

Plain Language Guide¹

Proposed Chesapeake Bay Preservation Area Regulations City of Richmond Department of Public Utilities

What is this about?

The Richmond Department of Public Utilities (DPU) is proposing new regulations that establish clear, consistent procedures for managing development and land disturbance in Chesapeake Bay Preservation Areas (CBPAs) throughout the City. The City's CBPA program protects the water quality and ecological function of Richmond's waterways and the Chesapeake Bay watershed by regulating development near streams, wetlands, and other sensitive natural features.

The proposed regulations implement the Director's authority under City Code Article IV, Chapter 14, as updated by Ordinance No. 2026-039. They establish detailed standards and procedures for six program areas: protecting mature trees during development; requiring resiliency assessments for projects near waterways; approving nature-based climate adaptation measures; streamlining living shoreline project approvals; managing sight line, vista, and access path modifications in vegetated buffers; and conducting water quality impact assessments. The regulations also establish a uniform administrative review process — from pre-application conference through application, decision, and appeal — that applies across all program areas.

These regulations primarily affect property owners and developers working in or near Chesapeake Bay Preservation Areas, environmental and engineering consultants preparing CBPA applications, design and construction professionals working on shoreline and buffer projects, and anyone proposing mature tree removal during development. Members of the public interested in how Richmond protects its waterways and natural resources will also find this guide useful.

★ *This plain language guide summarizes the proposed regulation. The complete text is available for review at the DPU Director's Office (730 E. Broad Street) and on the DPU website. You are welcome to comment before the regulation is finalized — see the contact information at the bottom of this guide.*

PART 1: Chesapeake Bay Preservation Areas — Overview

1. What is a Chesapeake Bay Preservation Area?

A Chesapeake Bay Preservation Area (CBPA) is a designated area of land that the City is required to protect under the Virginia Chesapeake Bay Preservation Act (Virginia Code § 62.1-44.15:67 et seq.) and the state's implementing regulations (9VAC25-830). CBPAs consist of two components:

- **Resource Protection Areas (RPAs):** The most environmentally sensitive lands, including 100-foot vegetated buffers around streams, wetlands, and water bodies with perennial flow. Development in RPAs is most strictly regulated.

¹ This plain language guide is prepared in accordance with Section 2.02 of the Department of Public Utilities (DPU) Public Notice, Comment, and Hearing Procedures. The complete proposed regulation and additional information are available for public inspection as required by Richmond City Code Section 28-26.

- **Resource Management Areas (RMAs):** Lands adjacent to RPAs that also affect water quality but are subject to less restrictive standards.

The boundaries of Richmond's CBPAs are shown on the City's Chesapeake Bay Preservation Areas Map. If you are unsure whether your property has a CBPA, contact DPU.

2. Who administers Richmond's CBPA program?

The Director of Public Utilities (or designee) serves as the Administrator of Richmond's CBPA program. The Administrator reviews and approves CBPA site plans, evaluates applications for exceptions and special approvals, establishes administrative procedures, and enforces compliance. These regulations implement the Administrator's discretionary authority under City Code §§ 14-292 through 14-295.

3. Do these regulations replace the City Code requirements for CBPAs?

No. These regulations supplement and do not replace the City Code requirements in Article IV, Chapter 14. They provide the detailed procedures and technical standards needed to implement the Director's discretionary authority. All other applicable City, state, and federal requirements continue to apply, including the City's Floodplain Management regulations (Article II, Chapter 14), Erosion and Stormwater Management Program regulations (Article V, Chapter 14), and permits from the Virginia Marine Resources Commission and the U.S. Army Corps of Engineers.

PART 2: Mature Tree Protection

4. Are trees protected in Chesapeake Bay Preservation Areas?

Yes. City Code Section 14-263(3) requires that mature trees be protected during development and removed only where necessary. A mature tree is defined as a canopy tree (one that typically grows 35 feet or taller) with a trunk diameter of 12 inches or greater at breast height, or an understory tree (one that grows 12–35 feet) with a trunk diameter of 4 inches or greater at breast height.

5. What tree protection measures are required during construction?

Any applicant proposing land disturbance in a CBPA must show all mature trees on the Chesapeake Bay Site Plan, with species and trunk diameter measurements. Trees to be preserved must be protected by fencing or other physical barriers at the drip line (or at least one foot of radius for every inch of trunk diameter, whichever is greater). Within these tree protection zones:

- No grading, trenching, or excavation is permitted
- No materials may be stored or equipment operated

Construction best management practices must be used to prevent soil compaction and root damage.

6. When can a mature tree be removed?

Mature tree removal requires Administrator approval and is only authorized when the applicant demonstrates — through clear and convincing evidence — that removal is necessary for one of the following reasons:

- **Site access:** The tree prevents reasonable access to the buildable area and no feasible alternative route exists.
- **Building footprint:** The tree is within the proposed building footprint and relocating the structure is not feasible due to lot configuration, setbacks, or topographic constraints.
- **Utility installation:** The tree conflicts with required utility connections and trenchless or alternative installation methods are not technically or economically feasible.

- **Safety hazard:** The tree is dead, diseased, dying, or structurally unsound as certified by an ISA Certified Arborist or City Arborist, and poses an imminent safety risk.
- **Stormwater management:** The tree prevents installation of required stormwater facilities and alternative configurations are not feasible.
- **Permitted buffer modification:** Removal is authorized for sight lines, access paths, or shoreline erosion control under Parts 6 and 7 of the regulation.

The applicant bears the burden of proof. The Administrator will prepare written findings documenting the necessity determination for each tree removal request.

7. What mitigation is required if a mature tree is approved for removal?

Approved tree removals require replacement planting at the following ratios:

- Canopy trees: 3 replacement trees for each tree removed
- Understory trees: 2 replacement trees for each tree removed

Replacement trees must meet minimum caliper standards (2-inch caliper for canopy species; 1.5-inch caliper for understory species) and native species are preferred. Plantings must be maintained for a monitoring period of typically two to three years, and trees that die during this period must be replaced. The first choice for replacement planting locations is within the RPA buffer; if that is not possible, elsewhere on the property within the CBPA; and if off-site planting is necessary, in an Administrator-approved location within the same watershed.

PART 3: Resiliency Assessments

8. What is a resiliency assessment?

A resiliency assessment is a study required by City Code Section 14-264(1)(c) for proposed land disturbance in a resource protection area. Its purpose is to evaluate how sea-level rise, storm surge, and flooding could affect the buffer function of the RPA in light of the proposed development — and to identify appropriate adaptation measures to address those risks.

9. When is a resiliency assessment required?

A resiliency assessment is mandatory for development in a Chesapeake Bay Preservation Area that meets any of the following thresholds:

- Any structure with a foundation or habitable space within 200 feet of mean high water (or 500 feet for critical facilities such as hospitals and emergency operations centers)
- Any structure with a lowest floor elevation at or below 8 feet NAVD88 in tidal influence areas, or within 2 feet of the Base Flood Elevation
- Any new structure or substantial improvement in a Special Flood Hazard Area (FEMA Zone A or AE)
- New development of 2,500 square feet or more of land disturbance within or adjacent to an RPA
- Redevelopment that increases impervious cover by 2,500 square feet or more within 300 feet of an RPA
- Any project the Administrator determines warrants assessment based on site characteristics, intensity, or duration of use

Note: Installation and maintenance of water, sewer, natural gas, and telecommunications lines owned or permitted by the City or a regional service authority are exempt from the resiliency assessment requirement.

10. What does a resiliency assessment include?

A resiliency assessment must analyze current and projected flood conditions using the DEQ AdaptVA platform or equivalent data sources, evaluate sea-level rise projections under multiple scenarios, assess storm surge and tidal flooding risks, identify potential impacts to the RPA buffer, and recommend adaptation measures. The report must be prepared in accordance with the DEQ Chesapeake Bay Preservation Act Resiliency Guidance and must be submitted along with the CBPA application.

PART 4: Adaptation Measures in Resource Protection Areas

11. What is an adaptation measure?

An adaptation measure is a project, practice, or approach that reduces the impacts of climate change — including sea-level rise, storm surge, and flooding — through the use of environmental processes and natural systems. Adaptation measures are also known as nature-based solutions. City Code Section 14-264(4) allows adaptation measures within RPAs as an exception to the general prohibition on development in buffer areas.

12. What kinds of adaptation measures are eligible?

The regulation establishes criteria for approving adaptation measures in RPAs. Eligible measures must: use natural or nature-based approaches; primarily address climate-related flooding, erosion, or sea-level rise impacts; minimize land disturbance and vegetation removal; maintain or enhance the water quality functions of the RPA; and be consistent with other applicable City, state, and federal requirements.

Examples of acceptable adaptation measures include:

- Living shorelines and vegetated shoreline stabilization
- Tidal wetland restoration and enhancement
- Bioretention cells and rain gardens designed for flood attenuation
- Floodplain restoration and reconnection
- Green infrastructure for stormwater management
- Permeable pavement and porous surfaces to reduce runoff
- Elevated structures to accommodate sea-level rise
- Shoreline retreat and managed realignment

Hardened shoreline protection structures (such as bulkheads and riprap revetments) that do not incorporate natural elements are generally not considered eligible adaptation measures under these regulations.

13. What standards apply to fill used in adaptation measure projects?

Fill within the RPA for adaptation measures is subject to strict standards. Fill must be the minimum necessary to achieve the adaptation purpose, must be stable, clean, and free of contamination, and must not increase flood risk to adjacent properties. Projects involving fill in wetlands or tidal areas require Virginia Marine Resources Commission (VMRC) or Wetlands Board approval in addition to CBPA approval.

⚠ *Adaptation measures in resource protection areas require Administrator approval before construction begins. Beginning work without approval is a violation of City Code § 14-295 and may result in civil penalties of up to \$5,000 per day, stop-work orders, and restoration requirements.*

PART 5: Living Shorelines

14. What is a living shoreline?

A living shoreline is a shoreline stabilization technique that uses natural materials — such as native vegetation, oyster reefs, coir fiber logs, and compatible sand or gravel fill — to reduce erosion while maintaining or enhancing natural habitat and water quality functions. Living shorelines are the preferred alternative to bulkheads and other hardened shoreline structures in Virginia.

15. Do living shoreline projects require CBPA approval?

Living shoreline projects that meet the standards in Part 5 of the regulation may qualify for an exemption from certain RPA development restrictions, subject to Administrator approval. To qualify for the exemption, a living shoreline project must:

- Minimize land disturbance within the RPA to the greatest extent practicable
- Maintain a vegetated buffer of sufficient width to protect water quality
- Use only clean fill material meeting applicable standards
- Obtain any required VMRC or Wetlands Board approvals
- Meet construction and post-construction monitoring requirements

Projects that do not meet these standards must apply through the standard CBPA exception process.

16. What other permits are needed for a living shoreline project?

In addition to CBPA Administrator approval, living shoreline projects in tidal areas typically require a permit or approval from the Virginia Marine Resources Commission (VMRC) or Wetlands Board. Some projects may also require a U.S. Army Corps of Engineers Section 404 permit. Applicants should contact VMRC and the Army Corps early in the planning process. DPU CBPA approval does not substitute for any required state or federal permit.

PART 6: Buffer Area Modifications — Sight Lines, Vistas, and Access Paths

17. Can vegetation in the RPA buffer be cleared for a view or access to the water?

Yes, under limited circumstances. City Code Section 14-264(5) allows reasonable sight lines, vistas, and access paths through the RPA buffer as exceptions to the general prohibition on vegetation clearing. The regulation establishes specific standards for each type of modification.

18. What standards apply to sight line and vista modifications?

Sight line and vista modifications through the buffer must:

- Be the minimum width and extent necessary to achieve the desired view
- Avoid removal of mature trees to the maximum extent practicable
- Maintain adequate ground cover and understory vegetation to protect soil stability and water quality
- Include replacement vegetation where any vegetation is removed

The Administrator will evaluate proposed sight line and vista modifications based on the specific dimensions, location, and vegetation impact of each request.

19. What standards apply to access path modifications?

Access paths through the buffer to the water must:

- Be the minimum width necessary for the intended use (generally no more than 6 feet for pedestrian access)
- Follow the natural contours of the land to minimize grading and erosion risk
- Use pervious surface materials where practicable
- Avoid mature tree removal to the maximum extent practicable

Maintenance and monitoring of approved modifications are required under the conditions of approval.

PART 7: Shoreline Erosion Control Projects

20. Are shoreline erosion control projects allowed in the RPA buffer?

Yes. City Code Section 14-264(5) recognizes shoreline erosion control projects as a permitted exception to RPA buffer restrictions. Part 7 of the regulation establishes standards for mature tree removal and tree incorporation requirements specific to shoreline erosion control projects.

21. Can mature trees be removed for a shoreline erosion control project?

Mature tree removal for shoreline erosion control is restricted. Trees may only be removed where they are within the footprint of the approved erosion control structure or where the Administrator determines their removal is necessary for the structural integrity or function of the project. Where trees must be removed, the regulation requires incorporation of woody material into the project where consistent with the design and with VMRC guidelines, and mitigation for removed trees consistent with Part 2 of the regulation.

22. What other approvals are required for shoreline erosion control projects?

All shoreline erosion control projects in tidal areas must be consistent with the Virginia Wetlands Act and VMRC guidelines. Most projects will require a VMRC permit or Wetlands Board approval in addition to CBPA Administrator approval. Projects must also comply with all applicable City floodplain management requirements.

PART 8: Water Quality Impact Assessments

23. What is a water quality impact assessment?

A water quality impact assessment (WQIA) is a technical study that evaluates the potential effects of a proposed development project on the water quality of streams, wetlands, and other water bodies in the Chesapeake Bay Preservation Area. WQIAs analyze pollutant loads (particularly nitrogen, phosphorus, and sediment), stormwater runoff characteristics, and the effectiveness of proposed best management practices in reducing water quality impacts.

24. When is a WQIA required?

A water quality impact assessment is required for:

- Any land disturbance exceeding 2,500 square feet within a resource protection area
- Any development or redevelopment that increases impervious cover within or adjacent to an RPA
- Any project that involves encroachment into a wetland or water body
- Any other project the Administrator determines may have a significant water quality impact based on site characteristics or development intensity

Note: Installation and maintenance of water, sewer, natural gas, and telecommunications lines owned or permitted by the City or a regional service authority are exempt from the WQIA requirement.

25. What qualifications are required to prepare a WQIA?

WQIAs must be prepared by or under the supervision of a licensed Virginia Professional Engineer (P.E.) or other qualified professional with demonstrated expertise in stormwater management, water quality analysis, and Chesapeake Bay program requirements. The Administrator may request documentation of the preparer's qualifications.

26. What does a WQIA evaluate?

A WQIA must analyze existing site conditions and drainage patterns, calculate pre- and post-development pollutant loads using standard methodologies, evaluate the effectiveness of proposed BMPs in reducing pollutant loads, and demonstrate that the project meets applicable water quality protection criteria. Reports must follow the format requirements in Section 8.07 of the regulation and must be submitted with the CBPA application.

PART 9: Administrative Procedures — Applying for CBPA Approval

27. What is a pre-application conference, and is it required?

A pre-application conference is a meeting between the applicant (and any consultants) and DPU staff to discuss a proposed project before a formal application is submitted. Pre-application conferences are strongly encouraged and, for complex projects involving RPA encroachments, resiliency assessments, or adaptation measures, are effectively required to ensure applications are complete and compliant. Scheduling a pre-application conference early can save significant time and cost by identifying issues before they appear in a formal application review.

28. What must be included in a CBPA application?

Application requirements vary by project type. Standard elements across all CBPA applications include:

- Chesapeake Bay Site Plan showing all site features, mature trees, proposed disturbance areas, and required buffers
- Written narrative describing the project and its purpose
- Documentation supporting any necessity claims (for mature tree removal) or exception requests
- Any required resiliency assessment or water quality impact assessment
- Proposed mitigation or BMP plan
- Applicable standard forms from Part 10 of the regulation

Standard application forms are available on the DPU website and at the Director's Office.

29. How does DPU review a CBPA application?

DPU follows a two-step review process:

- **Completeness Review:** DPU staff review the application to confirm all required elements are present. You will be notified whether your application is complete. If it is incomplete, you will receive a written list of missing items and have an opportunity to provide them.
- **Technical Review:** Once deemed complete, the application undergoes technical review for compliance with the CBPA Regulation and City Code. DPU staff may request additional information during technical review. Upon completion of technical review, the Administrator will issue a written decision.

30. What decisions can the Administrator make on my application?

- **Approval:** Application meets all requirements and is approved as submitted.
- **Conditional Approval:** Application is approved subject to conditions — such as enhanced mitigation, monitoring requirements, or BMP maintenance agreements.
- **Denial:** Application does not meet applicable requirements or impacts cannot be adequately mitigated.

All decisions are in writing and include findings of fact, conclusions about applicable requirements, conditions of approval (if any), grounds for denial (if applicable), and a statement of your right to appeal.

31. How long is a CBPA approval valid?

Approval validity periods are established by the Administrator consistent with the City's general practices for development approvals and the scope of the approved work. An approval will expire if construction has not commenced within 6 months of approval, or if substantial work is discontinued for one year. Extension requests must be submitted in writing before expiration and may be granted at the Administrator's discretion if site conditions and applicable requirements have not materially changed.

32. How do I appeal a CBPA decision?

Appeals of Administrator decisions are governed by City Code § 14-294. The process is:

- **Step 1:** File a written appeal with the Director of Public Utilities within 30 days of the Administrator's written decision. Include a \$50 filing fee payable to the City treasury.
- **Step 2:** A hearing will be scheduled within 45 days of the appeal filing.
- **Step 3:** The Director will issue a written decision within 15 days of the hearing.
- **Step 4:** If still dissatisfied, you may appeal the Director's decision to the Circuit Court within 30 days.

PART 10: Forms, Reporting, and Website Publication

33. What standard forms are available?

DPU will develop and maintain standard application forms, checklists, and templates for all CBPA program areas, including:

- Resource protection area encroachment/development application
- Water quality impact assessment checklist
- Resiliency assessment checklist
- Mature tree removal application
- Buffer modification application
- Living shoreline exemption request
- Monitoring report templates
- Maintenance agreement template

These forms will incorporate, where appropriate, templates and checklists from DEQ's Bay Act Resiliency Guidance to ensure consistency with state requirements. All forms will be available on the DPU website and at the Director's Office.

34. Does DPU report to the state on the CBPA program?

Yes. In accordance with 9VAC25-830, DPU submits an annual report to DEQ by March 31 of each year summarizing CBPA program activity, including: the number and type of applications processed; approvals, denials, and conditions imposed; mature trees removed and replacement plantings; adaptation measures approved and installed; water quality and resiliency issues identified; and recommendations for

program improvements. DPU also maintains these regulations, all forms and checklists, and annual reports on the City's website as required by Virginia Code § 62.1-44.15:67(C).

Important Things to Know

- **No vested rights affected:** Nothing in these regulations affects vested rights protected under Virginia Code § 62.1-44.15:79 and applicable Virginia common law.
- **Existing approvals are protected:** Approvals issued before these regulations take effect remain valid under their existing terms until expiration or renewal.
- **Pending applications:** Applications submitted and deemed complete before adoption will be processed under the standards in effect at the time of submission. Pending applicants may request review under the new standards if those standards are more favorable.
- **Other permits still required:** DPU's CBPA approval does not substitute for required VMRC, Army Corps, DEQ, or other state and federal permits. Obtain all required approvals before starting work.
- **Violations are serious:** Unauthorized land disturbance, tree removal, or development in a CBPA is subject to civil penalties of up to \$5,000 per day, stop-work orders, and mandatory restoration under City Code § 14-295.
- **These regulations are certified by DEQ:** Richmond's CBPA program, including these regulations, is subject to periodic review and certification by the Virginia Department of Environmental Quality under 9VAC25-830.

Tips for a Smooth Experience with DPU

- Schedule a pre-application conference before investing significant resources in application preparation — DPU staff can help you understand what is required for your specific project.
- Determine early whether your property is in a CBPA and whether your project involves an RPA or RMA, as the requirements differ significantly.
- If your project involves mature trees, document alternatives considered and retain an ISA Certified Arborist early in the process if tree removal may be needed.
- For shoreline and adaptation measure projects, contact the Virginia Marine Resources Commission (VMRC) early — their review timeline is typically longer than the CBPA review and both approvals are needed before construction.
- Use the standard forms and checklists available on the DPU website to ensure your application is complete before submission — incomplete applications delay review.
- If a resiliency assessment or water quality impact assessment is required, retain a qualified professional early; these studies take time to prepare properly.
- Keep records of all submissions, correspondence, approvals, monitoring reports, and inspection records related to your CBPA project.
- If you receive a stop-work order or notice of violation, contact DPU promptly — unresolved violations accrue penalties daily.

For Questions About This Proposed Regulation:

Call: (804) 646-5209 Email: Lee.Crowell@RVA.Gov

Website: <https://www.rva.gov/public-utilities/rulesandregulations>

Director's Office: 730 East Broad Street, Richmond, VA 23219 (available weekdays, 8:00 a.m. – 5:00 p.m.)

Your participation in this process helps DPU protect Richmond's waterways and serve the community better!