

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE/
ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEETING
THURSDAY, NOVEMBER 13, 2008**

COMMITTEE MEMBERS PRESENT:

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 MEMBERS ABSENT:

Walter L. Alcorn, At-Large
Frank A. de la Fe, Hunter Mill District
Rodney L. Lusk, Lee District

ENVIRONMENTAL QUALITY ADVISORY COUNCIL MEMBER PRESENT:

Johna Gagnon

COUNTY STAFF PRESENT:

Michelle Brickner, Department of Public Works and Environment Services (DPWES)
Judith Cronauer, DPWES
John Friedman, DPWES
Noel Kaplan, Department of Planning and Zoning
James Patteson, DPWES
Sara Robin Ransom, Planning Commission Office
Linda Rodeffer, Planning Commission Office

OTHERS PRESENT:

Mike Albright, Christopher Consultants
Steven Bruckner, Sierra Club
Bryan Campbell, Angler Environmental
Mike Cook, citizen
Nikhil Deshpande, Rinker Design Associates
Harry Glasgow, Northern Virginia Soil and Water Conservation District/ Fairfax
County Park Authority
Mark Headly, Wetland Studies and Solutions, Inc.
Diane Hoffman, Northern Virginia Soil and Water Conservation District
Brian Knode, Duke Realty
Philip Latosa, Friends of Accotink Creek
Mark Liberati, BC Consultants
Mary Beth Loya, Northern Virginia Association of Realtors
Lisa May, NVAR
Cyrene Movitz, The Aeospace Corporation
Charlene Parker, Christopher Consultants
Stephanie Perez, Dewberry

Pete Rigby, Paciulli, Simmons
Ari Sareen, ECS
Jim Scanlon, BC Consultants
Charles Smith, Fairfax County Park Authority
Ed Umbrell, Bohler Engineering
Eileen Watson, Williamsburg Environmental
Lori Whitacre, Burgess and Niple

ATTACHMENTS:

- (1) PowerPoint Presentation – Information Sharing Meeting on Riparian Buffers Upstream of RPAs
- (2) Stakeholder Feedback

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On behalf of Chairman James R. Hart, Judith Cronauer, Department of Public Works and Environmental Services, convened the meeting at 7:03 p.m., in Rooms 106/107, Herrity Building, 12055 Government Center Parkway, Fairfax, Virginia 22035. She said the purpose of the meeting was to present the results of the workgroup meetings to the stakeholders.

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Ms. Cronauer narrated the PowerPoint presentation shown in Attachment (1). She reviewed the stakeholder and workgroup recommendations regarding the following topics:

How Far to Go Upstream
Mapping Options
Buffer Width
Permitted Uses
Preservation and Reforestation.

Following a question and answer period, the meeting was adjourned.

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ADJOURNMENT

November 13, 2008

The meeting was adjourned at 9:02 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: December 10, 2008

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission



Information Sharing Meeting Riparian Buffers Upstream of RPAs

November 13, 2008
Presentation to Stakeholders
Results of Workgroup Meetings



Presentation Outline

- Introduction/Background
- Considerations (stakeholders, staff)
- Each of the criteria (stakeholder feedback, options, workgroup recommendation)
 - How Far Upstream and Mapping
 - Permitted Uses
 - Preservation/Reforestation

INTRODUCTION AND BACKGROUND

Background

- Board's request - Regulatory approach to extending riparian buffers upstream of RPAs.
- Staff conducted research, including regulations in other jurisdictions and mapping options.
- Stakeholder meetings were held to obtain stakeholder input (July 2008).

Workgroup Meetings

October 2008

- Comprised of Planning Commission Environment Committee and members of the Environmental Quality Advisory Council.
- Developed criteria around which regulations might be constructed.
- Considered stakeholder feedback, information from staff research, including riparian buffer regulations in other Virginia counties.
- How far upstream, mapping, buffer width, permitted uses, and preservation/reforestation.

Information Sharing Meeting

- Purpose of this meeting is to present the results of the workgroup meetings to the stakeholders.

CONSIDERATIONS

Considerations in Evaluating Options

- What considerations are there regarding the establishment of a regulatory approach?

Stakeholder Feedback

- Financial impact to property owner as well as county.
- Impact on use of property.
- Enforcing the regulations.
- Determine goal of regulations.
- Notify affected property owners.
- Incentive to homeowners.
- Education and outreach rather than a regulatory approach.
- Comprehensive approach needed.
- Review effectiveness of other local programs.
- Change the adequate outfall requirements to improve the function of the buffer (sheet flow, level spreaders).

Considerations Identified by Staff

- Majority of ephemeral and intermittent streams are located in already developed areas – community common area (already somewhat protected) or homeowner's yards (impacting use of property).
- Additional costs associated with mapping, reviewing and enforcing the regulations.
- Goal of regulations.
- Notification to affected property owners.
- Balancing the impact on property owners and the costs and complexity of regulations with the benefits to be gained.
- Impacts of enforcement.
- Community acceptance of property restrictions.

HOW FAR UPSTREAM AND MAPPING

Stakeholder Feedback

How Far Upstream and Mapping

- A goal should be established and it should be determined how effective the extension of riparian buffers would be at meeting this goal.
- Site specific factors should be used to determine whether or not riparian buffers should be required.
- Ephemeral and intermittent streams should be included.
- Any establishment of the limits of the riparian buffer should be definitive and that stream classification and definitions should be consistent with the Federal and state regulations.
- Mapping should delineate areas based on the ecological value of the stream and whether reforesting the buffer area would be desirable.
- Maps should be definitive and a delineation methodology should be established.

How Far Upstream Options

- Intermittent streams only.
- Ephemeral and intermittent streams.
- Site specific decision (evaluate each site independently).
- Drainage area.

Mapping Options

- No mapping by county staff, burden on property owner to field map (ephemeral and intermittent, just intermittent, or site specific).
- Estimate location of streams using GIS, burden on property owner to verify (ephemeral and intermittent, or site specific).
- Evaluate every site independently to determine the ecological value of establishing a riparian buffer (site specific).
- Establish a drainage area using sample study (based on drainage area, not the type of stream).
- Field map Ordinary Highwater Mark (ephemeral and intermittent).
- Field map using North Carolina protocol (intermittent).

Results of Workgroup Meeting

How Far Upstream and Mapping

Establish a drainage area (based on sample study and no field work) to define how far upstream to go that maximizes the length of headwater streams protected and minimizes the impact to homeowners (balance).

- Easily defined point.
- Eliminates any uncertainties over whether the stream is intermittent or ephemeral. Promotes consistent review and enforcement. Easier to administer.
- Not as costly as identifying ephemeral or intermittent streams throughout the county.
- Allows notification of affected property owners. Property owner will have a good idea whether or not his/her property is affected by the regulations.

**BUFFER
WIDTH**

Buffer Width

- If fixed, how wide should the buffer be?
- If variable, what factors should guide the width of the buffers and what should the range be?

Stakeholder Feedback (cont.)

- A lot of the stakeholders recommended a variable width approach (28.5% of the dots versus 7.1% for the fixed approach).
- Opposing points of view
 - Consistent with current RPA practices
 - More flexibility in restrictions than current RPA practices

Stakeholder Feedback (cont.)

- For the variable width, consider the following:
 - Existing conditions (trees, slope, wetlands, topography)
 - Density, use
 - Drainage area
 - Practicality
 - Amount of stormwater runoff
- For a fixed width approach, several suggestions were offered
 - 100-foot width on intermittent and ephemeral streams.
 - 100-foot width, but allow flexibility for existing structures (compensate with financial and creative solutions).
 - 50-foot width for ephemeral and 100-foot width for intermittent.

Fixed Width Versus Variable Width

- Using a variable-width approach to establishing buffer widths (Chesapeake Bay Program 1996).
 - Allows the evaluation of site-specific conditions in order to optimize the desired buffer functions.
 - Requires a site evaluation before the required width could be established
 - More difficult to monitor and administer
 - Less easily understood than a fixed-width approach
- Current RPA buffers - fixed minimum width of 100 feet, (measured from the stream bank on each side), but will be wider if there are contiguous wetlands or major floodplains along the stream.

Options

- Fixed buffer width no less than 35 feet and no more than 50 feet.
- Two fixed buffer widths (in the range of 35 feet to 50 feet) based on predefined drainage areas (narrower width for smaller drainage area).
- Variable width based on site conditions (difficult to administer, not in line with current RPA practice).

Results of Workgroup Meeting

Buffer Width

- Requested that staff explore no less than a buffer width of 35 feet, but consider a possibility of wider buffer width requirements in objectively defined areas such as the Water Supply Protection Overlay District.

PERMITTED USES

Permitted Uses

- What should be allowed in the buffer area (exemptions, exceptions, allowed uses)?

Stakeholder Feedback

- Allow facilities and practices that would serve a purpose similar to riparian buffers in lieu of riparian buffers (LID, rain gardens, natural landscaping, LEED certification, reforestation on another part of the site)

Stakeholder Feedback (cont.)

- Stormwater management
- Environmental attributes
- Accessory uses
- Recreational uses
- Stricter than RPA requirements
- Same as RPA requirements
- Environmental equivalents
- More lenient than RPA requirements

Stakeholder Feedback (cont.)

Factors for Consideration

- If reforested, allow a period of time for the vegetation to establish before allowing the use.
- Cumulative impacts.
- Will the use interfere with the intent of the buffer?
- Prohibit if use would materially change topography in the buffer.
- Discourage removal of dead trees unless they pose a hazard.
- Prohibit use of pesticides, herbicides, and fertilizers in new buffer areas and RPAs.
- Consider size of impact.

Options

- Permitted Uses.
 - 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.
 - Tree preservation (tradeoff outside buffer area).
 - Trails and paths.
 - Accessory uses to residential structures that do not require a building permit (small sheds, fences).
- No permitted uses.

Results of Workgroup Meeting

Permitted Uses

- Permitted Uses.
 - 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).
 - Tree preservation (tradeoff outside buffer area).
 - Trails and paths.
 - Accessory uses to residential structures that do not require a building permit (small sheds, fences).

**PRESERVATION
AND
REFORESTATION**

Preservation/Reforestation

- Two components
 - Preservation of existing forested buffer areas.
 - Reforestation if existing buffer is not forested.

Stakeholder Feedback

- Reforestation should be done with native, endemic, appropriate and diverse species with high wildlife value.
- Preservation should be primary (manage existing forested buffers and remove invasive species).
- Do not require reforestation.
- Consider value of seeking conservation easements in buffer areas.
- Consider value of removing existing vegetation to plant trees.
- Use site specific factors to determine if reforestation is of value.

Options

- Do not require reforestation (less impact to property owners, difficulties in enforcing).
- Require reforestation if land disturbance is greater than 2,500 square feet (would include plans with additions or accessories to single family homes that encroach into the buffer area, as well as new homes), uses that require a site plan, or a subdivision plan.
- Require reforestation if it is a new home construction (establishing a new use), uses that require a site plan, or a subdivision plan.
- Require reforestation for uses that require a site plan or a subdivision plan.

Options (cont.)

- If reforestation is required
 - Should allow for water quality credits.
 - Should require recordation of easements and maintenance agreements.

Results of Workgroup Meeting

Preservation/Reforestation

Three options to consider:

- Require reforestation if land disturbance is greater than 2,500 square feet (would include plans with additions or accessories to single family homes that encroach into the buffer area, as well as new homes), uses that require a site plan, or a subdivision plan.
- Require reforestation if it is a new home construction (establishing a new use), uses that require a site plan, or a subdivision plan.
- Require reforestation for uses that require a site plan or a subdivision plan.

Results of Workgroup Meeting Preservation/Reforestation (cont.)

- If reforestation is required
 - Allow for water quality credits.
 - Require recordation of easements and maintenance agreements.

Questions?

**STAKEHOLDER FEEDBACK
CONSOLIDATION OF ALLOWED USES**

	Items
Stormwater Management	<ul style="list-style-type: none"> • SWM/BMP/LID features • Construction of wetlands • Restoration, stabilization (outfalls, streams, wetlands) • Detention facilities (in special circumstances) • Runoff/flow energy reduction practices • LID if it offsets water quality functions provided by the buffer • Conveyance/flood prevention • Preservation/reforestation areas
Recreational Uses	<ul style="list-style-type: none"> • Trail uses • Vegetation management • Permeable surface paths • Recreational uses in general
Other Uses	<ul style="list-style-type: none"> • Fences • Sheds • Decks, patios, pools • Garages • Additions • Minor additions • Swing sets • Gardens • Other ancillary uses by homeowner that don't inhibit drainage • Landscaping • Drainfields (septic) • Passive homeowner uses on existing residential lots • Retaining wall • Porous pavement • Consider loss of buildable area, allow some expansion (consistency is the key) • Allow yard space around existing house within buffer area
Other Environmental Attributes	<ul style="list-style-type: none"> • Educational plots and experimental (native) plants • Natural landscaping (certified wildlife habitat, rain gardens) • Trading land areas (similar to tree cover canopy) • Removal of non-native, noxious, and invasive weeds • Sustainable buildings <p>Develop mitigation criteria in cases where uses are allowed</p>
Current RPA allowed uses, exceptions and exemptions	<ul style="list-style-type: none"> • Nothing more should be allowed • Loss of buildable land allowances should equal current regulations • All existing uses, allowable uses, and uses allowed by exemptions and exceptions in the current regulations

	Items
Stricter than RPA requirements	<ul style="list-style-type: none"> • Maintain allowed uses in existing buffers and do not go beyond them (no additions allowed) • Regional ponds should be removed • No silvicultural activities should be allowed in the new buffer area • Where private roads and driveways are allowed, require permeable surfaces • No increase in impervious area without mitigation and compensation • Remove storm sewer outfalls in intermittent areas, go higher in watersheds where possible, to minimize downcutting and other damage
More lenient than RPA requirements	<ul style="list-style-type: none"> • Eliminate existing criteria that vacant land needs an existing use to encroach in the RPA