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Guidance Memorandum

Subject: GM22-2008 Board Guidance Document: Resource Protection Area- Onsite Buffer Area Delineation
To: DEQ Division of Water Planning Staff
From: Jutta Schneider, Water Planning Division Director
Date: February 3, 2022
Copies: Director of Central Operations, Director of Regional Operations, Water Permitting Division Director, Enforcement Division Director, Regional Directors, Deputy Regional Directors

Summary: As a result of actions by the 2013 General Assembly, certain water quality programs previously administered by the Virginia Department of Conservation and Recreation (DCR) are now administered by the Department of Environmental Quality (DEQ). The following guidance document associated with the implementation of the Chesapeake Bay Preservation Act and the Chesapeake Bay Preservation Area Designation and Management Regulations has been updated solely to correct typographical errors and update website links, to reflect the change in program administration from DCR to DEQ, and to reflect current regulatory and statutory authorities (Va. Code §62.1-44.15:67 et seq. and 9VAC25-830 et seq.), and does not include substantive updates or revisions.

Table with 2 columns: New Guidance Number and Title, Replaces Previous Guidance Number and Title. Row 1: GM22-2008 Board Guidance Document: Administrative Procedures for the Designation and Refinement of Chesapeake Bay Preservation Boundaries; DCR-CBLAB-021 Board Guidance Document: Administrative Procedures for the Designation and Refinement of Chesapeake Bay Preservation Boundaries

Electronic Copy:

Once effective, an electronic copy of this guidance will be available on:

- The Virginia Regulatory Town Hall under the Department of Environmental Quality (<https://townhall.virginia.gov/l/gdocs.cfm?agencynumber=440>);
- The Department’s website at: <https://www.deq.virginia.gov/water/chesapeake-bay/chesapeake-bay-preservation-act/local-program-regulations-guidance>

Contact Information:

Please contact Justin Williams, Director, Office of Watersheds and Local Government Assistance Programs, (804) 659-1125, Justin.Williams@deq.virginia.gov with any questions regarding the application of this guidance.

Certification:

As required by Subsection B of [§ 2.2-4002.1](#) of the APA, the agency certifies that this guidance document conforms to the definition of a guidance document in [§ 2.2-4101](#) of the Code of Virginia.

Disclaimer:

This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, it does not mandate or prohibit any particular action not otherwise required or prohibited by law or regulation. If alternative proposals are made, such proposals will be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Effective Date: _____

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Administrative Procedures for the Designation and Refinement of Chesapeake Bay Preservation Area Boundaries

Guidance on the Chesapeake Bay Preservation Area Designation and Management Regulations

September, 2003, Revised September 2008, February 2022

Purpose:

This document provides administrative guidance to localities in mapping the location and extent of Resource Protection Areas (RPAs), generally and on a particular site, pursuant to ~~§ 9 VAC 10-20-105~~ § 9 VAC 25-830-80(C) and ~~9 VAC 10-20-80~~ 9 VAC 25-830-80 (D) of the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations). The Regulations include a provision that requires site-specific refinement of RPAs during or prior to the plan of development review process. This guidance document provides assistance to localities on how to deal with the administrative aspects of mapping Chesapeake Bay Preservation Areas (CBPAs) and site-specific determination of RPAs.

Regulations:

- Section ~~9 VAC 10-20-60~~ 9 VAC 25-830-60(1) requires the local Bay Act program to have a map adopted by the governing body that delineates Chesapeake Bay Preservation Areas.
- Section ~~9 VAC 10-20-80 C~~ 9 VAC 25-830-80(C) indicates that the designation of RPA components are not subject to modification unless based on reliable, site-specific information as provided for in Section ~~9 VAC 10-20-105~~ 9 VAC 25-830-110 and Section ~~9 VAC 10-20-130~~ 6 9 VAC 25-830-140(6), review of a Water Quality Impact Assessment (WQIA)
- Section ~~9 VAC 10-20-80 D~~ 9 VAC 25-830-80(D) specifies that local governments may use either the USGS 7 1/2-minute topographic quadrangle maps or a scientifically valid system of infield indicators of perennial flow to generally determine the location of RPAs in their locality. However, site-specific RPA determinations must be made or confirmed by the local government pursuant to ~~9 VAC 10-20-105~~ 9 VAC 25-830-110.
- Section ~~9 VAC 10-20-105~~ 9 VAC 25-830-110 requires that localities, as part of their plan of development review process for projects located within CBPAs, ensure or confirm that a reliable, site-specific evaluation is conducted to determine whether water bodies on or adjacent to the development site have perennial flow, and that Resource Protection Area boundaries are adjusted, as necessary, on the site, based on the results of the evaluation.

- Section ~~9 VAC 40-20-191-A-9~~ VAC 25-830-190 A(4) (i) of the Regulations requires that local land development ordinances and regulations provide for the depiction of RPA and Resource Management Area (RMA) boundaries on plats and site plans.

Discussion:

When the Regulations were originally adopted into local ordinances and programs, many Tidewater localities mapped their CBPA features using map sources such as the U.S. Geological Survey (USGS) topographic quadrangle maps. Because the USGS maps are based on aerial photography and reflect only limited and inconsistent consideration of site-specific conditions, the resulting Chesapeake Bay Preservation Area maps were only able to provide general information about the possible location of RPAs and RMAs within a locality. Field inspections often revealed that perennial streams did not exist where shown or existed in areas that were originally mapped as intermittent streams or as areas where no water features were shown. Because of the inconsistencies noted between mapped information and actual field conditions, it became necessary to amend the Regulations to ensure that all streams exhibiting perennial flow and associated features will be protected. See *Determinations of Water Bodies with Perennial Flow Guidance* for more information on methods for determining perennial flow.

Mapping Resource Protection Areas

The designation and delineation of RPAs is a two-stage process under the Regulations. The first stage conducted by localities at the time their Bay Act programs were originally adopted required that localities provide a map depicting the general location of Chesapeake Bay Preservation Areas, including RPAs. The second stage requires a site-specific determination of the actual RPA boundaries at the time of site plan or WQIA development and review. The Regulations allow the use of the USGS quad maps to generally depict where perennial streams occur. If the USGS quad map indicates an entire stream on a site is perennial and the owner/developer of the subject property agrees the stream is perennial, then the USGS quad map could be used as the basis for RPA designation on a plan of development (POD) for the site, and no further determination of perennial flow would be necessary. However, there may be sites where only part of a stream on a property is depicted as perennial on the USGS quad map, and a site-specific evaluation would be appropriate to determine the full extent of perennial flow.

The determination of perennial flow does not constitute the final delineation of RPA boundaries, given that this determination would not necessarily show nontidal wetlands or other RPA features. Therefore, a site-specific determination of the extent of the RPA would still be required through the plan of development process or review of a WQIA when the proposed development activity would occur in close proximity to a water body with perennial flow or mapped RPA. The Regulations do not preclude localities or property owners from conducting site-specific evaluations prior to the plan-of-development process or prior to the preparation of a WQIA.

Although localities may continue to use USGS maps for generally mapping RPAs, localities may want to consider a more reliable method of mapping water bodies with perennial flow. Another accepted method for “generally” mapping RPAs is to use a scientifically valid default drainage area.

CBPA Maps Based on USGS Quadrangle Maps

The Chesapeake Bay Preservation Area (CBPA) maps were intended for use as a planning tool only and not as a detailed site-specific RPA boundary map for site planning purposes. Most Tidewater localities mapped their original CBPA maps based on the USGS quadrangle maps as well as other mapping sources. If a local government chooses to retain these general CBPA maps, they will need to develop an administrative process to ensure that water bodies with perennial flow are reliably identified and protected by buffers. Conversely, a land owner without any water feature on or near his or her property should not be required to undertake an evaluation to determine whether a water body with perennial flow exists on a lot or parcel. The Appendix contains a recommended process for screening which properties would not need to undertake a site-specific determination. When a property is screened out, then more site-specific information would not need to be obtained. However, if during the screening process, certain indicative features are identified, additional information would need to be provided to ensure that all water bodies with perennial flow on the site have been identified and verified in the field.

When using general CBPA maps, localities are encouraged to develop “working CBPA maps” to track RPA refinements as determined through site-specific analyses. Working maps might take the form of a digital map, a basic, hand-drawn map or parcel notations. The purpose of a “working map” is to provide local staff and landowners with the most up-to-date information upon which to make decisions.

Site-specific determinations can result in the expansion, reduction, addition, or removal of RPA features from local maps. The official local CBPA maps were intended to be general in nature and were not intended to be true “zoning” maps. Therefore, any modification of a “general” CBPA map pursuant to a site-specific determination will be considered by DEQ as a “refinement” of boundaries, and will not require the approval of DEQ. In the case of a locality that does treat their CBPA map as a zoning map embedded within the zoning ordinance, they would be required to update their maps through the processes required by the local governing body.

Site-Specific CBPA Maps-Determinations

As a service to the public, the local government may wish to conduct advanced surveys to produce a map with definitive boundaries for water bodies with perennial flow, as described in the guidance document “Determinations of Water Bodies with Perennial Flow.” This would also ensure a measure of consistency and certainty regarding the designation of all RPAs. The task would be a substantial undertaking for the local government, but the “definitive” mapping product would likely prove to be a beneficial tool for attracting and guiding development within its jurisdictions. Local CBPA Maps based upon scientifically valid in-field surveys should be considered to be definitive and, therefore, local governments would not need to confirm the existence of perennial flow during the plan of development review process.

However, methods described in the guidance document *Determinations of Water Bodies with Perennial Flow* would only determine water bodies with perennial flow, and not other RPA features such as tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, tidal shores, and any other lands designated by the local governments as RPA features. For this reason, site-specific determinations would still, at a

minimum, need to include an examination of all RPA features and the extent of the 100 foot buffer area on the subject property.

Local CBPA map modifications that revise the local Chesapeake Bay Preservation Area designation on “definitive” maps will need to be reviewed and approved by DEQ as a major program modification. Major modifications of this nature can involve changes to either the RPA or RMA boundaries.

Responsibility for the On-site Determination Procedure

During the plan of development review process required for any land disturbance that exceeds 2,500 square feet in CBPAs (~~Section 9 VAC 10-20-120-4-9 VAC 25-830-130(3)~~), local governments are required to ensure or confirm whether a water body conveys perennial flow and that any necessary adjustments in the RPA boundaries have been made. Local governments may conduct these evaluations and adjustments themselves or require the developer or landowner to perform the site-specific RPA and RMA delineation in the field. If a perennial water feature or other required RPA feature is discovered through this process, the responsible party must abide by all necessary provisions of the local Bay Act program.

The locality is responsible for verifying any determinations submitted by the applicant. If someone is interested in purchasing a property and wants to know if there is an RPA on the site, the locality should recommend that an appropriately trained professional walk the site to determine if there are any water bodies with perennial flow on site.

Areas Outside of Designated CBPAs

Some localities designated CBPAs to include an RMA that is a set linear width. These localities typically have land area that is outside of designated CBPAs. In these cases, since the Regulations apply to areas within CBPAs, the on-site delineation of RPA features should be limited to areas within the designated linear width CBPAs. For feature-based RMAs, an on-site evaluation would be necessary to determine if such features exist, and it would be through this process that all CBPA features and any water bodies with perennial flow would be identified and designated on-site.

Plats and Site Plans

Sections ~~9 VAC 10-20-191 A 4-9 VAC 25-830-190 A (4) and (5)~~ require local ordinances to provide RPA and RMA boundaries to be depicted on plats and site plans including notations on plats to require the retention of an undisturbed and vegetated 100-foot wide buffer area. The sections also require other plat notations and that local governments delineate buildable area on each lot during the plan of development review process. The delineation of buildable areas must be based on the performance criteria, local front and side yard setback requirements, and any other relevant easements or limitations regarding lot coverage. It may be helpful to also show these on public improvement plans, subdivision plans, grading plans, erosion and sediment control plans, and any other plans of development, although the regulations do not require this.

By complying with this part of the Regulations, localities will help potential property buyers, the development industry and property owners become more aware of the constraints or limitations that any site might have.

Mechanisms for notifying the Public of the Presence of Resource Protection Areas

In addition to many of the methods mentioned earlier for communicating the existence of or potential existence of RPA features and the limitations this may impose upon development, several localities have developed additional ways to notify property owners of this designation. Some localities have installed signs along RPAs that alert property owners of the restrictions associated with their properties. This method has proven very successful in limiting further encroachments into the buffer areas by unsuspecting property owners. Some localities have sent individual notifications to all property owners who may have RPA on or near their properties, along with corresponding GIS-based maps of their neighborhoods.

Mapping and Regulation of Ditches as RPAs

The RPA includes drainage ditches or channels constructed in wetlands or from former natural drainage ways, which convey perennial flow. Ditches are constructed for many purposes and occur in many different settings, including agricultural ditches, roadside ditches, ditches constructed for purposes of flood control or as part of a stormwater management BMP, and ditches constructed specifically for purposes of draining wetlands (i.e., Tulloch ditches). The following provides guidance on how ditches in these settings should be regulated.

Section ~~9 VAC 10-20-150 B 1~~ 9 VAC 25-830-150 B(1) exempts the “. . . construction, installation, operation, and maintenance of . . . public roads, and their appurtenant structures . . .” from compliance with the Regulations as long as review of the facilities is in accordance with the erosion and sediment control (ESC) law, the stormwater management (SWM) law, an ESC plan and SWM plan approved by ~~DCR~~ DEQ or local water quality criteria at least as stringent as the above state requirements. A roadside ditch, within the right-of-way of a public road that is exempted as noted above, is considered to be an appurtenant structure and, therefore, maintenance of the roadside ditch is also exempted from the Regulations. A buffer is not required for such ditches. This provision was not changed by the 2002 amendments of the Regulations

Section ~~9 VAC 10-20-130.b 3~~ 9 VAC 25-830-140(5)(b)(3) addresses agricultural drainage ditches, which may be water bodies with perennial flow, but which are not required to have the buffer requirements applied if “. . . at least one best management practice which, in the opinion of the local Soil and Water Conservation District board, addresses the more predominant water quality issue on the adjacent land . . .” Necessary maintenance of such ditches can also be performed. Therefore, when the above conditions are met, no buffer is required. This provision was not changed by the 2002 amendments of the Regulations.

Section ~~9 VAC 10-20-130.1.e~~ 9 VAC 25-830-140(1)(e) allows for flood control and stormwater management best management practices (BMPs) to be placed in the RPA, provided certain conditions are met. This section further allows for maintenance of those structures. Therefore, ditching associated with flood control or BMP construction, as well as maintenance of such ditches may be permitted under this provision, as well as the maintenance of such facilities. A buffer is not required for such ditches.

Grandfathering

The purpose of the site-specific delineation requirement is to identify and protect any unmapped perennial water bodies and to specify the upstream extent of all RPA/RMA features for use on site plans, subdivision plans, zoning maps, and record plats. DEQ realizes that this could affect some properties by placing an RPA or RMA designation on previously platted or developed properties. Therefore, any “developed” (platted or built on) land that falls within a newly designated RPA would be afforded the administrative relief outlined in ~~9 VAC 10-20-130-4~~ 9 VAC 25-830-140(4) and ~~9 VAC 10-20-150A~~ 9 VAC 25-830-150 (A) of local program ordinance amendment. Any structures located within the 100-foot buffer on such land would be considered non-conforming structures. For more information on nonconforming uses and structures, see the guidance document, entitled “Nonconforming Uses and Structures Guidance” accessible via the website: <https://www.deq.virginia.gov/water/chesapeake-bay/chesapeake-bay-preservation-act/local-program-regulations-guidance>

Appendix

Administrative Method For Local Governments: Process for determining whether site-specific determinations must be considered in areas outside of mapped RPAs

One of the issues raised is how to assist localities in determining if a proposed land disturbing activity, development, or redevelopment site may possess a RPA if the site is not currently shown as an RPA on existing Chesapeake Bay Preservation Area maps. Due to a variety of factors, many localities may not regularly update their CBPA maps and yet, as outlined in Section 9 VAC ~~10-20-~~ ~~105~~ 25-830-110, a reliable, site-specific evaluation must be conducted either by the locality or the applicant. The following is a screening method for assessing whether a site may possess an RPA warranting further on-site evaluation. The method is based on the presence or absence of certain features and the location of those features relative to the site.

The first step would be for the local government staff to ask applicants a series of simple questions to determine if any RPA features are present. If the applicant answers “Yes” to any of the questions, the site would need to be further evaluated, either through a site visit by the locality’s staff or a more formal evaluation by the applicant. If the applicant answers “No” to all of the questions, the locality would then consult its resources to determine the likelihood of a RPA existing for that site. If none of the conditions are present, then the locality may assume that the site does not contain a RPA. If any of the conditions are present, however, a further investigation is warranted.

Questions for an Applicant:

- Does the subject property have a river, stream, creek, pond, lake, ditch or area of concentrated water flow onsite or within 100 yards of any limits of the subject property?
- Does the subject property have a spring or continuous groundwater discharge source onsite?
- Does the subject property have a wetland (marsh/swamp/area of prolonged saturation) onsite or within 100 yards of any limits of the subject property?

Local Government Information Sources

- Does the 7.5-minute USGS quadrangle map show any solid or dotted blue line streams on-site or within 500 feet of the subject property?
- Does the National Wetland Inventory (NWI) map show any wetlands on-site or within 100 yards of the subject property?
- Does the FEMA map show a 100-year floodplain on-site?
- Does the NRCS Soil Survey show a solid or three-dot stream onsite or within 100 yards of the subject property? (or) Are there any one-dot streams shown and a hydric soil type associated with this area?