize pollutant removal while protecting, enhancing, and/or restoring the ecological integrity of the EQC. In addition, stormwater management facilities that are provided in EQCs should typically be designed to provide regional benefits.

Stream stabilization and restoration efforts within EQCs should be encouraged where such efforts are needed to improve the ecological conditions of significantly degraded streams. Natural channel design methods should be applied to the greatest extent possible. In addition, replanting efforts in EQCs that would restore or enhance the environmental values of areas that have been subject to clearing should be supported; native species of vegetation should be applied both to such replanting efforts and to stream bank stabilization efforts. Removal of non-native invasive species of vegetation from EQCs is encouraged to the extent that such efforts would not be in

conflict with county ordinances; such efforts should be pursued in a manner that is least disruptive to the EQCs.

Other disturbances to EQCs should only be pursued in extraordinary circumstances and only where mitigation/compensation measures are provided that will result in a clear net environmental benefit—there should be net benefits relating to most, if not all, of the EQC purposes listed above that are applicable to the proposed disturbances.

Preservation should be achieved through dedication to the Fairfax County Park Authority, if such dedication is in the public interest. Otherwise, EQC land should remain in private ownership in separate undeveloped lots with appropriate commitments for preservation. The use of protective easements as a means of preservation should be considered.