

**MEMORANDUM**

DATE: August 8, 2006

TO: The Board of Supervisors

FROM: Michael D. Woolson, Senior Watershed Planner  
Scott J. Thomas, Chief Engineer Stormwater

SUBJECT: Revisions to the Powhatan Creek and Yarmouth Creek Watershed Management Plans

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Based upon direction given by the Board at the June 27 work session, staff has developed the following recommendations related to Priority Nos. 2, 3, 4, and 11 of the Powhatan Creek Watershed Management Plan.

**Powhatan Creek**

Priority No. 2 – RPA buffer expansion

The original language for the resolution for Priority No. 2 in the Powhatan Creek Watershed Management Plan states “Implement new RPA boundary based upon perennial streams.” Further clarification of this priority is given in the Aquatic Buffers section of the Watershed Management Plan which outlines six categories of buffer improvements to be undertaken. These are:

- a. RPA extensions.
- b. Inclusion of intermittent streams and unconnected wetlands within a buffer system.
- c. Buffer reclamation, widening, and revegetation (Including a 300-foot mainstem buffer).
- d. Buffer management criteria.
- e. Directing of required open space or natural areas derived from clustered development to riparian buffer areas.
- f. Watershed education on buffer management.

Staff proposes to eliminate references to RPA extensions. The Chesapeake Bay Preservation Ordinance was amended on January 1, 2004, and now includes a site-specific determination of perennial streams instead of the paper-based system using the United States Geological Survey 7.5-minute series quadrangle maps per the original Ordinance. Instead, staff proposes to substitute the phrase ‘riparian buffers,’ which would be beyond the regulatory buffer established with the Chesapeake Bay Preservation Ordinance.

Staff proposes to amend the James City County Guidelines for Design and Construction of Stormwater BMP’s manual (County BMP manual) where applicants can receive BMP point credit for providing intermittent stream and isolated pocket wetland (non-RPA wetland) buffers. To receive BMP point credit, the applicant would have to meet specific criteria as established in the County BMP manual. Staff is recommending a minimum intermittent stream and pocket wetland buffer width of 50-feet to receive BMP point credit.

Staff proposes to amend the County BMP manual where applicants can receive BMP credit for providing expanded-width riparian buffers. This expanded riparian buffer would consist of three zones. The first zone would be the regulatory RPA buffer. The second zone could vary in width and have similar maintenance requirements as the RPA zone, but would allow stormwater management facilities and passive recreation activities. The only requirements of the third zone (outer-most zone) would be no impervious cover or septic systems. The first and middle zones in the expanded riparian buffer would require conservation easements,

while the third zone could be delineated with a building setback line on a plat. Staff proposes a ratio for the middle and outer zones based upon the proposed width in the development application of 75 percent middle zone and 25 percent outer zone. The goal of the expanded riparian buffer is to preserve or restore a mature forest ecosystem along the areas near streams.

Staff proposes that they be given the authority to pursue expanded riparian buffers in legislative action development cases regardless of whether BMP point credit is proposed. The extent of the buffer will likely vary from among properties due to size and shape. Staff will document the rationale and the Board and Commission can review the reasonableness of the recommendations as part of their decision-making process. Staff does not propose to enforce expanded riparian buffers on existing development, including already-platted single-family lots, except as outlined below.

Staff would use the concept of expanded riparian buffers as one type of potential RPA encroachment mitigation when an applicant requests a waiver or exception to Chapter 23 of the James City County Code, Chesapeake Bay Preservation Ordinance.

To summarize, staff proposes the following changes to Priority No. 2 of the Powhatan Creek Watershed Management Plan:

- a. RPA extensions.  
*Eliminate, already covered in Chapter 23 of JCC Code.*
- b. Inclusion of intermittent streams and unconnected wetlands within a buffer system.  
*Change to County BMP Manual; apply to legislative cases.*
- c. Buffer reclamation, widening, and revegetation (Including a 300 foot mainstem buffer).  
*Change to County BMP Manual; apply to legislative cases. Use as a possible mitigation effort in CBPA exception/waiver requests.*
- d. Buffer management criteria.  
*Keep, already covered in Chapter 23 of JCC Code.*
- e. Directing of required open space or natural areas derived from clustered development to riparian buffer areas.  
*Keep, incentive to do so in County BMP Manual.*
- f. Watershed education on buffer management.  
*Keep, already covered by existing PRIDE program.*

#### Priority No. 3 – Prohibit rezonings which increase impervious cover in sensitive watersheds

Staff proposes that this priority not be adopted. Minimizing impervious cover will remain an important general consideration in all areas of the watershed.

#### Priority No. 4 – Cluster down, reducing lot sizes to create additional open space

Staff proposes adopting this priority, as there are mechanisms in place through the zoning ordinance to allow for this to occur. The Better Site Design process may recommend enhancements.

Priority No. 11 – Limiting impervious cover to 10% in select sub-watersheds

Staff proposes that this priority not be adopted. Minimizing impervious cover will remain an important consideration in all areas of the watershed.

**Application to Yarmouth Creek**

The Board of Supervisors adopted the Yarmouth Creek Watershed Management Plan by resolution dated October 14, 2003. The resolution adopted six goals and 14 priorities as outlined in the Yarmouth plan, except for Priority No. 3, Special Stormwater Criteria. At that time Special Stormwater Criteria was not developed; however, the Board authorized staff to proceed with a plan to formulate the special stormwater criteria in February 2003. This took about 14 months to complete by use of a locally formed task group. Upon completion, the group presented the criteria to the Board and it was adopted by resolution dated December 14, 2004.

As it was always envisioned that tools for watershed protection could be easily transferred between County-prepared and adopted watershed management plans, staff proposes that the program as revised and outlined above in Priority No. 2 for Powhatan Creek be equally applied to Yarmouth Creek. It is proposed that this be done by revising Yarmouth Creek Priority No. 14 from its previous language of “*Continue to strengthen enforcement of existing RPA laws on new development and as stated in the law protect all perennial streams and connected wetlands*” to “*Implement riparian buffer and intermittent stream objectives as outlined in the memorandum dated August 8, 2006 entitled “Revisions to the Powhatan Creek and Yarmouth Creek Watershed Management Plans.” Continue to strengthen enforcement of existing RPA laws on new development and as stated in the law protect all perennial streams and connected wetlands*” or by other similar language as desired by the Board.

Staff has prepared two cover memorandums and resolutions for the Board’s consideration and action, if so desired, at this work session.

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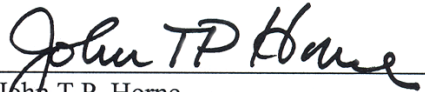
Michael D. Woolson

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Scott J. Thomas

CONCUR:

  
Darryl E. Cook

  
John T.P. Horne