

A G E N D A

JAMES CITY COUNTY BOARD OF SUPERVISORS

WORK SESSION

County Government Center Board Room

October 14, 2003

4:00 P.M.

-
- A. CALL TO ORDER**
 - B. ROLL CALL**
 - C. BOARD DISCUSSION**
 - 1. Chesapeake Bay Preservation Ordinance Update
 - D. ADJOURNMENT**

101403bsws.age

A G E N D A

JAMES CITY COUNTY BOARD OF SUPERVISORS

WORK SESSION

County Government Center Board Room

October 14, 2003

4:00 P.M.

- A. CALL TO ORDER**
- B. ROLL CALL**
- C. BOARD DISCUSSION**
 - 1. Chesapeake Bay Preservation Ordinance Update
- D. ADJOURNMENT**

101403bsws.age

MEMORANDUM

DATE: October 14, 2003

TO: The Board of Supervisors

FROM: Darryl E. Cook, Environmental Director

SUBJECT: Chesapeake Bay Preservation Ordinance - Update

The Chesapeake Bay Preservation Ordinance is being revised to bring it into compliance with the first major revision to the State Chesapeake Bay Preservation Area Designation and Management Regulations since the State law was adopted in 1989. The regulations became effective on March 1, 2002, and all local governments were originally given until March 1, 2003, to amend their Ordinances to ensure consistency with the revised regulations. On February 11, 2003, the Secretary of Natural Resources requested that the Chesapeake Bay Local Assistance Board (CBLAB) extend that deadline primarily so that more guidance could be provided to localities in the area of perennial flow and associated wetlands determinations. On February 18, 2003, CBLAB met and passed a resolution granting an extension to its deadline until December 31, 2003. A technical adhoc committee was formed by the Department of Conservation and Recreation (DCR) to help CBLAB finalize the outstanding guidance. The DCR adhoc committee developed the guidance this summer and the CBLAB adopted the guidance on September 15, 2003. Now that the guidance has been adopted, all the information necessary to move forward with adoption of the Ordinance is in place.

The amended Ordinance was presented to the Board in a Work Session held on March 25, 2003. That version of the Ordinance was developed with the input of an external review team consisting of representatives of the local engineering, development, and environmental communities. Staff met with representatives of these groups four times during the month of January to review the proposed Ordinance amendments. As the deadline for adoption was delayed until December 31, 2003, no action was proposed or taken by the Board at that Work Session. As CBLAB has nearly finished developing the guidance, staff reassembled the local review committee in August to make any final changes necessary to achieve compliance with the new regulations. The committee has met twice since that time. This memorandum discusses in detail all the proposed changes to the attached Ordinance and it incorporates changes that were generally consensus items developed with the committee. It will be pointed out in this memorandum the one item to date where it was not possible to obtain consensus.

The new regulations require many changes to the Chesapeake Bay program, some major and some minor. Some of the changes are required and others are left as a local option. This memorandum will outline the major changes and discuss the impact of those changes. One of the major required changes was to clarify the protection and maintenance of the 100-foot Resource Protection Area (RPA) buffer. Language in the previous regulations allowed reduction of the buffer to 50 feet if equivalency to the 100-foot buffer could be demonstrated. This language has been removed and it is the State's position that the buffer is always 100 feet in width with provisions made for any necessary encroachment. This does not represent a change in our administration of the ordinance as the 100-foot buffer has always been the standard in the County. Other major changes are presented below and presented in the body of the memorandum in bold type:

- **Perennial flow basis for determination of the RPA - Sections 23-3 -pg 6, 23-4 -pg 9, 23-10(2)d -pg 30.**
- **Site specific RPA determination requirements - Sections 23-4 -pg 9, 23-8 -pg 19, 23-10(2)d -pg 30.**
- **Stormwater management performance criteria - Sections 23-9(b)(8) -pg 23.**

- **Agricultural performance standards and management plans - Sections 23-7c(3) -pg 17, 23-9b(10) -pg 24.**
- **Clarifications regarding noncomplying structures and lots, and exemptions - Sections 23-12 -pg 36, 23-13 -pg 40.**
- **Exception review and approval process - Sections 23-14, pg 43, 23-15, pg 45, 23-16, pg 46.**
- **Lot Size - Section 23-6 -pg 10.**

The optional or permissive items in the regulations that may be included in local programs are:

- Designation of Intensely Developed Areas - not applicable to James City County.
- Septic system inspections and alternatives - Two options were presented in the State regulations to the currently required mandatory septic tank pumping once in every five years. These options were installation and maintenance of a plastic filter in the outflow pipe of the septic tank, or inspection and certification once every five years by a certified sewage hauler that the septic system was functioning properly and that the tank did not need pumping. Neither the Williamsburg Environmental Health Office of the Virginia Department of Health nor staff recommends the first alternative, and, therefore, that alternative has not been included in the Ordinance. However, the second alternative of inspection and certification is in accordance with the proposed regulations for septic systems as contained in the Sewage Handling and Disposal Regulation of the Commonwealth of Virginia developed by the Virginia Department of Health and is being included in the Ordinance.
- Some components of the agricultural management plans - added in Sections 23-7, 23-9b(10).
- The additional grandfather period for lots platted between October 1, 1989, to the effective date of the amended Ordinance - added in Section 23-7(c)(2) -pg 16.

The major changes are outlined below along with the rationale for each change and as applicable, the review Committee's input is included. The changes are listed by section in numerical order.

Section 23-3. Definitions

- A. The major change in this section relates to the definition of the RPA. The RPA is defined as lands adjacent to water bodies with perennial flow (streams flowing year-round). The new regulations (9 VAC 10-20-105) and the revised Ordinance in Sections 23-4 and 23-10(2)(d) require that the determination of perennial flow be conducted on a site-specific basis using a reliable scientific method. This is a required change from the current situation where a perennial stream was identified on a USGS quadrangle map (see *tributary stream* definition which is being deleted).**

Before the State developed its perenniality guidance this summer, the County hired a consultant to develop a method to meet the perennial flow determination requirement. The goal was to develop a method that met the State regulations but could be readily applied in the field without significant cost or training requirements. The consultant proposed the use of a well known, scientifically based methodology developed by the North Carolina Department of Water Quality. It is referred to simply as the North Carolina method and it turned out to be one of the five methods that the DCR adhoc committee endorsed for use in the state. The other four endorsed methods are groundwater

monitoring, surface water monitoring, drainage area, and documented observation (photographs, etc.).

The North Carolina method was applied in the Powhatan Creek watershed and the results are contained in a report available in Development Management. The study demonstrated that perennial flow generally extended further upstream than depicted on the USGS topographic maps, which were the reference documents for perennial flow determinations when the Ordinance was first adopted in 1990. The increase in area established as an RPA buffer would be increased by 206 acres. But as shown in the attached Table 2 from the report, after evaluation of areas that were already developed, government-owned, or located within existing conservation easements, the increase in buffer acreage was reduced to 72 acres of private, undeveloped land. There is an outstanding issue regarding the application of the method related to the threshold value for perennial flow that is being worked on by a separate local technical committee. An example of the stream classification form is attached to this memorandum.

Another result of the study was that there was no demonstrated correlation between drainage area and perennial flow in Powhatan Creek. Therefore, it is proposed that the drainage area method not be used for determination of perennial flow in the County, however, the other four methods listed previously would be acceptable.

- B. At the request of the review committee, a definition of perennial flow was added. The definition is from the guidance development by CBLAB.
- C. **A definition was added for the Chesapeake Bay Board, which is comprised of the members of the Wetlands Board. The exception process has been revised by the state regulations and in Section 23-14 to require that certain exceptions for RPA encroachments not be granted administratively by County staff but by a Board of Supervisors' appointed board. The process also requires that a public hearing be held for the Chesapeake Bay Board processed exceptions. This is a required change.**
- D. There are minor changes in the definitions of floodplain, highly erodible soils, impervious cover, nontidal wetlands, noxious weeds, and Resource Management Areas. Most of these were modified at the suggestion of the review committee.
- E. A definition was added for public roads to match the State regulations.
- F. A definition was added for silvicultural (forestry) activities as these are exempt from the ordinance requirements and it was important that the eligible activities be identified. The definition is from the State regulations.
- G. At the suggestion of the review committee, definitions were added for *sight line* and *runoff*.

These were consensus items from the committee.

Section 23-4. Designation of Chesapeake Bay Preservation Area (CPBA)

This section was modified to require that a site specific delineation of the RPA occur for each project as described previously in the definitions section. This is a required change as discussed in the definitions section.

In addition, the preparation of a map that will generally present the location of the RPA is required by the regulations. A map will be prepared based on the County's Soil Survey map with the general limit of the RPA

(perennial flow) being based on the presence of hydric soils. At the time of submission of a plan of development, this general location will be replaced by a site specific, field determination. The committee reached consensus on the use of the soil survey as the basis for the general map of the RPA with the USGS perennial stream information also being presented.

Section 23-5. Permitted Uses.

Wording was deleted to eliminate a reference to other sections of the Ordinance where disturbance of 25 percent slopes is allowed without an exception. This wording was unnecessary as there are no other sections of the Ordinance where this is permitted.

Section 23-6. Lot Size.

This section has been amended to include a 15-foot construction zone setback between the principal structure and the limit of the RPA. This setback would also be applied to existing platted lots. The setback area can be used as yard area, for additions to the principal structure that would not damage the RPA such as decks and patios, or the installation of accessory structures. This provision is for protection of the buffer and the future property owner by ensuring that they will have reasonable use of their lot. This is modeled after similar provisions in Henrico and Chesterfield Counties. Henrico County instituted the measure because without this separation, the lots were not satisfactory to homeowners (no rear yards or expansion possibility) and it resulted in higher quality development. The study of local Chesapeake Bay programs by the Joint Legislative Audit and Review Commission (JLARC) commented that this provision in Henrico County virtually eliminated the need for exceptions and offered a high degree of protection to the buffer (see attachment). This provision is also recommended by CBLAB as presented in the attached letter dated November 8, 2002. The setback is consistent with the Zoning Ordinance 15-foot construction zone setback requirement in Section 24-96(c) related to protection of landscape area buffers.

In James City County, there has been a similar experience with regard to inadequate separation between residential structures and the RPA. Currently, the largest separation we can obtain is about 10 feet, which is the minimum distance necessary to construct a structure without disturbing the RPA. This is not a specific requirement of the Ordinance; its application becomes a negotiated site-by-site administrative procedure. This minimal separation has led to dissatisfaction on the part of some homeowners because of the small amount of useable yard area and has contributed to some violations. This issue has caused problems on lots in Landfall at Jamestown, Heron's Run in Seasons Trace, Governor's Land, Kingsmill, and other individually platted properties. In some cases, the homeowners stated they would not have purchased the property if they had realized the placement of the house allowed them no rear yard or limited the ability to expand their home.

In staff's opinion, the provision is a reasonable method to protect the buffer from encroachment, protect future property owners from having an inadequate rear yard area, and decrease the administrative effort associated with protecting the buffer. The Board has been seeking a way to increase protection of the RPA buffer and reduce the number of violations and this represents an effective way that has been utilized elsewhere and is endorsed by the State. Exceptions to this provision would be administratively handled by County staff. It was not possible to obtain consensus on this item with the review committee. Dissenting members of the committee felt that the problem could be handled on a case by case basis with the requirement shown on individual plats and plans that no disturbance of the buffer would be allowed under any conditions, and also through increased education of the public and the realtor community. A memo prepared by the dissenting members dated September 8, 2003, is attached to this memo. This is an optional item.

Section 23-7. Development Criteria for Resource Protection Areas

- A. There are numerous changes to this section as a major focus of the regulations' revisions concerned the RPA. Changes have been incorporated in Subsection (a) regarding the use of the RPA for placement of roads or driveways, stormwater management facilities, and new uses on lots recorded prior to adoption of the revised Ordinance. These items are optional but they were included in the Ordinance to allow for increased flexibility regarding the use of the RPA, as the extent of the RPAs will be expanding as a result of the perennial stream definition change.
- B. Subsection (a)(1)(a) was amended to add a reference to any *applicable approved watershed management plan* such as the Powhatan Creek Watershed Plan.
- C. Subsection (a)(4)(i) was amended at the request of the committee to determine how "optimum" would be applied when reviewing the siting of a BMP in the RPA. The following explanation has now been included: optimum location shall mean that it is the best place to locate the facility from an engineering/functionality consideration regardless of the presence of an RPA.
- D. Subsection (c) was moved from Section 23-9 to this section for consistency as all the other items related to the RPA were contained in Section 23-7. In addition, there were some changes made to this section.
 - 1. A statement was added that the buffer shall consist of three layers of vegetation and be of native vegetation for clarification. This is currently how the buffer requirements are being administered.
 - 2. A sentence was added at the request of the committee that states that existing vegetation can be included in a buffer modification plan.
 - 3. The language regarding reduction of the buffer width is being deleted as discussed in the third paragraph of this memorandum.
 - 4. Language was added to Subsection (1) to clarify that buffer modifications require approval by the County before they are undertaken.
 - 5. Any modification of the buffer vegetation must be shown on a buffer modification plan.
 - 6. The word vista was removed from Subsection (1)(a) as it was redundant to the sight line criteria and caused confusion as to its definition.

The change related to the buffer width is a required change; the others are optional.

- E. Subsection (c)(2)(a) allows for administrative RPA buffer modifications and the use of the separation area on lots created before the adoption of the revised ordinance. It sets forth mitigation requirements associated with the buffer modifications. **The additional "grandfather" period as presented in Subsection (c)(2)(b) is optional but was included to allow for greater flexibility in administration of the ordinance provisions.**
- F. **There are several language changes to the agricultural provisions but essentially the use of the buffer for agricultural purposes is little changed. The requirement for a conservation plan has been changed to a conservation assessment or nutrient management plan. These are required changes.** One additional change requested by the review committee was to add "and implemented" to the requirement that a nutrient management plan be developed.

- G. Subsection (4) was added to ensure that when agricultural or silvicultural use of the buffer ceases and the land converted to other uses, the RPA buffer is to be reestablished. This is a required change.

Section 23-8. Determining Resource Protection Areas Boundaries.

As discussed previously, a site specific delineation of the RPA is required by the new regulations and is included in this section.

Section 23-9. Performance Standards.

- A. Language was included in this subsection regarding the stormwater management objectives for redevelopment or as the regulations now refer to this category of development, previously developed land. This revision has no material effect on the County's administration of this criteria as we use a point system rather than a direct pollutant load calculation for demonstrating compliance with the stormwater management criteria.
- B. Subsection (b)(1)b. has been revised to allow for flexibility in the application of the 60 percent impervious cover limitation. Sites can exceed the 60 percent coverage if it can be demonstrated that water quality impacts will be no greater that if the site were 60 percent impervious. The changes also include a provision that encourages stormwater master planning for projects by allowing the computation of impervious cover on a project rather than individual site basis.
- C. In Subsection (2)a., a statement was added at the committee's request to state that trees 12 inches and larger could be removed to accommodate site grading. Also, the size of vegetation to be replanted for restoration of vegetated areas has been reduced from 2-1/2 inches to 1-1/2 inches caliper. It has been determined that the survivability and availability of the smaller size trees plants is greater.
- D. Subsection (8) regarding the stormwater management requirements for projects has been revised to be consistent with the State's stormwater criteria. This is a required change. Also, a statement was added to clarify that water quantity increases resulting from development activities would need to be addressed in accordance with the County's Erosion and Sediment Control Ordinance, Chapter 8 of the County Code.**
- E. Subsection (8)(a) contains a clarification for sites utilizing existing BMP facilities for compliance with stormwater management criteria.
- F. Subsection (9) was amended at the committees request to include language that addressed projects that do not require wetlands permits or only have to submit post-construction information.
- G. Subsection (10) changes the requirement for a conservation plan to a conservation assessment. The assessments are not as comprehensive as a plan but this is a required change. A factor to consider is that the Colonial Soil and Water Conservation District is currently not able to prepare conservation plans due to cutbacks.** Language has also been added to this section to clarify that plans of development or water quality impact assessments would not be required for agricultural lands except for land disturbing activities not associated with food and fiber production.
- H. Subsection (c) has been transferred to Section 23-7 as discussed previously.

Section 23-10. Plan of Development.

- A. The introductory section and subsection (1) establish that a plan is required for all development activities that exceed 2,500 square feet to ensure that the requirements of the ordinance are met. This is a requirement of the regulations. Language was also added to include consistency with any approved watershed management plans when reviewing development plans.
- B. The environmental inventory, subsection (2) has been revised to include the requirement for the perennial flow determination and the change in definition for RPA features. This is a required change.** A requirement has been added to show the regulated floodplain, which is required by the Zoning Ordinance (Chapter 24). This is an optional change but does not represent a change in administration as the floodplains have always been shown on the environmental inventories.
- C. The Clearing Plan, Subsection (3)(a)3 has been modified to remove the word vista to be consistent with the change in Section 23-7(c)(1). Also, subsection a.4. has been added regarding the inclusion of erosion control measures on the plan. Again, this has been a matter of practice but has not been explicitly stated in the Ordinance. Under Subsection b., the size of the trees to be planted has been reduced from 2-1/2 to 1-1/2 inches for the reasons stated previously for Section 23-9(b)(2)a.
- D. Subsection (4) regarding stormwater management was modified to clarify that water *quantity* control stormwater management would still need to be considered as part of the Erosion Control Ordinance requirements even if water *quality* were not required by the Chesapeake Bay Ordinance.

Section 23-11. Water Quality Impact Assessments.

This section was modified to include the requirement for a water quality impact assessment for land disturbance activities in an RPA. This is a required change.

Section 23-12. Waiver for Noncomplying Structures.

- A. This section has been modified to address the granting of waivers to the ordinance requirements for structures that were in existence prior to the adoption of the original ordinance in 1990. These provisions are generally the same as they were previously but have been restructured to meet the new regulation requirements.**
- B. Subsection (1)(d) was added to include a statement that the waiver would not conflict with the comprehensive plan or applicable watershed management plan.

Section 23-13. Exemptions.

This section has been modified to meet the current regulations. The exemptions are a requirement of the regulations but do not represent a significant change from the previous requirements. The exemptions for RPAs were included in the previous ordinance in Section 23-14 as exceptions.

Section 23-14. Exceptions.

This section contains significant required changes regarding exceptions that are granted for the use of RPAs. The use requirements are presented in Section 23-7. The changes involve the requirement that RPA encroachments be handled by a citizen board and that a public hearing must be conducted. Currently, all exceptions are handled administratively by County staff. The process and the findings required for granting an exception are included in this section. As presented in the revised ordinance,

staff recommends that the Wetlands Board be the hearing body for these exception requests. The Wetlands Board is currently the appeal body for the administrative determinations made under the Ordinance and has stated its willingness to serve as the exception hearing body. The Wetlands Board is already familiar with the RPA issues through their involvement with granting wetlands permits although additional training will be necessary.

Section 23-15. Applications for Exceptions.

This section was amended to include the Board as one of the entities to which an exception application can be made.

Section 23-16. Granting waivers or Exceptions.

This section was amended to include the Board as one of the entities which can grant an exception.

Section 23-17. Appeals.

This section was amended to remove reference to the Wetlands Board to be consistent with Section 23-14. Also, Subsection (d) was added to state that appeals to the Board decisions are to the Circuit Court.

Darryl E. Cook

CONCUR:

William C. Porter, Jr.

DEC/gb
chesbay2_03_88.mem

Attachments:

1. Table 2 from Perennial Stream Protocol Report for Powhatan Creek Watershed Study
2. North Carolina Stream Classification Form
3. Joint Legislative Audit and Review Commission's Chesapeake Bay Study, Page 41
4. Chesapeake Bay Local Assistance Department Letter dated November 8, 2002
5. Chesapeake Bay Preservation Ordinance Update - Separation of Structures from the RPA dated September 8, 2003
6. Proposed amended Ordinance

TABLE 2: NEW RPA BUFFER PROPERTY					
Survey Site #	New rpa buffer ac	Currently Developed ac	Government owned ac	Existing jcc/conservation easement	Private undeveloped ac
1	5				5
2	4	2	2		
3 NS					
4	4				4
5	14	10		7	4
6	6	3			3
7 NS					
8 NS					
9	7	7			
10	20				20
11	10		7		3
12	16		16		
13	25	20			5
13-A					
14 NS					
15	19	15		15	4
16 NS/EST	10	5	5		
17	11				11
18	9	4		4	5
19/19A	12	7		7	5
20 intmnt					
21	22	11	11		
22	8	6			2
23	3				3
23-A NS/EST	6	3			3
24	-5				
26					
27	-5				
TOTAL	206	93	41	33	72

Table 2 shows that 72 acres of additional buffer would occur on private undeveloped property in the Powhatan Creek Watershed.

An evaluation of the NCDWQ field indicators for all 23 perennial streams is presented in Figures 1-6. The primary geomorphology results are presented in Figure 1. Conclusions regarding primary geomorphology indicators from the site inspections include:

NCDWQ Stream Classification Form

Project Name: _____ River Basin: _____ County: _____ Evaluator: _____
 DWQ Project Number: _____ Nearest Named Stream: _____ Latitude: _____ Signature: _____
 Date: _____ USGS QUAD: _____ Longitude: _____ Location/Directions: _____

***PLEASE NOTE:** *If evaluator and landowner agree that the feature is a man-made ditch, then use of this form is not necessary. Also, if in the best professional judgement of the evaluator, the feature is a man-made ditch and not a modified natural stream—this rating system should not be used**

Primary Field Indicators: (Circle One Number Per Line)

I. Geomorphology	Absent	Weak	Moderate	Strong
1) Is There A Riffle-Pool Sequence?	0	1	2	3
2) Is The USDA Texture In Streambed Different From Surrounding Terrain?	0	1	2	3
3) Are Natural Levees Present?	0	1	2	3
4) Is The Channel Sinuous?	0	1	2	3
5) Is There An Active (Or Relic) Floodplain Present?	0	1	2	3
6) Is The Channel Braided?	0	1	2	3
7) Are Recent Alluvial Deposits Present?	0	1	2	3
8) Is There A Bankfull Bench Present?	0	1	2	3
9) Is a Continuous Bed & Bank Present?	0	1	2	3
<i>(*NOTE: If Bed & Bank Caused By Ditching And WITHOUT Sinuosity Then Score=0*)</i>				
10) Is a 2 nd Order Or Greater Channel (As Indicated On Topo Map And/Or In Field) Present?		Yes=3	No=0	

PRIMARY GEOMORPHOLOGY INDICATOR POINTS: _____

II. Hydrology	Absent	Weak	Moderate	Strong
1) Is There A Groundwater Flow/Discharge Present?	0	1	2	3

PRIMARY HYDROLOGY INDICATOR POINTS: _____

III. Biology	Absent	Weak	Moderate	Strong
1) Are Fibrous Roots Present In Streambed?	3	2	1	0
2) Are Rooted Plants Present In Streambed?	3	2	1	0
3) Is Periphyton Present?	0	1	2	3
4) Are Bivalves Present?	0	1	2	3

PRIMARY BIOLOGY INDICATOR POINTS: _____

Secondary Field Indicators: (Circle One Number Per Line)

I. Geomorphology	Absent	Weak	Moderate	Strong
1) Is There A Head Cut Present In Channel?	0	.5	1	1.5
2) Is There A Grade Control Point In Channel?	0	.5	1	1.5
3) Does Topography Indicate A Natural Drainage Way?	0	.5	1	1.5

SECONDARY GEOMORPHOLOGY INDICATOR POINTS: _____

II. Hydrology	Absent	Weak	Moderate	Strong
1) Is This Year's (Or Last Year's) Leaf litter Present In Streambed?	1.5	1	.5	0
2) Is Sediment On Plants (Or Debris) Present?	0	.5	1	1.5
3) Are Wrack Lines Present?	0	.5	1	1.5
4) Is Water In Channel <i>And</i> >48 Hrs. Since Last <i>Known</i> Rain? (*NOTE: If Ditch Indicated In #9 Above Skip This Step And #5 Below*)	0	.5	1	1.5
5) Is There Water In Channel During Dry Conditions <i>Or</i> In Growing Season)?	0	.5	1	1.5
6) Are Hydric Soils Present In Sides Of Channel (Or In Headcut)?		Yes=1.5		No=0

SECONDARY HYDROLOGY INDICATOR POINTS: _____

III. Biology	Absent	Weak	Moderate	Strong		
1) Are Fish Present?	0	.5	1	1.5		
2) Are Amphibians Present?	0	.5	1	1.5		
3) Are Aquatic Turtles Present?	0	.5	1	1.5		
4) Are Crayfish Present?	0	.5	1	1.5		
5) Are Macrobenthos Present?	0	.5	1	1.5		
6) Are Iron Oxidizing Bacteria/Fungus Present?	0	.5	1	1.5		
7) Is Filamentous Algae Present?	0	.5	1	1.5		
8) Are Wetland Plants In Streambed?	SAV	Mostly OBL	Mostly FACW	Mostly FAC	Mostly FACU	
Mostly UPL						
(* NOTE: If Total Absence Of All Plants In Streambed As Noted Above Skip This Step UNLESS SAV Present*)	2	1	.75	.5	0	0

SECONDARY BIOLOGY INDICATOR POINTS: _____

TOTAL POINTS (Primary + Secondary) = _____ (If Greater Than Or Equal To 19 Points The Stream Is At Least Intermittent)

Notes:

Table 7	
Local RPA Development Applications Approved (FY 2000 and FY 2001)	
<u>Type of Building Permits</u>	<u>Frequency</u>
Single Family Development	185
Subdivision	16
Accessory	60
Industrial/Commercial	16
Other*	37
Total	314

**Other* includes activities such as landscaping, stream bank erosion protection, tree removal, and septic tank installation.

Source: JLARC staff file analysis of Bay Act program files at 11 Tidewater cities and counties.

ranged from a fairly strict policy where few encroachments are allowed unless hardships are demonstrated to a more generous policy where encroachments appeared to be regularly allowed into the buffer. However, there did not appear to be a single explanation as to the differing policies.

Henrico County is an example of a locality that follows a "strict" RPA buffer policy. According to Henrico County staff, the county protects its RPA buffer by requiring a mandatory 30 to 50-foot setback (depending on the zoning classification) "between the buildable area on a residential lot" and the buffer allowing homeowners to have adequate rearyard space which helps eliminate the need to encroach. Henrico also requires developers to post signs along the RPA boundaries designating them as environmentally sensitive areas. Henrico staff reported that they authorized very few "exceptions" for property owners to encroach into the RPA buffers because the county requires applicants to demonstrate "significant" hardships before granting encroachment rights. Henrico staff also said the nature of the county's geography precludes citizens from requesting RPA encroachments, for the most part, because there are no real scenic vistas along its preservation areas.

JLARC staff confirmed that Henrico County does not grant RPA encroachments unless property owners demonstrate significant hardships. The study team reviewed a proposal that Henrico received in February 2001 requesting that a "landfill" operation expand into the RPA buffer. The county responded to the applicant by stating:

...it is the intent of the Chesapeake Bay Act to protect the water quality of streams and wetlands by maintaining a 100 [foot] vegetated buffer along tributary streams. I can not imagine an instance whereby a 100-foot buffer could be more useful or beneficial than at a landfill operation. In addition, your proposal to include a 2 to 1 landfill slope as part of the buffer is particularly



COMMONWEALTH of VIRGINIA

CHESAPEAKE BAY LOCAL ASSISTANCE DEPARTMENT

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

James Monroe Building
101 North 14th Street, 17th Floor
Richmond, Virginia 23219
FAX: (804) 225-3447
November 8, 2002

C. Scott Crafton
Acting Executive Director
(804) 225-3440
1-800-243-7229 Voice/TDD

Mr. Darryl Cook
Environmental Division Director
James City County
P O Box 8784
Williamsburg, VA 23187-8784

Re: Resource Protection Area Setbacks

Dear Mr. Cook:

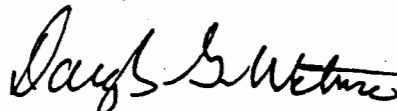
As I'm sure you are aware, the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) clarify that there is to be a 100-foot buffer area adjacent to and landward of all Resource Protection Area (RPA) features and along both sides of any water body with perennial flow. During recent meetings with certain localities, **it became clear that the 100-foot RPA buffer was being used as a building setback line and not as a required "no disturbance" area.** Allowing structures to be built on the RPA boundary line has led to construction disturbance within the buffer area, which is not allowed under the Regulations. Section 9VAC 10-20-130.3 of the Regulations requires that "...a 100-foot buffer area of vegetation that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from run-off shall be retained if present and established where it does not exist." In addition, Section 9VAC 10-20-130.5.a of the Regulations describes the circumstances in which vegetation may be removed from the buffer. Nothing in this subsection permits the removal of vegetation in the buffer for the purpose of clearing land in preparation for construction.

In order to avoid disturbance within the RPA, each locality's review process needs to ensure that structures on lots recorded after the date of local program adoption, and not otherwise exempted by the new Regulations, are placed far enough outside of the RPA so that no disturbance of the RPA occurs during the construction process. Allowing the placement of houses and other structures at the edge of the RPA line appears to cause unnecessary violations during construction, and further serves to cause additional intrusions into RPAs as property owners add patios, decks, home additions, or clear more area for a yard. The Department recommends that localities place additional language in their land development ordinances that ensures that the

RPA remains intact. Several Tidewater localities have had success through policy and regulatory language requiring a setback from the RPA boundary line that provides the property owner with enough usable area outside the RPA to construct a house and establish a usable yard area. Localities could also require a note on the plat that indicates that clearing or grading activities are prohibited within the RPA. In addition to new regulatory language, a plat note would help to educate new and prospective landowners on the implications of the Resource Protection Area. Because all localities are currently in the process of revising their local Bay Act programs to meet the requirements of the revised Regulations, this would be an appropriate time to make any such changes as well.

Please consider addressing these recommendations during the current revision of your local Bay Act programs and feel free to contact me if I can be of any assistance with this issue or any other issues of concern. I can be reached at 1-800-243-7229 or by e-mail at dwetmore@cblad.state.va.us.

Sincerely,



Douglas G. Wetmore
Principal Environmental Planner

Cc: Martha Little
Shawn Smith

Memorandum

DATE: September 8, 2003

TO: Board of Supervisors of James City County

FROM: Marc Bennett, Mark Rinaldi, Doug Beisch (members of the Chesapeake Bay Preservation Ordinance Update Committee)

SUBJECT: Chesapeake Bay Preservation Ordinance Update
Separation of Structures from the RPA

As members of the Committee, we believe the committee has been cordial and largely productive, with members of the James City County Staff, the environmental community and the engineering and environmental sciences community, working together for positive outcomes. Consensus has been reached on the several issues. However, the Committee, having met no fewer than four (4) times this year on the Ordinance update, has not been able to reach consensus on the matter of the Staff proposal to require a building separation (most recently, worded as "setback") from the RPA buffer line.

While we are sympathetic to the sometimes unpleasant encounters that Staff must endure in resolving Chesapeake Bay compliance issues, by Staff's own admission, the issue giving rise to their proposal for the separation/setback occurs in fewer than one case per week, on average. We feel, however, that the proposed remedy before you from the Staff will neither minimize unpleasant encounters, nor reduce Staff workload, nor reduce actual or potential infractions of the Ordinance. We believe the following key considerations should be included in your evaluation of this matter and we are prepared to address any questions you might have during your September 23, 2003, work session or subsequent public meetings and hearings in this matter.

The Staff recommends an additional 15-foot (formerly 25-foot) separation be established between the principal dwelling and the RPA Buffer. This separation would provide a construction zone for the principal dwelling erection, a rear yard for the principal dwelling, and an area for the possible future expansion of the principal dwelling. Staff believes the construction zone will:

- Reduce requests to the Staff to allow impacts within the RPA buffer to create yards or dwelling additions.
- Reduce the occurrence of unintentional violations of the RPA buffer, through lack of awareness, which require time and resource expenditures by Staff to enforce and resolve.

All Committee members appreciated the time and effort Staff currently employs in these matters. However, enforcement of an additional separation/setback would also require Staff resources. Essentially, the proposed ordinance amendment would shift the Staff workload from active enforcement to enforcement during the plan approval process. Yet, even the suggested provisions of the amended ordinance may not be completely effective in the reduction of violations.

Speaking not for the Committee as a whole or for Staff, but as three committee members out of five to six regular non-Staff participants, our conclusions are as follows:

- The building separation effectively reduces the buildable area of the lots. On pre-platted lots, adoption of the proposed changes as suggested by Staff will alter the building setbacks without the consent of the property owner. For lots with existing improvements, such a change could result in the creation of non-conforming structures, which if damaged by fire or other natural causes beyond a certain extent, might not be permitted to be re-built. In the absence of vesting provisions, this could become particularly onerous for some homeowners. The application of this requirement to previously platted lots would result in a greater workload for the Staff due to the additional review required for improvements within this 15-foot setback area. On lots to be created subsequent to the amendment, the changes will result in second owner or second applicant privileges not afforded to the original owner or applicant because a future expansion can be approved in instances where original construction cannot (i.e. within the 15-foot setback).
- The proposed building separation/setback does not recognize characteristics unique to the property, such as topography, the nature, extent and maturity of existing vegetation and current land condition or use. These characteristics of the property are strikingly important when considering impacts of construction on the RPA buffer, or even RPA “impacts” themselves. Temporary construction impacts to grassed RPA areas do not pose the same threat to water quality that construction impacts to mature shrubs and trees may pose. Proper erosion and sediment control can alleviate concerns with construction in grassed areas; mature shrubs and trees require years or decades to achieve equivalent environmental benefit of the pre-construction condition.
- “Compliance with the ordinance to the maximum extent practicable” is not a “grand fathering” provision nor does it ensure beneficial use of a platted buildable lot. The phrase does suggest that more active administration (more work load), and subjectivity, not objectivity, may be introduced into the process if Staff’s proposed changes are adopted.

We respectfully submit that greater compliance with this specific Chesapeake Bay Ordinance matter can more simply and cost-effectively be accomplished, and with greater personal accountability and less subjectivity, by:

- Increasing educational opportunities and awareness for the public at large (through the County’s Website, through FYI, Neighborhood Connections, mailings, and particularly, through targeted training of the Realtor community) so that citizens are specifically advised of and know what can and cannot be constructed or altered within the RPA buffer; and,
- Providing provisions in the amended ordinance for highlighting the intent and purpose of the established RPA Buffer, and the noted Staff concerns about construction immediately adjacent to the RPA, for all future property owners to realize, either during the platting of the lots, or at the issuance of the building permit.

We thank you for your consideration of our concerns. Please feel free to call on any of us should you have any questions.

ORDINANCE NO. _____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 23, CHESAPEAKE BAY PRESERVATION, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY AMENDING, SECTION 23-3, DEFINITIONS; SECTION 23-4, DESIGNATION OF CHESAPEAKE BAY PRESERVATION AREA (CBPA); SECTION 23-5, PERMITTED USES; SECTION 23-6, LOT SIZE; SECTION 23-8, DETERMINING RESOURCE PROTECTION AREA BOUNDARIES; SECTION 23-9, PERFORMANCE STANDARDS; SECTION 23-10, PLAN OF DEVELOPMENT; SECTION 23-11, WATER QUALITY IMPACT ASSESSMENT; SECTION 23-13, EXEMPTIONS; SECTION 23-14, EXCEPTIONS; SECTION 23-16, GRANTING WAIVERS OR EXCEPTIONS; SECTION 23-17, APPEALS; AND SECTION 23-18, VIOLATIONS; PENALTIES; BY AMENDING AND RENAMING SECTION 23-7, REQUIRED CONDITIONS, TO DEVELOPMENT CRITERIA FOR RESOURCE PROTECTION AREAS; SECTION 23-12, WAIVERS, TO WAIVERS FOR NONCOMPLYING STRUCTURES; AND SECTION 23-15, APPLICATIONS FOR WAIVERS OR EXCEPTIONS, TO APPLICATIONS FOR EXCEPTIONS.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 23, Chesapeake Bay Preservation, is hereby amended and reordained by amending Section 23-3, Definitions; Section 23-4, Designation of Chesapeake Bay Preservation Area (CBPA); Section 23-5, Permitted uses; Section 23-6, Lot size; Section 23-8, Determining resource protection area boundaries; Section 23-9, Performance standards; Section 23-10, Plan of development; Section 23-11, Water quality impact assessment; Section 23-13, Exemptions; Section 23-14, Exceptions; Section 23-16, Granting waivers or exceptions; Section 23-17, Appeals; and Section 23-18, Violations; penalties; by amending and renaming Section 23-7, Development criteria for resource protection areas; Section 23-12, Waivers for noncomplying structures; and Section 23-15, Applications for exceptions.

Chapter 23. Chesapeake Bay Preservation

Sec. 23-3. Definitions.

For the purpose of this chapter, the following words and phrases shall have the meanings ascribed below:

Agricultural lands. Those lands used for tilling soil, planting and harvesting crops or plant growth of any kind in the open, pasture, horticulture, dairying, floriculture, or raising poultry and/or livestock. Buildings and structures are not included in this definition.

Best management practice (BMP). A practice, or combination of practices, that is determined by a state, local or regional agency to be the most effective, practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

Board. *The Chesapeake Bay Board, which is comprised of the members of the James City County Wetlands Board.*

Buffer area. An area of natural or established vegetation managed to protect other components of resource protection areas and county and state waters from significant degradation due to land disturbances or uses.

Caliper. The diameter of a tree trunk measured six inches above the ground for nursery stock.

Chesapeake Bay Preservation Area (CBPA). All land in James City County designated by the board of supervisors pursuant to part III of the Chesapeake Bay Regulations and the Code of Virginia, section 10.1-2107 of the Act. Chesapeake Bay Preservation Area (CBPA) shall consist of resource protection areas (RPAs) and resource management areas (RMAs).

Development. The construction or substantial alteration of residential, commercial, industrial, institutional, recreational, transportation, or utility facilities or structures.

Dripline. A vertical projection to the ground surface from the furthest lateral extent of a tree's leaf canopy.

Floodplain. All lands that would be inundated by floodwater as a result of a storm event of a 100-year return interval *as designated by Chapter 24, Section 24-586, et seq., of the County Code.*

Highly erodible soils. Soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The erodibility index for any soil is defined *by the Universal Soil Loss Equation* as the product of the formula $RKLS/T$, ~~as defined by the "Flood Security Act (F.S.A.) Manual" of August 1988, in the "Field Office Technical Guide" of the U.S. Department of Agriculture Soil Conservation Service,~~ where K is the soil susceptibility to water erosion in the surface layer; R is the rainfall and runoff, LS is the combined effects of slope length and steepness; and T is the soil loss tolerance.

Highly permeable soils. Soils with a given potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 72 inches (permeability groups "rapid" and

"very rapid") as found in the *National Soils Survey Handbook* of ~~July 1983~~ *November 1996*, in the "Field Office Technical Guide" of the U.S. Department of Agriculture ~~Soil~~ *Natural Resources* Conservation Service.

Hydric soils. Soils that are saturated, flooded or ponded long enough during the growing season to support wetland vegetation.

Impervious cover. A surface composed of any material that significantly impedes or prevents natural infiltration of water into the soil. Impervious surfaces include, but are not limited to, roofs, buildings, streets, parking areas, and any concrete, asphalt or compacted aggregate surface. *Pervious pavement surfaces will not be considered as totally impervious but will be given partial credit based on the open area and runoff characteristics of the paver structure and the proposed installation.*

Land disturbing activity. *As defined in the Erosion and Sediment Control Ordinance, section 8-2 of the county code.*

Manager. The manager of development management or his designee.

Nonpoint source pollution (NSP). Includes, but is not limited to, the following stormwater-borne pollutants resulting from land use activities:

- (1) Sediment;
- (2) Nutrients, such as phosphorus and nitrogen;
- (3) Bacteria; *such as fecal coliforms*

- (4) Viruses;
- (5) Oxygen depletion;
- (6) Hydrocarbons, such as fuels and lubricants;
- (7) Toxic metals, such as lead, zinc, copper;
- (8) Toxic chemicals;
- (9) Chlorides, *chlorinated water*; and
- (10) Increases in water temperature *above normal, ambient levels*.

Nontidal wetlands. Those wetlands, other than tidal wetlands, that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, as defined by the U.S. Environmental Protection Agency pursuant to section 8404 of the Federal Clean Water Act, in 33 CFR 328.3b, ~~dated November 13, 1986.~~

Noxious weeds. Weeds that are difficult to control effectively, such as Johnson Grass, Kudzu and multiflora rose. *A complete list is contained in the Department of Conservation and Recreation, Division of Natural Heritage publication entitled Invasive Plant Species of Virginia.*

Plan of development. Site plans, subdivision plans or other plans submitted pursuant to section 23-10 to ensure compliance with this chapter.

Public Road. A publicly owned road designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to (i) the Erosion and Sediment Control Law (section 10.1-560 et seq. of the Code of Virginia) and (ii) the Virginia Stormwater Management Act (section 10.1-603.1 et seq. of the Code of Virginia). This definition includes those roads where the Virginia Department of Transportation exercises direct supervision over the design or construction activities, or both.

Redevelopment. The process of developing land that is or has been previously developed.

Resource management area (RMA). That component of the CBPA that is not classified as the resource protection area. Lands of particular sensitivity within RMAs include, but not limited to, nontidal wetlands not in RPAs floodplains, highly erodible soils, highly permeable soils, and hydric soils.

Resource protection area (RPA). That component of a CBPA comprised of lands ~~at or near the shoreline~~ *adjacent to water bodies with perennial flow* that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters. RPAs shall include: ~~tidal wetlands, tidal shores, nontidal wetlands connected by surface flow and contiguous to tidal wetlands or to tributary streams, and a 100-foot-wide buffer area, as defined in this chapter, adjacent to and landward of other RPA components.~~

(1) *Tidal wetlands;*

(2) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;

(3) Tidal shores;

(4) A buffer area not less than 100 feet in width located adjacent to and landward of the components listed in subdivisions 1 through 3 above, and along both sides of any water body with perennial flow.

Runoff. That portion of precipitation that is discharged across the land surface through conveyances to one or more waterways.

Sightline. A line extending from a fixed point to a viewed object or area through an opening or passageway.

Silvicultural activities. Forest management activities, including but not limited to the harvesting of timber, the construction of roads and trails for forest management purposes, and the preparation of property for reforestation that are conducted in accordance with the silvicultural best management practices developed and enforced by the State Forester pursuant to § 10.1-1105 of the Code of Virginia and are located on property defined as real estate devoted to forest use under § 58.1-3230 of the Code of Virginia.

Substantial alteration. Expansion or modification of a building or development which would result in a disturbance of land exceeding an area of 2,500 square feet in the RMA only.

Tidal shore or shore. Land contiguous to a tidal body of water between the mean low water level and the mean high water level.

Tidal wetlands. Vegetated and nonvegetated wetlands, as defined in section ~~62.1-13.2~~ *28.2-1300* of the Code of Virginia.

~~*Tributary stream.* Any perennial stream that is so depicted on the most recent U.S. Geological Survey 7-½ minute topographic quadrangle map (scale 1:24,000).~~

Water Body with Perennial flow. A body of water that flows in a natural or man-made channel year-round during a year of normal precipitation. This includes, but is not limited to, streams, estuaries, and tidal embayments, and may include drainage ditches or channels constructed in wetlands or from former natural drainageways, which convey perennial flow. Lakes and ponds through which a perennial stream flows are part of the perennial stream. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow. The methodology to determine perennial flow shall be in accordance with section 23-10 (2)(d) of this chapter.

Water-dependent facility. A development of land that cannot exist outside of the RPA and must be located on the shoreline because of the intrinsic nature of its operation. These facilities include, but are not limited to:

- (1) Ports;
- (2) The intake and outfall structures of power plants, water treatment plans, sewage treatment plants and storm sewers;
- (3) Marinas and other boat docking structures;

- (4) Beaches and other public water-oriented recreation areas; and
- (5) Fisheries or other marine resources facilities.

Wetlands. Tidal and nontidal wetlands.

Sec. 23-4. Designation of Chesapeake Bay Preservation Area (CBPA).

The board of supervisors hereby designates all of James City County, Virginia, as a CBPA. The CBPA is further delineated on the CBPA map as resource protection areas (RPAs) and resource management areas (RMAs). The CBPA map shows general locations of RPAs and RMAs and should be consulted by persons contemplating development. *Site specific determinations of RPAs shall occur through the Plan of Development review process or through the review of a Water Quality Impact Assessment developed pursuant to section 23-11 of this chapter.*

Sec. 23-5. Permitted uses.

Permitted uses, special permit uses, accessory uses and special requirements shall be as established by the zoning district for that lot, parcel or acreage as specified in chapter 24 of this Code, unless specifically modified by the requirements set forth herein. All land-disturbing activities shall be prohibited on slopes of 25 percent or greater unless permitted in other sections of this chapter and determined by the manager to be consistent with the intent of this chapter.

Sec. 23-6. Lot size.

Lot size shall be subject to the requirements of the zoning ordinance; provided, that any lot shall have sufficient area outside the RPA to accommodate an intended use, in accordance with performance standards in section 23-9, when this use is not otherwise allowed in the RPA. *In addition, there shall be a construction zone setback of 15 feet between the principal structure and the limit of the RPA. This setback is to protect the RPA from construction impacts, allow for useable yard area, allow for additions to the principal structure that would not damage the RPA such as decks and patios as determined by the manager, and allow for the installation of accessory structures. This construction zone setback shall be clearly delineated on the subdivision plat. This provision shall also apply to lots recorded prior to (the effective date of these amendments). A Water Quality Impact Assessment shall not be required to grant an administrative exception to this section.*

Cross reference-Zoning, Ch. 24.

Sec. 23-7. ~~Required conditions.~~ *Development criteria for resource protection areas.*

~~(a) All development and redevelopment exceeding 2,500 square feet of land disturbance shall be subject to a plan of development review process, including the approval of a site plan in accordance with the provisions of the zoning ordinance or a subdivision plan in accordance with the subdivision ordinance.~~

~~(b) Development in RPAs may be allowed only if it is water dependent or constitutes redevelopment.~~

~~(c) A water quality impact assessment shall be required for any proposed development or redevelopment within RPAs and for any other development within RMAs when required by the manager because of the unique characteristics of the site or intensity of development or potential impacts on water quality or RPAS.~~

~~(d) Plans of development or water quality impact statements are not required for agricultural lands.~~

In addition to the general performance criteria set forth in section 23-9, the criteria in this section are applicable in Resource Protection Areas.

(a) Development in RPAs may be allowed only when permitted by the manager and if it (i) is water dependent; (ii) constitutes redevelopment; (iii) is a new use subject to the provisions of subsection (c)(2) of this section; (iv) is a road or driveway crossing satisfying the conditions set forth in subdivision (3) of this section; or (v) is a flood control or stormwater management facility satisfying the conditions set forth in subdivision (4) of this section.

(1) A new or expanded water dependent facility may be allowed provided that the following criteria are met:

a. It does not conflict with either the comprehensive plan or any applicable approved watershed management plan;

b. It complies with the performance criteria set forth in section 23-9 of this chapter;

- c. Any nonwater - dependent component is located outside of the RPA; and*
 - d. Access to the water-dependent facility will be provided with the minimum disturbance necessary. Where practicable, a single point of access will be provided.*
- (2) Redevelopment on isolated redevelopment sites shall be permitted only if there is no increase in the amount of impervious cover and no further encroachment within the RPA and it shall conform to sections 23-9(b)(4) and (5), and the stormwater management requirements outlined under section 23-9(b)(8) of this chapter.*
- (3) Roads and driveways not exempt under section 23-13 and which, therefore, must comply with the provisions of this chapter, may be constructed in or across RPAs if each of the following conditions are met:*
 - a. The manager makes a finding that there are no reasonable alternatives to aligning the road or drive in or across the RPA, and;*
 - b. The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize encroachment in the RPA and minimize adverse effects on water quality, and;*
 - c. The design and construction of the road or driveway satisfy all applicable criteria of this chapter including the submission of a water quality impact assessment, and;*

d. The manager reviews the plan for the road or driveway proposed in or across the RPA in coordination with the plan of development requirements as required under section 23-10.

(4) Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in RPAs provided that:

a. The manager has conclusively established that location within the RPA is the optimum location, meaning that it is the best place to locate the facility from an engineering/functionality consideration regardless of the presence of an RPA;

b. The size of the facility is the minimum necessary to provide necessary flood control, stream channel protection, stormwater treatment or all three;

c. The facility must be consistent with a stormwater management program that has been approved by the Chesapeake Bay Local Assistance Board as a Phase 1 modification to the county's program;

d. All applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies;

e. Approval must be received from the county prior to construction; and,

f. Routine maintenance must be performed on the facility to assure that it continues to function as designed.

(b) A water quality impact assessment as outlined in section 23-11 of this chapter shall be required for any proposed land disturbance, development or redevelopment within RPAs and for any other development within RMAs when required by the manager because of the unique characteristics of the site, intensity of development, or potential impacts on water quality or RPAs in accordance with the provisions of section 23-11 of this chapter.

(c) Buffer area requirements. To minimize the adverse effects of human activities on the other components of RPAs, state waters and aquatic life, a 100-foot buffer area of vegetation that is effective in retarding runoff, preventing erosion and filtering nonpoint source pollution from runoff shall be retained if present and established during development where it does not exist. The buffer shall have three layers of vegetation comprised of native trees, shrubs, and ground covers. Where the buffer is being established, a buffer modification plan will be prepared that may incorporate existing vegetation. A list of acceptable native plants is available from the manager. A buffer area not less than 100 feet in width shall be located adjacent to and landward of other RPA components and along both sides of any ~~tributary stream~~ water body with perennial flow. The full buffer area shall be designated as the landward component of the RPA. The 100-foot buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. All subdivision plats submitted for approval after August 6, 1990, shall clearly identify the boundaries of any RPA within the property. Such plat shall contain a statement that all existing vegetation within the RPA shall remain in its undisturbed natural state, except for vegetation weakened by age, storm, fire or other natural cause.

Developers shall install signs identifying the landward limit of the RPA. Signs shall be obtained, installed and maintained in accordance with guidelines established by the manager.

- (1) Permitted buffer modifications. In order to maintain the functional value of the buffer area, existing vegetation may be removed upon approval by the manager of a buffer modification plan only to provide for reasonable sight lines, access paths, general wood lot management, and BMPs including those that prevent upland erosion and concentrated flows of stormwater, as follows:*
- a. Trees may be pruned or removed as necessary to provide for sight lines provided, that where removed they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion and filtering nonpoint source pollution from runoff.*
 - b. Access paths shall be constructed and surfaced so as to effectively control erosion;*
 - c. Dead, diseased, or dying trees or shrubbery, or noxious weeds may be removed based upon the approval of the manager, who may require a recommendation by a professional forester or arborist; and*
 - d. For shoreline erosion-control projects, trees and woody vegetation may be removed, necessary control techniques employed and appropriate vegetation established to protect or stabilize the shoreline and restore the function of the buffer in accordance with the best available technical advice and applicable permit conditions or requirements.*

(2) Permitted buffer encroachments.

- a. When application of the buffer and 15 foot construction zone setback would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, encroachments into the buffer and/or the 15 foot setback areas may be allowed through an administrative process in accordance with the following criteria:*
- 1. Encroachments into the buffer and 15 foot construction zone setback shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;*
 - 2. Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel; and*
 - 3. The encroachment may not extend into the seaward 50 feet of the buffer area.*
- b. When application of the buffer and 15 foot construction setback would result in the loss of a buildable area on a lot or parcel recorded between October 1, 1989, and (the effective date of these amendments), encroachments into the buffer and 15 foot setback areas may be allowed through an administrative process in accordance with the following criteria:*
- 1. The lot or parcel was created as a result of a legal process conducted in conformity with the county's subdivision regulations;*
 - 2. Conditions or mitigation measures imposed through a previously approved exception shall be met;*

3. *If the use of a best management practice (BMP) was previously required, the BMP shall be evaluated to determine if it continues to function effectively and, if necessary, the BMP shall be reestablished or repaired and maintained as required; and*
 4. *The criteria in subdivision 2 of this section shall be met.*
- (3) *On agricultural lands, the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area and appropriate measures may be taken to prevent noxious weeds from invading the buffer area. Agricultural activities may encroach into the buffer area as follows:*
- a. *Agricultural activities may encroach into the landward 50 feet of the 100-foot wide buffer area when at least one agricultural BMP which, in the opinion of the local soil and water conservation district board, addresses the more predominant water quality issue on the adjacent land - erosion control or nutrient management - is being implemented on the adjacent land, provided that the combination of the undisturbed buffer area and the BMP achieves water quality protection, pollutant removal and water resource conservation at least the equivalent of the 100-foot buffer area. If nutrient management is identified as the predominant water quality issue, a nutrient management plan, including soil tests, must be developed and implemented consistent with the Virginia Nutrient Training and Certification Regulations (4 VAC 5-15 et seq.) administered by the Virginia Department of Conservation and Recreation.*

- b. Agricultural activities may encroach within the landward 75 feet of the 100-foot wide buffer area when agricultural BMPs which address erosion control, nutrient management, and pest chemical control, are being implemented on the adjacent land. The erosion control practices must prevent erosion from exceeding the soil loss tolerance level, referred to as "T," as defined in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service. A nutrient management plan, including soil tests, must be developed and implemented consistent with the Virginia Nutrient Management Training and Certification Regulations (§ VAC 5-515 et seq.) administered by the Virginia Department of Conservation and Recreation. In conjunction with the remaining buffer area, this collection of BMPs shall be presumed to achieve water quality protection at least the equivalent of that provided by the 100-foot wide buffer area.*
- c. The buffer area is not required to be designated for agricultural drainage ditches if at least one BMP which, in the opinion of the local soil and water conservation district board, addresses the more predominant water quality issue on the adjacent land - erosion control or nutrient management - is being implemented on the adjacent land.*
- (4) When agricultural or silvicultural uses within the buffer area cease, and the lands are proposed to be converted to other uses, the full 100-foot wide buffer area shall be reestablished. In reestablishing the buffer, management measures shall be undertaken to provide woody vegetation that assures the buffer functions are maintained or established.*

Sec. 23-8. Determining resource protection area boundaries.

~~The CBPA map shall be used as a guide to the general location of RPAs.~~ *Reference materials that may be used as general guidance for estimating locations of Resource Protection Areas includes federal and county topographic maps, wetland maps, and aerial photography.* Site-specific boundaries of the RPA shall be determined by the applicant through the performance of an environmental inventory *required as part of the plan of development review process or a water quality impact assessment.* Site-specific boundaries determined by the applicant shall be reviewed and approved by the manager.

Sec. 23-9. Performance standards.

(a) *Purpose and intent.* The performance standards establish the means to minimize erosion and sedimentation potential, reduce land application of nutrients and toxics, and maximize rainwater infiltration. Natural ground cover, especially woody vegetation, is most efficient in holding soil in place and preventing site erosion. Indigenous vegetation, with its adaptability to local conditions without the use of harmful fertilizers or pesticides, filters *and infiltrates* stormwater runoff. Keeping impervious cover to a minimum enhances rainwater infiltration and effectively reduces *increases of* stormwater runoff ~~potential~~.

The purpose and intent of these requirements is also to implement the following objectives: prevent a net increase in nonpoint source pollution from new development *and development on previously developed land where the runoff was treated by a water quality protection best management practice*; achieve a ten percent reduction in nonpoint source pollution from redevelopment *on previously developed land where the runoff was not treated by one or more water quality best management practices*; and achieve a 40 percent reduction in nonpoint source pollution from agricultural and silvicultural uses.

(b) *General performance standards:*

- (1) Land disturbance shall be limited to the area necessary to provide for the ~~desired~~ *proposed* use or development.
 - a. In accordance with an approved plan of development, the limits of clearing and/or grading shall be clearly defined. These limits shall be clearly shown on submitted plans and physically marked on the development site in accordance with subsection (2)b. below.
 - b. Impervious cover shall not exceed 60 percent of the site *unless it can be demonstrated that the project will have the same impact on water quality as the project would have if it were 60 percent impervious. Demonstration of equivalent water quality will be through compliance with guidelines developed by the manager. For projects with an approved stormwater master plan, compliance with this impervious cover provision can be demonstrated on a project basis rather than an individual site basis. However, in no case shall impervious cover exceed the limits established in section 24-9(c)(4) of the zoning ordinance.*
 - c. Ingress and egress during construction shall be limited to one access point, unless otherwise approved by the manager.
- (2) ~~Indigenous~~ *Existing* vegetation shall be preserved to the maximum extent ~~possible~~ *practicable*, consistent with the use ~~and~~ *or* development permitted by an approved plan of development.

- a. Existing trees over 12 inches in diameter at breast height shall be preserved except in impervious areas *and as necessary to accommodate site grading. Upon approval by the manager, Diseased trees or trees weakened by age, storm, fire or other injury may be removed; provided, that when such removal results in a 20 percent or greater reduction in existing tree canopy, a sufficient number of trees with a $\geq 1\frac{1}{2}$ inch caliper shall be planted to restore the full canopy.*
 - b. Prior to clearing or grading, suitable protective barriers, such as safety fencing ~~or chainlink fencing~~, shall be erected outside of the dripline of any tree or stand of trees to be preserved unless otherwise approved on the clearing plan. Protective barriers shall remain so erected throughout all phases of construction. The storage of equipment, materials, debris or fill shall not be allowed within the area protected by the barrier.
- (3) Land development shall minimize impervious cover to promote infiltration of stormwater into the ground consistent with the *proposed* use or development permitted.
- (4) All development and redevelopment exceeding 2,500 square feet of land disturbance shall be subject to a plan of development review process conducted in accordance with section 23-10 of this chapter.*
- (45) Any land-disturbing activity exceeding 2,500 square feet, including construction of all single-family houses, *and septic tanks and drainfields* shall comply with the requirements of chapter 8 of this Code.

- (56) All on-site sewage disposal systems not requiring a NPDES permit shall be pumped out at least once every five years. *However, in lieu of requiring proof of septic tank pump-out every five years, owners of on-site sewage disposal systems can submit documentation every five years, certified by a sewage handler permitted by the Virginia Department of Health, that the septic system has been inspected, is functioning properly, and the tank does not need to have the effluent pumped out of it.*
- (67) A reserve sewage disposal site, with a capacity at least equal to that of the primary sewage disposal site, shall be provided. This requirement shall not apply to any lot or parcel recorded prior to October 1, 1989, if such lot or parcel is not sufficient in capacity to accommodate a reserve sewage disposal site, as determined by the local health department. Building or construction of any impervious surface shall be prohibited on the area of all sewage disposal sites or on an on-site sewage treatment system which operates under a permit issued by the State Water Control Board until the structure is served by public sewer.
- (78) For any development or redevelopment, stormwater runoff shall be controlled by the use of BMPs ~~that achieve the following:~~ *are consistent with the water quality protection provisions (4 VAC 3-20-71 et seq.) of the Virginia Stormwater Management Regulations (4 VAC 3-20). This consistency shall be demonstrated by compliance with the criteria and BMP facilities contained in the latest version of the James City County Guidelines for Design and Construction of Stormwater Management BMPs. In addition, increases in the quantity of stormwater runoff resulting from development or redevelopment shall be addressed by the requirements of chapter 8 of the County Code.*

- ~~a. For new development sites, the post-development non-point source pollution runoff load shall not exceed the predevelopment load, based on average land cover conditions;~~
- ~~b. For redevelopment sites, the nonpoint source pollution load shall be reduced by at least ten percent. The manager may waive or modify this requirement for redevelopment sites that originally incorporated best management practices for stormwater runoff quality control; provided the following provisions are satisfied:~~
- ~~1. In no case may the post-development nonpoint source pollution runoff load exceed the predevelopment runoff load;~~
- 2a. If ~~BMPs are structural~~ *compliance for a development is based in whole or part on the use of existing downstream onsite or offsite structural BMPs*, evidence shall be provided that facilities are currently in good working order and performing at the design levels of service. The manager may require a review of both the original ~~structural~~ design and maintenance plans to verify this provision. A new maintenance agreement may be required to ensure compliance with this chapter;
- (89) Prior to initiating grading or other on-site activities on any portion of a lot or parcel, all wetlands permits required by federal, state and county laws and regulations shall be obtained and evidence of such submitted to the manager. *For those projects where no wetlands are proposed to be impacted or where the impacts do not require written authorization, documentation shall be submitted to the manager by a qualified wetlands professional attesting that the wetlands permitting process has been completed and no further documentation is necessary from the regulatory agencies.*

- (910) Land upon which agricultural activities are being conducted shall ~~have~~ *undergo* a soil and water quality conservation plan *assessment*. Such plans *assessment* shall ~~be based upon the "Field Office Technical Guide" of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with this chapter. Such a plan shall be approved by the local Soil and Water Conservation District by January 1, 1995~~ *evaluate the effectiveness of existing practices pertaining to soil erosion and sediment control, nutrient management and management of pesticides, and where necessary, results in a plan that outlines additional practices needed to ensure that water quality protection is accomplished consistent with this chapter. Plans of development or water quality impact assessments are not required for activities on agricultural lands except for land disturbing activities not related to food and/or fiber production.*

~~(c) Buffer area requirements. To minimize the adverse effects of human activities on the other components of RPAs, state waters and aquatic life, a 100-foot buffer area of vegetation that is effective in retarding runoff, preventing erosion and filtering nonpoint source pollution from runoff shall be retained if present and established during development where it does not exist. A buffer area not less than 100 feet in width shall be located adjacent to and landward of other RPA components and along both sides of any tributary stream. The full buffer area shall be designated as the landward component of the RPA. The 100-foot buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients. A combination of a buffer area not less than 50 feet in width and appropriate BMPs located landward of the buffer area which collectively achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the 100-foot buffer area may be employed in lieu of the 100-foot buffer if approved by the manager. All subdivision plats submitted for approval after August 6, 1990, shall clearly identify the boundaries of any RPA within the property. Such plat shall contain a statement that all existing vegetation~~

~~within the RPA shall remain in its undisturbed natural state, except for vegetation weakened by age, storm, fire or other natural cause. Developers shall install signs identifying the landward limit of the RPA. Signs shall be obtained, installed and maintained in accordance with guidelines established by the manager. The following additional performance criteria shall apply:~~

- ~~(1) In order to maintain the functional value of the buffer area, indigenous vegetation may be removed only to provide for reasonable sight lines, access paths, general wood lot management, and BMPS, as follows:~~
 - ~~a. Trees may be pruned or removed as necessary to provide for sight lines and vistas; provided, that where removed they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion and filtering nonpoint source pollution from runoff. Any removal of existing vegetation shall require approval following review of the plan of development;~~
 - ~~b. Access paths shall be constructed and surfaced so as to effectively control erosion;~~
 - ~~c. Dead, diseased, or dying trees or shrubbery may be removed at the discretion of the landowner based upon the approval of the manager, who may require a recommendation by a professional forester or arborist; and~~
 - ~~d. For shoreline erosion-control projects, trees and woody vegetation may be removed; necessary control techniques employed and appropriate vegetation established to protect or~~

~~stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.~~

~~(2) When application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, modifications to the width of the buffer area may be allowed in accordance with the following criteria:~~

~~a. Modifications to the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities;~~

~~b. Where possible an area equal to the area encroaching the buffer area shall be established elsewhere on the lot or parcel in a way to maximize water quality protection; and~~

~~c. In no case shall the reduced portion of the buffer area be less than 50 feet in width.~~

~~(3) On agricultural lands, the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area and noxious weeds from invading the buffer area. The agricultural buffer area may be reduced as follows:~~

~~a. To a minimum width of 50 feet when the adjacent land is enrolled in a federal, state or locally funded agricultural BMP program, and the program is being implemented; provided, that the combination of the reduced buffer area and BMPs achieve water quality protection, pollutant removal and water resource conservation at least the equivalent of the 100-foot buffer area;.~~

- ~~b. To a minimum width of 25 feet when a soil and water quality conservation plan, as approved by the local soil and water conservation district, has been implemented on the adjacent land; provided, that the portion of the plan being implemented for the CBPA achieves water quality protection at least the equivalent of that provided by the 100-foot buffer area in the opinion of the local soil and water conservation district board. Such plan shall be based upon the "Field Office Technical Guide" of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with the Act and the regulations adopted pursuant to the Act.~~
- ~~c. The buffer area is not required for agricultural drainage ditches if the adjacent agricultural land has in place BMPs in accordance with a conservation plan approved by the local soil and water conservation district.~~

Sec. 23-10. Plan of development.

Any development or redevelopment exceeding 2,500 square feet of land disturbance in the CBPA shall be accomplished through a plan of development process prior to any clearing or grading of the site or the issuance of any building permit ~~unless the manager determines that due to the scope and nature of the proposed development certain of the required information is unnecessary~~ *to assure compliance with all applicable requirements of this chapter and any applicable approved watershed management plans.* Administration of the plan of development process shall be in accordance with chapter 24 of this Code for site plans and chapter 19 of this Code for subdivision plans. The following plans or studies shall be submitted, unless otherwise provided for:

- (1) *Site and subdivision plans.* Site plans in accordance with the provisions of chapter 24 of this Code or subdivision plans in accordance with chapter 19 of this Code; *In the event that chapter 24 does not require the preparation of a site plan for a development activity that exceeds 2,500 square feet of land disturbance, a plan will still be required for the purposes of this chapter that complies with items 2, 3, and 5 of this subsection.*

- (2) *Environmental inventory.* An environmental inventory shall be submitted in conjunction with preliminary site plan or preliminary subdivision plan approval applications. *Except for the perennial stream determination required in item d of this subsection,* ~~This~~ requirement may be waived by the manager when the proposed use or development would result in less than 5,000 square feet of disturbed area. For existing single-family lots in a RPA, showing items *required by subsection a. through 4.* ~~below~~ on the plat plan normally required as part of the building permit application shall satisfy the requirements for an environmental inventory. An environmental inventory is not required for existing single-family lots in the RMA.
 - a. The environmental inventory shall be drawn to scale clearly delineating the following components:
 1. Tidal wetlands;
 2. Tidal shores;
 3. Nontidal wetlands ~~in RPA~~ *connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow (i.e. RPA wetlands);*

4. A 100-foot buffer area located adjacent to and landward of the components listed in items 1. through 3. above, and along both sides of any ~~tributary stream~~ *water body with perennial flow*;
 5. Nontidal wetlands ~~in RMA~~ *not included in item 3 (i.e. RMA wetlands)*;
 6. ~~Hydric soils~~; *100-year floodplains as designated by chapter 24 of the County Code*;
and
 7. Slopes 25 percent or greater.
- b. Wetlands delineations shall be performed consistent with the procedures specified in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands, ~~1989~~ *currently approved for use by the Army Corps of Engineers*.
 - c. The environmental inventory shall be drawn at the same scale as the preliminary site plan or subdivision plan and shall be certified as complete and accurate by a person or firm competent to make the inventory.
 - d. *The environmental inventory shall include a reliable, site specific evaluation to determine whether water bodies on or adjacent to the development site have perennial flow. This evaluation shall be provided by the person applying to use or develop the site using one of the*

county approved methods of in-field indicators of perennial flow unless the county has already made a field determination of perennial flow for the site. These site-specific determinations shall be confirmed by the manager and shall be used to establish the boundaries of the RPA.

- (3) *Clearing plan.* A clearing plan shall be submitted in conjunction with site plan review or subdivision plan review. No clearing or grading of any lot or parcel shall be permitted without an approved clearing plan. For existing single-family lots, a clearing line shown on the plat plan normally submitted as part of the building permit application shall satisfy clearing plan requirements. No clearing or grading shall occur on existing single-family lots until the building permit is obtained.

Clearing plans shall be prepared and/or certified by design professionals practicing within their areas of competence as prescribed by the Code of Virginia.

a. Contents of the plan:

1. The clearing plan shall be drawn to scale and clearly delineate the location, size and description of existing and proposed plant material. All existing trees on the site 12 inches or greater diameter at breast height (DBH) shall be shown on the clearing plan, or where there are groups of trees, the woodlines of the group may be outlined instead. The specific number of trees 12 inches or greater DBH to be preserved outside of the impervious cover and outside the groups shall be indicated on the

plan. Trees to be removed and woodlines to be changed to create desired impervious cover shall be clearly delineated on the clearing plan.

2. Any required buffer area shall be clearly delineated and any plant material to be added to establish or supplement the buffer area, as required by this chapter, shall be shown on the clearing plan.
3. Within the RPA buffer area, trees to be removed for sight lines, ~~vistas~~, access paths, and BMPs, as provided for in this chapter, shall be shown on the plan. Vegetation required by this chapter to replace any existing trees within the buffer area shall also be shown on the clearing plan.
4. *Erosion and sediment controls shall be provided as necessary and in accordance with chapter 8 of the County Code.*

b. Plant specifications:

1. All plant materials necessary to supplement the buffer area or vegetated areas outside the impervious cover shall be installed according to standard planting practices and procedures.
2. All supplementary or replacement plant materials shall be living and in healthy condition. Plant materials shall conform to the standards of the most recent edition

of the *American Standard for Nursery Stock*, published by the American Association of Nurserymen.

3. Where areas to be preserved, as designated on an approved clearing plan, are encroached, replacement of existing trees and other vegetation will be achieved at a ratio of two planted trees to one removed. Replacement trees shall be a minimum ~~2~~1-½ inches caliper at the time of planting.

c. Maintenance:

1. The applicant shall be responsible for the maintenance, repair and replacement of all vegetation as may be required by the provisions of this chapter.
2. In buffer areas and areas outside the impervious cover, plant material shall be tended and maintained in a healthy growing condition and free from refuse and debris. Unhealthy, dying or dead plant materials shall be replaced during the next planting season, as required by the provisions of this chapter.

d. Installation and bonding requirements:

1. Where buffer areas are required, no certificate of occupancy shall be issued until the installation of required plant material to establish or supplement the buffer is completed, in accordance with the approved clearing plan.

2. When the occupancy of a structure is desired prior to the completion of the plan, a certificate of occupancy may be issued only if the applicant provides a form of surety satisfactory to the county attorney in an amount equal to the costs of the remaining plant materials, related materials and installation costs.
 3. All required plant material shall be installed and approved by the first planting season following issuance of a certificate of occupancy or the surety may be forfeited.
- (4) *Stormwater management plan.* A stormwater management plan shall be submitted as part of the plan of development process required by this chapter and in conjunction with site plan or subdivision plan preliminary approval. A stormwater management plan is not required for existing single family lots.

To control stormwater runoff structural BMPs shall be required for site plans with impervious cover exceeding ten percent of site area and for subdivisions with more than one-half dwelling unit per acre. *However, all projects are subject to the stormwater provisions of chapter 8 of this Code.* Single-family subdivisions of five lots or less shall not be subject to this requirement. Any contiguous property owned by the same subdivider, or deemed by the manager as a logical part of a contiguous subdivision, cannot be subdivided into greater than five lots without complying with the requirements of this chapter. BMPs shall be designed and constructed in accordance with guidelines established by the manager.

Performance assurances shall be provided that all BMPs required in plans of development shall be constructed to comply with the performance criteria set forth therein. The form of agreement and type of bond, letter of credit or other security shall be to the satisfaction of and approved by the county attorney. The amount of bond, letter of credit or other security and designated length of completion time shall be set by the manager or his authorized designee.

- a. Contents of the Plan: At a minimum, the stormwater management plan shall contain the following:
 1. Location and design of stormwater-control devices and BMPs.
 2. Procedures for implementing nonstructural stormwater-control practices.
 - b. The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than James City County, then a maintenance agreement shall be executed between the responsible party and the county.
- (5) *Erosion and sediment-control plan.* Erosion and sediment-control plan in accordance with chapter 8 of this Code.
- (6) *Landscaping plan.* Landscaping plan in accordance with chapter 24 of this Code.

(7) *Final plan.* Final site plans or final subdivision plans for all lands within CBPAs shall include the following information:

- a. Delineation of the RPA boundary;
- b. Delineation of required buffer areas;
- c. Delineation of RMA wetlands;
- d. All wetlands permits required by law;
- e. Delineation of slopes 25 percent or greater; and
- f. BMP maintenance agreement to ensure proper maintenance of BMPs in order to continue their functions.

Sec. 23-11. Water quality impact assessment.

A water quality impact assessment shall be required for any proposed *land disturbance*, development or redevelopment *with*in RPAs and for development or redevelopment in RMAs, when required by the manager, because of the unique characteristics of the site or intensity of the proposed development or redevelopment or potential impact on water quality or RPAs. A water quality impact assessment shall identify impacts of proposed development on water quality and land in RPAs and recommended measures for mitigation of these impacts. Water quality impact assessments shall address NSP components set forth in section 23-3 of this chapter and shall follow guidelines established by the manager. Development or redevelopment within an RMA shall not require a water quality impact assessment when impervious cover is less than 40 percent of the total site area.

Sec. 23-12. Waivers *for Noncomplying Structures*.

~~It is not the intent of this chapter to prevent beneficial use or minor modification or alteration of structures legally existing prior to adoption of this chapter, or to prevent the practical use of lots or structures existing prior to adoption of this chapter whose proximity to a RPA leaves insufficient area suitable for building outside the RPA, or which lacks soil suitable for reserve or alternate drainfields, or which contains other factors which make the property practically unusable upon application of the requirements of this chapter. Waivers to all or part of this chapter may be granted by the manager to allow the beneficial use of property; provided that:~~

~~(1) Waivers granted shall be the minimum necessary to provide for buildable area or practical beneficial use;~~

~~(2) Facilities, to the extent practical, which are not water dependent shall be located outside of a RPA;~~

~~(3) Waivers granted shall cause no increase in nonpoint source pollution load;~~

~~(4) Land disturbances in excess of 2,500 square feet shall comply with chapter 8 of this Code; and~~

~~(5) The application for waiver is made pursuant to section 23-15.~~

The manager through an administrative process may permit the continued use, alteration, or the expansion of any structure in existence on August 6, 1990, which is not in conformity with the provisions of this chapter. The process requires that:

(1) The manager grant a waiver for noncomplying structures on legal nonconforming lots or parcels to provide for alterations or expansions to such nonconforming structures provided that:

- a. There will be no increase in nonpoint source pollution load;*
- b. Any development or land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements of this chapter; and*
- c. For expansion of a principal noncomplying structure, the manager makes the following findings:*
 - 1. The request for the waiver is the minimum necessary to afford relief;*
 - 2. Granting the waiver will not confer upon the applicant any specific privileges that are denied by this chapter to other property owners in similar situations;*
 - 3. The waiver is in harmony with the purpose and intent of this chapter and does not result in water quality degradation;*

4. *The waiver is not based on conditions or circumstances that are self-created or self-imposed;*
 5. *Reasonable and appropriate conditions are imposed, as warranted, that will prevent the waiver from causing a degradation of water quality;*
 6. *Other findings, as appropriate and required by the manager are met; and*
 7. *In no case shall this provision apply to accessory structures as defined in chapter 24 of the County Code.*
- d. The waiver does not conflict with the comprehensive plan or any applicable approved watershed management plan.*
- (2) *An application for a waiver shall be made in writing to the manager and shall include for the purpose of proper enforcement of this chapter, the following information:*
- a. Name and address of applicant and property owner;*
 - b. Legal description of the property and type of proposed use and development;*
 - c. A sketch of the dimensions of the lot or parcel, location of buildings and proposed additions relative to the lot lines, and boundary of the Resource Protection Area;*

- d. Location and description of any existing private water supply or sewage system; and,*
- e. A plan that depicts the impacts to components of the environmental inventory as required by section 23-10(2) of this chapter, and identification of the amount of impact to each component.*

(3) A waiver shall become null and void if building foundations are not completed within twelve months from the date issued.

Sec. 23-13. Exemptions.

- (a) Public utilities, railroads, public roads, and related facilities.*
- (1) Construction, installation, operation and maintenance of electric, *natural* gas, *fiber-optic*, and telephone transmission lines, railroads, and activities of the Virginia Department of Transportation *public roads* and their appurtenant structures in compliance with *(i)* the Erosion and Sediment Control Law (section 10.1-560 et seq. of the Code of Virginia) *and the Stormwater Management Act (section 10.1-603.1 et seq. of the Code of Virginia)*, *(ii)* ~~or~~ an erosion and sediment control plan *and a stormwater management plan* approved by the Virginia Soil and Water Conservation Board *Department of Conservation and Recreation*, or *(iii)* *this chapter's water quality protection criteria which is at least as stringent as the above state requirements* will be deemed to comply with the regulations adopted pursuant to the Act. *The exemption of public roads is further conditioned on the following:*

a. *The road alignment and design has been optimized, consistent with all applicable requirements, to prevent or otherwise minimized the encroachment in the RPA and to minimize the adverse effects on water quality.*

(2) Construction, installation and maintenance by public agencies of water and sewer, *natural gas, and underground telecommunications and cable television* lines *owned, permitted or both, by the county or a regional service authority* shall be exempt from this chapter; provided that:

- a. To the degree possible, the location of such utilities and facilities should be outside RPAs;
- b. No more land shall be disturbed than is necessary to provide for the ~~desired~~ *proposed* utility installation;
- c. All such construction, installation and maintenance of such utilities and facilities shall be in compliance with all applicable federal, state and county permits and designed and conducted in a manner that protects water quality; and
- d. Any land disturbance exceeding an area of 2,500 square feet complies with chapter 8 of this Code.

(b) *Exemptions for silvicultural activities.* Silvicultural activities are exempt from the requirements of this chapter; provided, that silvicultural operations adhere to water quality protection procedures prescribed by the Department of Forestry in its *Virginia's Forestry Best Management Practices Handbook for Forestry Operations Water Quality*.

(c) Exemptions for Resource Protection Areas. The following land disturbances may be exempted by the manager from the requirements of this chapter provided that they comply with subdivisions 1 through 3 of this subdivision: (i) water wells; (ii) passive recreational facilities, such as boardwalks, trails, and pathways; and, (iii) historic preservation and archaeological activities.

(1) Any required permits, except those to which this exception specifically applies, shall have been issued;

(2) Sufficient and reasonable proof is submitted that the intended use will not deteriorate water quality; and,

(3) Any land disturbance exceeding an area of 2,500 square feet shall comply with chapter 8 of this Code.

Sec. 23-14. Exceptions.

~~(a) Exceptions to the requirements of this chapter may be granted by the manager, provided that exceptions to the requirements shall be the minimum necessary to afford relief and reasonable and appropriate conditions upon any exception granted shall be imposed as necessary so that the purpose and intent of the Act is preserved.~~

~~(b) Exceptions from these requirements may be granted for the following land disturbances in RPAs: water wells; passive recreational facilities, such as boardwalks, trails, and pathways; and, historic preservation and archaeological activities; provided, that it is demonstrated to the satisfaction of the manager that:~~

~~(1) Any required permits, except those to which this exception specifically applies, shall have been issued;~~

~~(2) Sufficient and reasonable proof is submitted that the intended use will not deteriorate water quality; and~~

~~(3) The intended use does not conflict with nearby planned or approved uses.~~

Exceptions to the requirements of section 23-7 of this chapter may be granted, provided that:

(a) A request for an exception to the requirements of this section shall be made in writing to the Chesapeake Bay Board (Board), which is comprised of the members of the James City County Wetlands Board. The request shall identify the impacts of the proposed exception on water quality and on lands within the RPA through the performance of a water quality impact assessment which complies with the provisions of section 23-11.

(b) The board shall notify the affected public of any such exception requests and shall consider these requests in a public hearing in accordance with §15.2-2204 of the Code of Virginia, except that only one hearing shall be required.

(c) The board shall review the request for an exception and the water quality impact assessment and may grant the exception with such conditions and safeguards as deemed necessary to further the purpose and intent of this chapter if the board finds that:

- (1) The exception request is the minimum necessary to afford relief;*
- (2) Granting the exception will not confer upon the applicant any special privileges denied by this chapter to other property owners similarly situated in the vicinity;*
- (3) The exception request will be in harmony with the purpose and intent of this chapter, and is not of substantial detriment to water quality;*
- (4) The exception request is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or non-conforming that are related to adjacent parcels; and*
- (5) Reasonable and appropriate conditions are imposed which will prevent the exception request from causing a degradation of water quality.*

(d) If the board cannot make the required findings or refuses to grant the exception, the Board shall return the request for an exception together with the water quality impact assessment and the written findings and rationale for the decision to the applicant.

(e) A request for an exception to the requirements of provisions of this chapter other than sections 23-7 shall be made in writing to the manager. The manager may grant these exceptions provided that:

- (1) Exceptions to the requirements are the minimum necessary to afford relief; and*

(2) *Reasonable and appropriate conditions are placed upon any exception that is granted, as necessary, so that the purpose and intent of this chapter is preserved.*

(3) *Exceptions to Section 23-9 may be made provided the findings as noted in Section 23-14(c) are made.*

Sec. 23-15. Applications for ~~waivers or~~ exceptions.

Applications for ~~waivers or~~ exceptions shall be made in writing to *the board or* the manager *as appropriate in accordance with sections 23-14(a) and (e)*, and shall include the following:

- (1) Name and address of applicant and property owner;
- (2) Legal description of the property and type of proposed use and development;
- (3) A sketch of the dimensions of the lot or parcel, location of buildings and proposed additions relative to the lot lines, the RPA, slopes greater than 25 percent and all wetlands; ~~and~~
- (4) Location and description of any existing private water supply or sewage system; *and*
- (5) *A water quality impact assessment completed in accordance with section 23-11 of this chapter and guidelines established by the manager.*

Sec. 23-16. Granting waivers or exceptions.

The *board or the* manager may grant waivers or exceptions as set forth herein. When reviewing applications, the *board or the* manager will consider written comments from the county engineer, the director of planning and other interested parties. Waivers or exceptions granted will become null and void if building foundations are not completed within 12 months.

Sec. 23-17. Appeals.

(a) An owner of property subject to an administrative decision, order or requirement under this chapter may appeal by submitting a written application for review to the ~~wetlands board~~ ("board") no later than 30 days from the rendering of such decision, order or requirement. The board shall hear the appeal as soon as practical after receipt of the application. The appellant, the board of supervisors, the manager, the planning director and any person or agency expressing an interest in the matter shall be notified by the board not less than ten days prior to the date of the hearing. Published notice of the board's public meetings shall state that appeals from decision under the Chesapeake Bay Preservation Ordinance may be heard.

(b) In rendering its decision, the board shall balance the hardship to the property owner with the purpose, intent and objectives of this chapter. The board shall not decide in favor of the appellant unless it finds:

- (1) The hardship is not generally shared by other properties in the vicinity;

- (2) The Chesapeake Bay, its tributaries and other properties in the vicinity will not be adversely affected; and
- (3) The appellant acquired the property in good faith and the hardship is not self-inflicted.
- (c) The board may impose conditions to the granting of any waiver or exception as it may deem necessary in the public interest, and may, to ensure compliance with the imposed conditions, require a cash escrow, bond with surety, letter of credit or other security as is acceptable to the county attorney.
- (d) An owner of a property subject to a board decision, order, or requirement may appeal to the Circuit Court of James City County.*

Sec. 23-18. Violations; penalties.

(a) Without limiting the remedies which may be obtained under this section, any person who violates any provision of this chapter or who violates, fails, neglects, or refuses to obey any variance or permit condition authorized under this chapter shall, upon such finding by the circuit court, be assessed a civil penalty not to exceed \$5,000.00 for each day of violation. Such penalties may, at the discretion of the court assessing them, be directed to be paid into the treasury of the county for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas within the county, in such a manner as the court may direct by order.

(b) Without limiting the remedies which may be obtained under this section, and with the consent of any person who has violated any provision of this chapter, or who has violated, failed, neglected, or refused to obey any variance or permit condition authorized under this chapter, the county may provide for the issuance of an order against such person for the one-time payment of civil charges for each violation in specific sums, not to exceed \$10,000.00 for each violation. Such civil charges shall be paid into the treasury of the county for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas in the county. Civil charges shall be in lieu of any appropriate civil penalty that could be imposed under subdivision (a) of this section. Civil charges may be in addition to the costs of any restoration required by the Board *of Supervisors*.

(c) In addition to, and not in lieu of, the penalties prescribed in sections (a) and (b) hereof, the county may apply to the circuit court for an injunction against the continuing violation of any of the provisions of this ordinance and may seek any other remedy authorized by law.

State law reference - Virginia Code § 10.1-2109(E)

Jay T. Harrison, Sr.
Chairman, Board of Supervisors

ATTEST:

Sanford B. Wanner
Clerk to the Board