Presented below are water quality standards that are in effect for Clean Water Act purposes.

EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.

December 16, 2020

Water Quality Standards
9VAC25-260

Effective October 6, 2020

The following provisions are in effect for Clean Water Act (CWA) purposes. However, in their January 6, 2020 action, EPA did not approve the following two new or revised provisions because they do not constitute and change to WQS and therefore are not subject for review under the CWA:

- In Section bb, Virginia added a provision that assessment guidance will be developed to address the appropriate assessment category if consecutive exceedances of the same seasonal mean criterion occur in a water body segment.
- Virginia added subsection (2) to specify the manner in which chlorophyll-a data should be aggregated and calculation procedures for how to calculate the median chlorophyll-a values for a segment. This addition defines the manner in which chlorophyll-a data should be aggregated and averaged.

Chapter 260. Water Quality Standards

Part I
Surface Water Standards with General, Statewide Application

9VAC25-260-5. Definitions.

The following words and terms when used in this chapter shall have the following meanings unless the context clearly indicates otherwise:

"Algicides" means chemical substances, most commonly copper-based, used as a treatment method to control algae growths.

"Board" means State Water Control Board.

"Chesapeake Bay and its tidal tributaries" means all tidally influenced waters of the Chesapeake Bay; western and eastern coastal embayments and tributaries; James, York, Rappahannock and Potomac Rivers and all their tidal tributaries to the end of tidal waters in each tributary (in larger rivers this is the fall line); and includes subdivisions 1, 2, 3, 4, 5, and 6 of 9VAC25-260-390, subdivisions 1, 1b, 1d, 1f and 1o of 9VAC25-260-410, subdivisions 5 and 5a of 9VAC25-260-415, subdivisions 1 and 1a of 9VAC25-260-440, subdivisions 2, 3, 3a, 3b and 3e of 9VAC25-260-520, and subdivision 1 of 9VAC25-260-530. This definition does not include free flowing sections of these waters.

"Criteria" means elements of the board's water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.

"Department" or "DEQ" means the Virginia Department of Environmental Quality.

"Designated uses" means those uses specified in water quality standards for each waterbody or segment whether or not they are being attained.

"Drifting organisms" means planktonic organisms that are dependent on the current of the water for movement.

"Epilimnion" means the upper layer of nearly uniform temperature in a thermally stratified man-made lake or reservoir listed in 9VAC25-260-187 B.

"Existing uses" means those uses actually attained in the waterbody on or after November 28, 1975, whether or not they are included in the water quality standards.

"Lacustrine" means the zone within a lake or reservoir that corresponds to nonflowing lake-like conditions such as those near the dam. The other two zones within a reservoir are riverine (flowing, river-like conditions) and transitional (transition from river to lake conditions).

"Man-made lake or reservoir" means a constructed impoundment.

"Mixing zone" means a limited area or volume of water where initial dilution of a discharge takes place and where numeric water quality criteria can be exceeded but designated uses in the waterbody on the whole are maintained and lethality is prevented.

"Natural lake" means an impoundment that is natural in origin. There are two natural lakes in Virginia: Mountain Lake in Giles County and Lake Drummond located within the boundaries of Chesapeake and Suffolk in the Great Dismal Swamp.

"Passing organisms" means free swimming organisms that move with a mean velocity at least equal to the ambient current in any direction.

"Primary contact recreation" means any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water (examples include but are not limited to swimming, water skiing, canoeing and kayaking).

"Pycnocline" means the portion of the water column where density changes rapidly because of salinity and/or temperature. In an estuary the pycnocline is the zone separating deep, cooler more saline waters from the less saline, warmer surface waters. The upper and lower boundaries of a pycnocline are measured as a change in density per unit of depth that is greater than twice the change of the overall average for the total water column.

"Secondary contact recreation" means a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of waters (examples include but are not limited to wading, boating and fishing).

"Swamp waters" means waters with naturally occurring low pH and low dissolved oxygen caused by (i) low flow velocity that prevents mixing and reaeration of stagnant, shallow waters and (ii) decomposition of vegetation that lowers dissolved oxygen concentrations and causes tannic acids to color the water and lower the pH.

"Use attainability analysis" means a structured scientific assessment of the factors affecting the attainment of the use which may include physical, chemical, biological, and economic factors as described in 9VAC25-260-10 H.

"Water quality standards" means provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the federal Clean Water Act (33 USC § 1251 et seq.).

"Wetlands" means those areas that are inundated or saturated by surface water 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. Wetlands generally include swamps, marshes, bogs, and similar areas.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from Volume 14, Issue 04, eff. December 10, 1997; amended, Virginia Register Volume 19, Issue 07, eff. January 15, 2003; Volume 20, Issue 09, eff. February 12, 2004; Errata 20:11 VA.R. 1387 February 9, 2004; amended, Virginia Register Volume 21, Issue 23, eff. June 24, 2005; Volume 24, Issue 04, eff. August 14, 2007; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-10. Designation of uses.

A. All state waters, including wetlands, are designated for the following uses: recreational uses, e.g., swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e.g., fish and shellfish.

B. Subcategories of the propagation and growth of a balanced indigenous population of aquatic life, including game fish designated use for waters in the Chesapeake Bay and its tidal tributaries are listed in this subsection.

1. Migratory Fish Spawning and Nursery Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival, growth and propagation of the early life stages of a balanced, indigenous population of anadromous, semi-anadromous, catadromous and tidal-fresh resident fish species inhabiting spawning and nursery grounds. This designated use extends from the end of tidal waters to the downriver end of spawning and nursery habitats that have been determined through a composite of all targeted anadromous and semi-anadromous fish species' spawning and nursery habitats (see boundaries in U.S. Environmental Protection Agency, 2004, Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum, Chesapeake Bay Program Office, Annapolis, Maryland). This designated use extends horizontally from the shoreline of the body of water to the adjacent shoreline, and extends down through the water column to the bottom water-sediment interface. This use applies February 1 through May 31 and applies in addition to the open-water use described in this subsection.

2. Shallow-water Submerged Aquatic Vegetation Designated Use: waters in the Chesapeake Bay and its tidal tributaries that support the survival, growth and propagation of submerged aquatic vegetation (rooted, underwater bay grasses). This use applies April 1 through October 31 in tidal-fresh, oligohaline and mesohaline Chesapeake Bay Program segments, and March 1 through November 30 in polyhaline Chesapeake Bay Program segments and applies in addition to the open-water use described in this subsection.

3. Open Water Aquatic Life Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival, growth and propagation of a balanced, indigenous population of aquatic life inhabiting open-water habitats. This designated use applies year-round but the vertical boundaries change seasonally. October 1 through May 31, the open water aquatic life use extends horizontally from the shoreline at mean low water, to the adjacent shoreline, and extending through the water column to the bottom water-sediment interface. June 1 through September 30, if a pycnocline is present and, in combination with bottom bathymetry and water column circulation patterns, presents a barrier to oxygen replenishment of deeper waters, this designated use extends down into the water column only as far as the upper boundary of the pycnocline. June 1 through September 30, if a pycnocline is present but other physical circulation patterns (such as influx of oxygen rich oceanic bottom waters) provide for oxygen replenishment of deeper waters, the open-water aquatic life designated use extends down into the bottom water-sediment interface (see boundaries in U.S. Environmental Protection Agency, 2004 Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum, Chesapeake Bay Program Office, Annapolis, Maryland). This designated use includes the migratory fish spawning and nursery and shallow-water submerged aquatic vegetation uses.

4. Deep Water Aquatic Life Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival and growth of a balanced, indigenous population of aquatic life inhabiting deep-water habitats. This designated use extends to the tidally influenced waters located between the upper and lower boundaries of the pycnocline where, in combination with bottom bathymetry and water circulation patterns, a pycnocline is present and presents a barrier to oxygen replenishment of deeper waters. In some areas, the deep-water designated use extends from the upper boundary of the pycnocline down to the bottom water-sediment interface (see boundaries in U.S. Environmental Protection Agency, 2004 Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum, Chesapeake Bay Program Office, Annapolis, Maryland). This use applies June 1 through September 30.

5. Deep Channel Seasonal Refuge Designated Use: waters in the Chesapeake Bay and its tidal tributaries that protect the survival of a balanced, indigenous population of benthic infauna and epifauna inhabiting deep-channel habitats. This designated use extends to the tidally influenced waters at depths greater than the lower boundary of the pycnocline in areas where, in combination with bottom bathymetry and water circulation patterns, the pycnocline presents a barrier to oxygen replenishment of deeper waters (see boundaries in U.S. Environmental Protection Agency, 2004 Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability 2004 Addendum, Chesapeake Bay Program Office, Annapolis, Maryland). This use applies June 1 through September 30.

C. In designating uses of a water body and the appropriate criteria for those uses, the board shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters.

D. The board may adopt subcategories of a use and set the appropriate criteria to reflect varying needs of such subcategories of uses, for instance, to differentiate between cold water (trout streams) and warm water fisheries.

E. At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under §§ 301(b)(1)(A) and (B) and 306 of the Clean Water Act and cost-effective and reasonable best management practices for nonpoint source control.

F. Prior to adding or removing any use, or establishing subcategories of a use, the board shall provide notice and an opportunity for a public hearing under the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia).

G. The board may adopt seasonal uses as an alternative to reclassifying a water body or segment thereof to uses requiring less stringent water quality criteria. If seasonal uses are adopted, water quality criteria should be adjusted to reflect the seasonal uses; however, such criteria shall not preclude the attainment and maintenance of a more protective use in another season.

H. The board may remove a designated use which is not an existing use, or establish subcategories of a use, if the board can demonstrate that attaining the designated use is not feasible because:

1. Naturally occurring pollutant concentrations prevent the attainment of the use;

2. Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;

3. Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place;

4. Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;

5. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

6. Controls more stringent than those required by §§ 301(b) and 306 of the Clean Water Act would result in substantial and widespread economic and social impact.

I. The board may not remove designated uses if:

1. They are existing uses, unless a use requiring more stringent criteria is added; or

2. Such uses will be attained by implementing effluent limits required under §§ 301(b)(1)(A) and (B) and 306 of the Clean Water Act and by implementing cost-effective and reasonable best management practices for nonpoint source control.

J. Where existing water quality standards specify designated uses less than those which are presently being attained, the board shall revise its standards to reflect the uses actually being attained.

K. The board must conduct a use attainability analysis whenever:

1. The board designates or has designated uses that do not include the uses specified in § 101(a)(2) of the Clean Water Act; or

2. The board wishes to remove a designated use that is specified in § 101(a)(2) of the Clean Water Act or to adopt subcategories of uses specified in § 101(a)(2) of the Clean Water Act which require less stringent criteria.

L. The board is not required to conduct a use attainability analysis under this chapter whenever designating uses which include those specified in subsection A of this section.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.1, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 21, Issue 23, eff. June 24, 2005; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-20. General criteria.

A. State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents which tend to raise the temperature of the receiving water will also be controlled. Conditions within mixing zones established according to 9VAC25-260-20 B do not violate the provisions of this subsection.

B. The board may use mixing zone concepts in evaluating limitations for Virginia Pollutant Discharge Elimination System permits.

1. Mixing zones evaluated or established by the board in fresh water shall not:

a. Prevent movement of or cause lethality to passing and drifting aquatic organisms through the water body in question;

b. Constitute more than one half of the width of the receiving watercourse nor constitute more than one third of the area of any cross section of the receiving watercourse;

c. Extend downstream at any time a distance more than five times the width of the receiving watercourse at the point of discharge.

2. Mixing zones evaluated or established by the board in open ocean, estuarine and transition zone waters (see 9VAC25-260-140 C) shall not:

a. Prevent movement of or cause lethality to passing and drifting aquatic organisms through the water body in question;

b. Extend more than five times in any direction the average depth along a line extending 1/3 of the way across the receiving water from the discharge point to the opposite shore.

3. A subsurface diffuser shall be required for any new or expanded freshwater discharge greater than or equal to 0.5 MGD to open ocean, estuarine and transition zone waters (see 9VAC25-260-140 C) and the acute and chronic criteria shall be met at the edge of the zone of initial mixing. The zone of initial mixing is the area where mixing of ambient water and effluent is driven by the jet effect and/or momentum of the effluent. Beyond this zone the mixing is driven by ambient turbulence.

4. Mixing zones shall not be allowed by the board for effluents discharged to wetlands, swamps, marshes, lakes or ponds.

5. An allocated impact zone may be allowed within a mixing zone. This zone is the area of initial dilution of the effluent with the receiving water where the concentration of the effluent will be its greatest in the water column. Mixing within these allocated impact zones shall be as quick as practical and shall be sized to prevent lethality to passing and drifting aquatic organisms. The acute aquatic life criteria are not required to be attained in the allocated impact zone.

6. Mixing zones shall be evaluated or established such that acute criteria are met outside the allocated impact zone and chronic criteria are met at the edge of the mixing zone.

7. No mixing zone shall be used for, or considered as, a substitute for minimum treatment technology required by the Clean Water Act and other applicable state and federal laws.

8. The board shall not approve a mixing zone that violates the federal Endangered Species Act of 1973 (16 USCA §§ 1531-1543) or the Virginia Endangered Species Act, Article 6 (§ 29.1-563 et seq.) of Chapter 5 of Title 29.1 of the Code of Virginia.

9. Mixing zones shall not be allowed for the bacteria criteria in 9VAC25-260-170.

10. The board may waive the requirements of subdivisions 1 b and c, 2 b, 3 and 4 of this subsection on a case-by-case basis if:

a. The board determines that a complete mix assumption is appropriate; or

b. A discharger provides an acceptable demonstration of:

(1) Information defining the actual boundaries of the mixing zone in question; and

(2) Information and data demonstrating no violation of subdivisions B 1 a, 2 a and B 7 of this subsection by the mixing zone in question.

11. The size of a thermal mixing zone shall be determined on a case-by-case basis. This determination shall be based upon a sound rationale and be supported by substantial biological, chemical, physical, and engineering evidence and analysis. Any such determination shall show to the board's satisfaction that no adverse changes in the protection and propagation of balanced indigenous populations of fish, aquatic life, and wildlife may reasonably be expected to occur. A satisfactory showing made in conformance with § 316(a) of the Clean Water Act shall be deemed as compliance with the requirements of this section.

12. Notwithstanding the above, no new or expanded mixing zone shall:

a. Be allowed in waters listed in 9VAC25-260-30 A 3 c;

b. Be allowed in waters defined in 9VAC25-260-30 A 2 for new or existing discharges unless the requirements outlined in 9VAC25-260-30 A 2 are satisfied.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.2, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-30. Antidegradation policy.

A. All surface waters of the Commonwealth shall be provided one of the following three levels, or tiers, of antidegradation protection. This antidegradation policy shall be applied whenever any activity is proposed that has the potential to affect existing surface water quality.

1. As a minimum, existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

2. Where the quality of the waters exceed water quality standards, that quality shall be maintained and protected unless the board finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the Commonwealth's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the board shall assure water quality adequate to protect existing uses fully. Further, the board shall assure that there shall be achieved the highest statutory and regulatory requirements applicable to all new or existing point source discharges of effluent and all cost-effective and reasonable best management practices for nonpoint source control.

3. Surface waters, or portions of these, which provide exceptional environmental settings and exceptional aquatic communities or exceptional recreational opportunities may be designated and protected as described in subdivisions 3 a, b and c of this subsection.

a. Designation procedures.

(1) Designations shall be adopted in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia) and the board's public participation guidelines.

(2) Upon receiving a nomination of a waterway or segment of a waterway for designation as an exceptional state water pursuant to the board's antidegradation policy, as required by 40 CFR 131.12, the board shall notify each locality in which the waterway or segment lies and shall make a good faith effort to provide notice to impacted riparian property owners. The written notice shall include, at a minimum: (i) a description of the location of the waterway or segment; (ii) the procedures and criteria for designation as well as the impact of the designation; (iii) the name of the person making the nomination; and (iv) the name of a contact person at the Department of Environmental Quality who is knowledgeable about the nomination and the waterway or segment. Notice to property owners shall be based on names and addresses taken from local tax rolls. Such names and addresses shall be provided by the Commissioners of the Revenue or the tax assessor's office of the affected jurisdiction upon request by the board. After receipt of the notice of the nomination, localities shall be provided 60 days to comment on the consistency of the nomination with the locality's comprehensive plan. The comment period established by subdivision 3 a (2) of this subsection shall in no way impact a locality's ability to comment during any additional comment periods established by the board.

b. Implementation procedures.

(1) The quality of waters designated in subdivision 3 c of this subsection shall be maintained and protected to prevent permanent or long-term degradation or impairment.

(2) No new, additional, or increased discharge of sewage, industrial wastes or other pollution into waters designated in subdivision 3 c of this subsection shall be allowed.

(3) Activities causing temporary sources of pollution may be allowed in waters designated in subdivision 3 c of this subsection even if degradation may be expected to temporarily occur provided that after a minimal period of time the waters are returned or restored to conditions equal to or better than those existing just prior to the

temporary source of pollution.

c. Surface waters designated under this subdivision are as follows:

(1) Little Stony Creek in Giles County from the first footbridge above the Cascades picnic area, upstream to the 3,300-foot elevation.

(2) Bottom Creek in Montgomery County and Roanoke County from Route 669 (Patterson Drive) downstream to the last property boundary of the Nature Conservancy on the southern side of the creek.

(3) Lake Drummond, located on U.S. Fish and Wildlife Service property, in its entirety within the cities of Chesapeake and Suffolk excluding any ditches and/or tributaries.

(4) North Creek in Botetourt County from the first bridge above the United States Forest Service North Creek Camping Area to its headwaters.

(5) Brown Mountain Creek, located on U.S. Forest Service land in Amherst County, from the City of Lynchburg property boundary upstream to the first crossing with the national forest property boundary.

(6) Laurel Fork, located on U.S. Forest Service land in Highland County, from the national forest property boundary below Route 642 downstream to the Virginia/West Virginia state line.

(7) North Fork of the Buffalo River, located on U.S. Forest Service land in Amherst County, from its confluence with Rocky Branch upstream to its headwaters.

(8) Pedlar River, located on U.S. Forest Service land in Amherst County, from where the river crosses FR 39 upstream to the first crossing with the national forest property boundary.

(9) Ramseys Draft, located on U.S. Forest Service land in Augusta County, from its headwaters (which includes Right and Left Prong Ramseys Draft) downstream to the Wilderness Area boundary.

(10) Whitetop Laurel Creek, located on U.S. Forest Service land in Washington County, from the national forest boundary immediately upstream from the second railroad trestle crossing the creek above Taylors Valley upstream to the confluence of Green Cove Creek.

(11) Ragged Island Creek in Isle of Wight County from its confluence with the James River at a line drawn across the creek mouth at N36°56.306'/W76°29.136' to N36°55.469'/W76°29.802' upstream to a line drawn across the main stem of the creek at N36°57.094'/W76°30.473' to N36°57.113'/W76°30.434', excluding wetlands and impounded areas and including only those tributaries completely contained within the Ragged Island Creek Wildlife Management Area on the northeastern side of the creek.

(12) Big Run in Rockingham County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of Big Run within the confines of Shenandoah National Park.

(13) Doyles River in Albemarle County from its headwaters to the first crossing with the Shenandoah National Park boundary and Jones Falls Run from its headwaters to its confluence with Doyles River and all tributaries to these segments of Doyles River and Jones Fall Run within the confines of Shenandoah National Park.

(14) East Hawksbill Creek in Page County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of East Hawksbill Creek within the confines of Shenandoah National Park.

(15) Jeremys Run in Page County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of Jeremys Run within the confines of Shenandoah National Park.

(16) East Branch Naked Creek in Page County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of East Branch Naked Creek within the confines of Shenandoah National Park.

(17) Piney River in Rappahannock County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of the Piney River within the confines of Shenandoah National Park.

(18) North Fork Thornton River in Rappahannock County from its headwaters downstream to the first crossing with the Shenandoah National Park boundary and all tributaries to this segment of the North Fork Thornton River within the confines of Shenandoah National Park.

(19) Blue Suck Branch from its headwaters downstream to the first crossing with the George Washington National Forest boundary.

(20) Downy Branch from its headwaters downstream to the first crossing with the George Washington National Forest boundary.

(21) North Branch Simpson Creek (Brushy Run) from its headwaters downstream to its confluence with Simpson Creek.

(22) Roberts Creek from its confluence with the Pedlar River upstream to its first crossing with the National Forest boundary.

(23) Shady Mountain Creek from its headwaters downstream to its confluence with the Pedlar River.

(24) Cove Creek from its headwaters downstream to the National Forest boundary.

(25) Little Cove Creek and its tributaries from the headwaters downstream to the National Forest boundary.

(26) Rocky Branch from its headwaters downstream to its confluence with the North Fork of the Buffalo River.

(27) North Fork of the Buffalo River from its confluence with Rocky Branch downstream to the National Forest Boundary.

(28) The Hazel River in Rappahannock County from its headwaters to the first downstream crossing with the Shenandoah National Park boundary and all tributaries within this segment within the confines of Shenandoah National Park.

(29) Little Stony Creek in Scott County from Bark Camp Lake dam to its confluence with Bakers Branch.

(30) North River in Augusta County from the Staunton Reservoir dam to the first crossing with National Forest lands boundary (near Girl Scout Camp May Flather).

B. Any determinations concerning thermal discharge limitations made under § 316(a) of the Clean Water Act will be considered to be in compliance with the antidegradation policy.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.3, eff. May 20, 1992; amended, Volume 13, Issue 11, eff. March 19, 1997; Volume 13, Issue 14, eff. April 30, 1997; Volume 14, Issue 04, eff. December 10, 1997; Volume 14, Issue 09, eff. February 18, 1998; Volume 20, Issue 09, eff. February 12, 2004; Volume 21, Issue 22, eff. August 10, 2005; Volume 22, Issue 10, eff. December 29, 2005; Volume 24, Issue 02, eff. September 11, 2007; Volume 24, Issue 26, eff. August 12, 2008; Volume 25, Issue 05, eff. October 22, 2008; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-40. Stream flow.

Man-made alterations in stream flow shall not contravene designated uses including protection of the propagation and growth of aquatic life.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-01.4, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-50. Numerical criteria for dissolved oxygen, pH, and maximum temperature***.

CLASS	DESCRIPTION OF WATERS	DISSOLVED OXYGEN (mg/l)****		pH	Max. Temp. (°C)
		Min.	Daily Avg.		
I	Open Ocean	5.0	--	6.0-9.0	--
II	Tidal Waters in the Chowan Basin and the Atlantic Ocean Basin	4.0	5.0	6.0-9.0	--
II	Tidal Waters in the Chesapeake Bay and its tidal tributaries	see 9VAC25-260-185		6.0-9.0	
III	Nontidal Waters (Coastal and Piedmont Zones)	4.0	5.0	6.0-9.0	32
IV	Mountainous Zones Waters	4.0	5.0	6.0-9.0	31
V	Stockable Trout Waters	5.0	6.0	6.0-9.0	21
VI	Natural Trout Waters	6.0	7.0	6.0-9.0	20
VII	Swamp Waters	*	*	3.7-8.0*	**

*This classification recognizes that the natural quality of these waters may fluctuate outside of the values for D.O. and pH set forth above as water quality criteria in Class I through VI waters. The natural quality of these waters is the water quality found or expected in the absence of human-induced pollution. Water quality standards will not be considered violated when conditions are determined by the board to be natural and not due to human-induced sources. The board may develop site specific criteria for Class VII waters that reflect the natural quality of the waterbody when the evidence is sufficient to demonstrate that the site specific criteria rather than narrative criterion will fully protect aquatic life uses. Virginia Pollutant Discharge Elimination System limitations in Class VII waters shall not cause significant changes to the naturally occurring dissolved oxygen and pH fluctuations in these waters.

**Maximum temperature will be the same as that for Classes I through VI waters as appropriate.

***The water quality criteria in this section do not apply below the lowest flow averaged (arithmetic mean) over a period of seven consecutive days that can be statistically expected to occur once every 10 climatic years (a climatic year begins April 1 and ends March 31). See 9VAC25-260-310 and 9VAC25-260-380 through 9VAC25-260-540 for site specific adjustments to these criteria.

****For a thermally stratified man-made lake or reservoir in Class III, IV, V or VI waters that are listed in 9VAC25-260-187, these dissolved oxygen and pH criteria apply only to the epilimnion of the waterbody. When these waters are not stratified, the dissolved oxygen and pH criteria apply throughout the water column.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.5, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 17, Issue 16 and Volume 18, Issue 17, eff. June 5, 2002; Volume 20, Issue 09, eff. February 12, 2004; Volume 21, Issue 23, eff. June 24, 2005; Volume 23, Issue 26, eff. August 14, 2007; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-55. (Repealed.)

Historical Notes

Derived from Volume 17, Issue 16 and Volume 18, Issue 17, eff. June 5, 2002; repealed, Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-60. Rise above natural temperature.

Any rise above natural temperature shall not exceed 3°C except in the case of Class VI waters (natural trout waters), where it shall not exceed 1°C. However, the board can, on a case-by-case basis, impose a more stringent limit on the rise above natural temperature. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

Statutory Authority

§§ 62.1-44.15(3) and (10) of the Code of Virginia.

Historical Notes

Derived from VR680-21-01.6, eff. May 20, 1992.

9VAC25-260-70. Maximum hourly temperature change.

The maximum hourly temperature change shall not exceed 2°C, except in the case of Class VI waters (natural trout waters) where it shall not exceed 0.5°C. These criteria shall apply beyond the boundaries of mixing zones and are in addition to temperature changes caused by natural conditions.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-01.7, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-80. Thermal discharges into lakes and impoundments.

In lakes and impoundments receiving thermal discharges, the temperature of the epilimnion, or surface water when there is no stratification, shall not be raised more than 3°C above that which existed before the addition of heat of artificial origin. The board may, on a case-by-case basis, impose a more stringent limit on temperature rise. The increase shall be based on the monthly average of the maximum daily temperature. The temperature of releases from these lakes and impoundments shall be consistent with standards established for the receiving waters. When an applicant for a permit proposes either a discharge of heated effluent into the hypolimnion or the pumping of water from the hypolimnion for return back into the same body of water, such practice shall not be approved unless a special study shows that the practice will not produce adverse effects.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-01.8, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-90. Thermal variances.

The temperature limits set forth in 9VAC25-260-50 through 9VAC25-260-80 may be superseded in certain locations where a thermal variance demonstration is performed in accordance with § 316(a) of the Clean Water Act.

A successful demonstration accepted by the board concerning thermal discharge limits carried out under § 316(a) of the Clean Water Act shall constitute compliance with the temperature requirements of these standards. A successful demonstration must assure the protection and propagation of a balanced indigenous population of aquatic species and wildlife in or on the water into which the discharge is made. When making a determination concerning thermal discharge limits under § 316(a) of the Clean Water Act, the board shall provide notice and opportunity for a public hearing.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.9, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-100. [Deleted].

Historical Notes

Derived from VR680-21-01, eff. May 20, 1992.

9VAC25-260-110. Halogen ban.

A. Chlorine or other halogen compounds Bromine, bromine chloride, hypochlorite and chlorine dioxide. shall not be used for disinfection purposes or other treatment purposes including biocide applications for any treatment facility with a permitted flow of 20,000 gallons per day or more discharging to waters containing endangered or threatened species listed in subsection C of this section or to waters listed as i and ii in the River Basin Section Tables, 9VAC25-260-390 et seq. except for dischargers who intermittently chlorinate. Dischargers of less than 20,000 gallons per day shall dechlorinate to the requirements of the numerical chlorine criteria in 9VAC25-260-140 B or to a nondetectable chlorine residual. Dischargers who intermittently chlorinate (not more than two hours in any eight-hour period) shall be required to install equipment or employ procedures, or both, to ensure dechlorination to a chlorine residual that meets the numerical chlorine criteria in 9VAC25-260-140 B, and to apply effective best management practices for chlorine. Dischargers who intermittently chlorinate shall, in order to address a possible malfunction of the dechlorination system, either have storage sufficient to contain the chlorinated water until it can be dechlorinated prior to discharge or have an online redundant and operational back-up dechlorination system.

B. Variance to this requirement shall not be made unless it has been affirmatively demonstrated that the existing uses of the water will be maintained and that either a change is justifiable to provide necessary economic or social development or the degree of waste treatment necessary to preserve the existing quality cannot be economically or socially justified.

C. TENNESSEE AND BIG SANDY RIVER BASINS

CLINCH RIVER SUBBASIN

Powell River from river mile 136 (south of Jonesville) downstream to the Tennessee/Virginia line (river mile 115.8—total 20.2 miles).

Endangered Species:

Appalachian monkeyface pearly mussel	Quadrula sparsa
Birdwing pearly mussel	Conradilla caelata
Cumberland monkeyface pearly mussel	Quadrula intermedia
Dromedary pearly mussel	Dromus dromas
Fine-rayed pigtoe pearly mussel	Fusconaia cuneolus
Shiny pigtoe pearly mussel	Fusconaia edgariana

Threatened Species:

Slender chub	Hybopsis cahni
Yellowfin madtom	Noturus flavipinnis

Clinch River from river mile 323 (Richlands) downstream to the Tennessee/Virginia line (river mile 202.1).

Endangered Species:

Appalachian monkeyface pearly mussel	Quadrula sparsa
Birdwing pearly mussel	Conradilla caelata
Fine-rayed pigtoe pearly mussel	Fusconaia cuneolus
Green blossom pearly mussel	Dysnomia torulosa gubernaculum
Pink mucket pearly mussel	Lampsilis orbiculata
Shiny pigtoe pearly mussel	Fusconaia edgariana

Clinch River from the Scott/Russell County line (at Bangor—river mile 244.2) downstream to the Tennessee boundary (river mile 202.1).

Threatened Species:

Slender chub	Hybopsis cahni

Copper Creek from 2 miles above its confluence with the Clinch River (river mile 211.6).

Endangered Species:

Fine-rayed pigtoe pearly mussel	Fusconaia cuneolus
Shiny pigtoe pearly mussel	Fusconaia edgariana

Copper Creek from Dickensville (river mile 56) in Russell County downstream to its confluence with the Clinch River.

Threatened Species:

Yellowfin madtom	Noturus flavipinnis

HOLSTON RIVER SUBBASIN

North Fork Holston River from river mile 93.3 (near Broadford) downstream to the Smyth/Washington County line (river mile 82.1).

Endangered Species:

Shiny pigtoe pearly mussel	Fusconaia edgariana

North Fork Holston River from the Smyth/Washington County line (river mile 82.1) to the Tennessee/Virginia boundary (river mile 5).

Threatened Species:

Spotfin chub	Hybopsis monacha

Middle Fork Holston River from river mile 43 (in Marion) downstream to river mile 18.4.

Endangered Species:

Tan riffle shell mussel	Dysnomia walkeri

Middle Fork Holston River from river mile 6.5 to river mile 3.2 near Osceola.

Threatened Species:

Spotfin chub	Hybopsis monacha

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-01.11, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998.

9VAC25-260-120. (Repealed.)

Historical Notes

Derived from VR680-21-01.12 and VR680-21-01.13, eff. May 20, 1992; repealed, Virginia Register Volume 14, Issue 4, eff. December 10, 1997.

9VAC25-260-140. Criteria for surface water.

A. Instream water quality conditions shall not be acutely[1] or chronically[2] toxic except as allowed in 9VAC25-260-20 B (mixing zones). The following are definitions of acute and chronic toxicity conditions:

"Acute toxicity" means an adverse effect that usually occurs shortly after exposure to a pollutant. Lethality to an organism is the usual measure of acute toxicity. Where death is not easily detected, immobilization is considered equivalent to death.

"Chronic toxicity" means an adverse effect that is irreversible or progressive or occurs because the rate of injury is greater than the rate of repair during prolonged exposure to a pollutant. This includes low level, long-term effects such as reduction in growth or reproduction.

B. The following table is a list of numerical water quality criteria for specific parameters.

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Acenapthene (µg/l) 83329					70	90
Acrolein (µg/l) 107028	3.0	3.0			3	400
Acrylonitrile (µg/l) 107131 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.61	70
Aldrin (µg/l) 309002 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	3.0		1.3		0.0000077	0.0000077
Ammonia (µg/l) 766-41-7 Chronic criterion is a 30-day average concentration not to be exceeded more than once every three years on the average.(see 9VAC25-260-155)						
Anthracene (µg/l) 120127					300	400
Antimony (µg/l) 7440360					5.6	640
Arsenic (µg/l)[5] 7440382	340	150	69	36	10	
Bacteria (see 9VAC25-260-160 and 9VAC25-260-170)						
Barium (µg/l) 7440393					2,000	
Benzene (µg/l) 71432 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					5.8	160
Benzidine (µg/l) 92875 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.0014	0.11
Benzo (a) anthracene (µg/l) 56553 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.012	0.013

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Benzo (b) fluoranthene (µg/l) 205992 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.012	0.013
Benzo (k) fluoranthene (µg/l) 207089 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.12	0.13
Benzo (a) pyrene (µg/l) 50328 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.0012	0.0013
Bis2-Chloroethyl Ether (µg/l) 111444 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.30	22
Bis (chloromethyl) Ether 542881 Known or suspected carcinogen; human health criteria at risk level 10^{-5}					0.0015	0.17
Bis2-Chloroisopropyl Ether (Bis (2-Chloro-1-methylethyl) Ether) (µg/l) 108601					200	4,000
Bis2-Ethylhexyl Phthalate (µg/l) 117817 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Synonym = Di-2-Ethylhexyl Phthalate.					3.2	3.7
Bromoform (µg/l) 75252 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					70	1,200
Butyl benzyl phthalate (µg/l) 85687					1.0	1.0

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Cadmium (µg/l)[5] 7440439 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER $e^{(0.9789[\ln(hardness)]-3.866)}$ (CF_a) Freshwater chronic criterion (µg/l) WER $e^{(0.7977[\ln(hardness)]-3.909)}$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 1.136672-[(ln hardness)(0.041838)] CF_c = 1.101672-[(ln hardness)(0.041838)]	1.8 $CaCO_3$ = 100	0.72 $CaCO_3$ = 100	33 X WER	7.9 X WER	5	
Carbon tetrachloride (µg/l) 56235 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					4.0	50
Carbaryl (µg/l) 63252	2.1	2.1	1.6			
Chlordane (µg/l) 57749 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	2.4	0.0043	0.09	0.0040	0.0031	0.0032
Chloride (µg/l) 16887006 Human health criterion to maintain acceptable taste and aesthetic quality and applies at the drinking water intake. Chloride criteria do not apply in Class II transition zones (see subsection C of this section).	860,000	230,000			250,000	
Chlorine, Total Residual (µg/l) 7782505 In DGIF class i and ii trout waters (9VAC25-260-390 through 9VAC25-260-540) or waters with threatened or endangered species are subject to the halogen ban (9VAC25-260-110).	19 See 9VAC25-260-110	11 See 9VAC25-260-110				
Chlorine Produced Oxidant (µg/l) 7782505			13	7.5		
Chlorobenzene (µg/l) 108907					100	800

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Chlorodibromomethane (µg/l) 124481 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					8.0	210
Chloroform (µg/l) 67663					60	2,000
2-Chloronaphthalene (µg/l) 91587					800	1,000
2-Chlorophenol (µg/l) 95578					30	800
Chlorpyrifos (µg/l) 2921882	0.083	0.041	0.011	0.0056		
Chromium III (µg/l)[5] 16065831 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion µg/l WER $[e^{\{0.8190[\ln(hardness)]+3.7256\}}]$ (CF_a) Freshwater chronic criterion µg/l WER $[e^{\{0.8190[\ln(hardness)]+0.6848\}}]$ (CF_c) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140.F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a= 0.316 CF_c=0.860	570 ($CaCO_3$ = 100)	74 ($CaCO_3$ = 100)			100 (total Cr)	
Chromium VI (µg/l)[5] 18540299	16	11	1,100	50		
Chrysene (µg/l) 218019 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					1.2	1.3

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Copper (µg/l)[5] 7440508 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{0.9422[\ln(hardness)]-1.700\}}$] ($CF_a$) Freshwater chronic criterion (µg/l) WER [$e^{\{0.8545[\ln(hardness)]-1.702\}}$] ($CF_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F. e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.960 CF_c = 0.960 Alternate copper criteria in freshwater: the freshwater criteria for copper can also be calculated using the EPA 2007 Biotic Ligand Model (See 9VAC25-260-140 G). Acute saltwater criterion is a 24-hour average not to be exceeded more than once every three years on the average.	13 $CaCO_3$ = 100	9.0 $CaCO_3$ = 100	9.3 X WER	6.0 X WER	1,300	
Cyanide, Free (µg/l) 57125	22	5.2	1.0	1.0	4	400
DDD (µg/l) 72548 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0012	0.0012
DDE (µg/l) 72559 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.00018	0.00018
DDT (µg/l) 50293 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Total concentration of DDT and metabolites shall not exceed aquatic life criteria.	1.1	0.0010	0.13	0.0010	0.00030	0.00030
Demeton (µg/l) 8065483		0.1		0.1		
Diazinon (µg/l) 333415	0.17	0.17	0.82	0.82		

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Dibenz (a, h) anthracene (µg/l) 53703 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0012	0.0013
1,2-Dichlorobenzene (µg/l) 95501					1,000	3,000
1,3-Dichlorobenzene (µg/l) 541731					7	10
1,4 Dichlorobenzene (µg/l) 106467					300	900
3,3 Dichlorobenzidine (µg/l) 91941 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.49	1.5
Dichlorobromomethane (µg/l) 75274 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					9.5	270
1,2 Dichloroethane (µg/l) 107062 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					99	6,500
1,1 Dichloroethylene (µg/l) 75354					300	20,000
1,2-trans-dichloroethylene (µg/l) 156605					100	4,000
2,4 Dichlorophenol (µg/l) 120832					10	60
2,4 Dichlorophenoxy acetic acid (Chlorophenoxy Herbicide) (2,4-D) (µg/l) 94757					1,300	12,000
1,2-Dichloropropane (µg/l) 78875 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					9.0	310
1,3-Dichloropropene (µg/l) 542756 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					2.7	120
Dieldrin (µg/l) 60571 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.24	0.056	0.71	0.0019	0.000012	0.000012
Diethyl Phthalate (µg/l) 84662					600	600
2,4 Dimethylphenol (µg/l) 105679					100	3,000
Dimethyl Phthalate (µg/l) 131113					2,000	2,000
Di-n-Butyl Phthalate (µg/l) 84742					20	30
2,4 Dinitrophenol (µg/l) 51285					10	300
Dinitrophenols (µg/l) 25550587					10	1,000
2-Methyl-4,6-Dinitrophenol (µg/l) 534521					2	30

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
2,4 Dinitrotoluene (µg/l) 121142 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.49	17
Dioxin 2, 3, 7, 8-tetrachlorodibenzo-p-dioxin (µg/l) 1746016					5.0 E-8	5.1 E-8
1,2-Diphenylhydrazine (µg/l) 122667 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.3	2.0
Dissolved Oxygen (µg/l) (See 9VAC25-260-50)						
Alpha-Endosulfan (µg/l) 959988 Total concentration alpha and beta-endosulfan shall not exceed aquatic life criteria.	0.22	0.056	0.034	0.0087	20	30
Beta-Endosulfan (µg/l) 33213659 Total concentration alpha and beta-endosulfan shall not exceed aquatic life criteria.	0.22	0.056	0.034	0.0087	20	40
Endosulfan Sulfate (µg/l) 1031078					20	40
Endrin (µg/l) 72208	0.086	0.036	0.037	0.0023	0.03	0.03
Endrin Aldehyde (µg/l) 7421934					1	1
Ethylbenzene (µg/l) 100414					68	130
Fecal Coliform (see 9VAC25-260-160)						
Fluoranthene (µg/l) 206440					20	20
Fluorene (µg/l) 86737					50	70
Foaming Agents (µg/l) Criterion measured as methylene blue active substances. Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					500	
Guthion (µg/l) 86500		0.01		0.01		
Heptachlor (µg/l) 76448 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.52	0.0038	0.053	0.0036	0.000059	0.000059
Heptachlor Epoxide (µg/l) 1024573 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.52	0.0038	0.053	0.0036	0.00032	0.00032
Hexachlorobenzene (µg/l) 118741 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.00079	0.00079

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Hexachlorobutadiene (µg/l) 87683 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.1	0.1
Hexachlorocyclohexane Alpha-BHC (µg/l) 319846 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0036	0.0039
Hexachlorocyclohexane Beta-BHC (µg/l) 319857 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.080	0.14
Hexachlorocyclohexane (µg/l) (Lindane) Gamma-BHC 58899	0.95		0.16		4.2	4.4
Hexachlorocyclohexane (HCH)-Technical (µg/l) 608731 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.066	0.1
Hexachlorocyclopentadiene (µg/l) 77474					4	4
Hexachloroethane (µg/l) 67721 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					1	1
Hydrogen sulfide (µg/l) 7783064		2.0		2.0		
Indeno (1,2,3,-cd) pyrene (µg/l) 193395 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.012	0.013
Iron (µg/l) 7439896 Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					300	
Isophorone (µg/l) 78591 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					340	18,000
Kepone (µg/l) 143500		zero		zero		

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Lead (µg/l)[5] 7439921 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the water effect ratio. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{1.273[\ln(hardness)]-1.084\}}$]($CF_a$) Freshwater chronic criterion (µg/l) WER [$e^{\{1.273[\ln(hardness)]-3.259\}}$] ($CF_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 1.46203-[(ln hardness)(0.145712)] CF_c = 1.46203-[(ln hardness)(0.145712)]	94 $CaCO_3$ = 100	11 $CaCO_3$ = 100	230 X WER	8.8 X WER	15	
Malathion (µg/l) 121755		0.1		0.1		
Mercury (µg/l) 5 7439976	1.4	0.77	1.8	0.94		
Methyl Bromide (µg/l) 74839					100	10,000
3-Methyl-4-Chlorophenol 59507					500	2,000
Methyl Mercury (Fish Tissue Criterion mg/kg) 8 22967926					0.30	0.30
Methylene Chloride (µg/l) 75092 Known or suspected carcinogen; human health criteria at risk level 10^{-5}. Synonym = Dichloromethane					20	1,000
Methoxychlor (µg/l) 72435		0.03		0.03	0.02	0.02
Mirex (µg/l) 2385855		zero		zero		

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Nickel (µg/l)[5] 744002 Freshwater values are a function of total hardness as calcium carbonate $CaCO_3$ mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{0.8460[\ln(hardness)] + 1.312\}}$] ($CF_a$) Freshwater chronic criterion (µg/l) WER [$e^{\{0.8460[\ln(hardness)] - 0.8840\}}$] ($CF_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.998 CF_c = 0.997	180 $CaCO_3$ = 100	20 $CaCO_3$ = 100	74 X WER	8.2 X WER	610	4,600
Nitrate as N (µg/l) 14797558					10,000	
Nitrobenzene (µg/l) 98953					10	600
N-Nitrosodimethylamine (µg/l) 62759 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.0069	30
N-Nitrosodiphenylamine (µg/l) 86306 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					33	60
N-Nitrosodi-n-propylamine (µg/l) 621647 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.050	5.1
Nonylphenol (µg/l) 84852153	28	6.6	7.0	1.7		
Parathion (µg/l) 56382	0.065	0.013				
PCB Total (µg/l) 1336363 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.		0.014		0.030	0.00064	0.00064
Pentachlorobenzene (µg/l) 608935					0.1	0.1

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Pentachlorophenol (µg/l) 87865 Known or suspected carcinogen; human health criteria risk level at 10^{-5}. Freshwater acute criterion (µg/l) $e^{(1.005(pH)-4.869)}$ Freshwater chronic criterion (µg/l) $e^{(1.005(pH)-5.134)}$	8.7 pH = 7.0	6.7 pH = 7.0	13	7.9	0.3	0.4
pH See 9VAC25-260-50						
Phenol (µg/l) 108952					4,000	300,000
Phosphorus Elemental (µg/l) 7723140				0.10		
Pyrene (µg/l) 129000					20	30
Radionuclides Gross Alpha Particle Activity (pCi/L) Beta Particle & Photon Activity (mrem/yr) (formerly man-made radionuclides) Combined Radium 226 and 228 (pCi/L) Uranium (µg/L)					15 4 5 30	
Selenium (µg/l)[5] 7782492 WER shall not be used for freshwater acute and chronic criteria. Freshwater criteria expressed as total recoverable.	20	5.0	290 X WER	71 X WER	170	4,200
Silver (µg/l)[5] 7440224 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{1.72[\ln(hardness)]-6.52\}}$] ($CF_a$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.85	3.4; $CaCO_3$ = 100		1.9 X WER			
Sulfate (µg/l) Criterion to maintain acceptable taste, odor, or aesthetic quality of drinking water and applies at the drinking water intake.					250,000	

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Temperature See 9VAC25-260-50						
1,2,4,5-Tetrachlorobenzene 95943					0.03	0.03
1,1,2,2-Tetrachloroethane (µg/l) 79345 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					2.0	30
Tetrachloroethylene (µg/l) 127184 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					100	290
Thallium (µg/l) 7440280					0.24	0.47
Toluene (µg/l) 108883					57	520
Total Dissolved Solids (µg/l) Criterion to maintain acceptable taste, odor or aesthetic quality of drinking water and applies at the drinking water intake.					500,000	
Toxaphene (µg/l) 8001352 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.	0.73	0.0002	0.21	0.0002	0.0070	0.0071
Tributyltin (µg/l) 60105	0.46	0.072	0.42	0.0074		
1, 2, 4 Trichlorobenzene (µg/l) 120821 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.71	0.76
1,1,1-Trichloroethane 71556					10,000	200,000
1,1,2-Trichloroethane (µg/l) 79005 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					5.5	89
Trichloroethylene (µg/l) 79016 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					6.0	70
2, 4, 5 –Trichlorophenol 95954					300	600
2, 4, 6-Trichlorophenol (µg/l) 88062 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					15	28
2-(2, 4, 5-Trichlorophenoxy) propionic acid (Silvex) (µg/l) 93721					100	400
Vinyl Chloride (µg/l) 75014 Known or suspected carcinogen; human health criteria at risk level 10^{-5}.					0.22	16

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		
Zinc (µg/l)[5] 7440666 Freshwater values are a function of total hardness as calcium carbonate ($CaCO_3$) mg/l and the WER. The minimum hardness allowed for use in the equation below shall be 25 and the maximum, hardness shall be 400 even when the actual ambient hardness is less than 25 or greater than 400. Freshwater acute criterion (µg/l) WER [$e^{\{0.8473[In(hardness)]+0.884\}}$]($CF_a$) Freshwater chronic criterion (µg/l) WER [$e^{\{0.8473[In(hardness)]+0.884\}}$] ($CF_c$) WER = Water Effect Ratio = 1 unless determined otherwise under 9VAC25-260-140 F e = natural antilogarithm ln = natural logarithm CF = conversion factor a (acute) or c (chronic) CF_a = 0.978 CF_c = 0.986	120 $CaCO_3$ = 100	120 $CaCO_3$ = 100	90 X WER	81 X WER	7,400	26,000

Table of Parameters[6, 7]						
PARAMETER CAS Number	USE DESIGNATION					
	AQUATIC LIFE				HUMAN HEALTH	
	FRESHWATER		SALTWATER		Public Water Supply[3]	All Other Surface Waters[4]
	Acute[1]	Chronic[2]	Acute[1]	Chronic[2]		

[1]One hour average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.

[2]Four-day average concentration not to be exceeded more than once every 3 years on the average, unless otherwise noted.

[3]Criteria have been calculated to protect human health from toxic effects through drinking water and fish consumption, unless otherwise noted and apply in segments designated as PWS in 9VAC25-260-390 through 9VAC25-260-540.

[4]Criteria have been calculated to protect human health from toxic effects through fish consumption, unless otherwise noted and apply in all other surface waters not designated as PWS in 9VAC25-260-390 through 9VAC25-260-540.

[5]Acute and chronic saltwater and freshwater aquatic life criteria apply to the biologically available form of the metal and apply as a function of the pollutant's water effect ratio (WER) as defined in 9VAC25-260-140 F (WER X criterion). Metals measured as dissolved shall be considered to be biologically available, or, because local receiving water characteristics may otherwise affect the biological availability of the metal, the biologically available equivalent measurement of the metal can be further defined by determining a water effect ratio (WER) and multiplying the numerical value shown in 9VAC25-260-140 B by the WER. Refer to 9VAC25-260-140 F. Values displayed above in the table are examples and correspond to a WER of 1.0. Metals criteria have been adjusted to convert the total recoverable fraction to dissolved fraction using a conversion factor. Criteria that change with hardness have the conversion factor listed in the table above.

[6]The flows listed below are default design flows for calculating steady state wasteload allocations unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

Aquatic Life:	
Acute criteria	1Q10
Chronic criteria	7Q10
Chronic criteria (ammonia)	30Q10
Human Health:	
Noncarcinogens	30Q5
Carcinogens	Harmonic mean

The following are defined for this section:

"1Q10" means the lowest flow averaged over a period of 1 day which on a statistical basis can be expected to occur once every 10 climatic years.

"7Q10" means the lowest flow averaged over a period of 7 consecutive days that can be statistically expected to occur once every 10 climatic years.

"30Q5" means the lowest flow averaged over a period of 30 consecutive days that can be statistically expected to occur once every 5 climatic years.

"30Q10" means the lowest flow averaged over a period of 30 consecutive days that can be statistically expected to occur once every 10 climatic years.

"Averaged" means an arithmetic mean.

"Climatic year" means a year beginning on April 1 and ending on March 31.

[7]The criteria listed in this table are two significant digits. For other criteria that are referenced to other sections of this regulation in this table, all numbers listed as criteria values are significant.

[8]The fish tissue criterion for methylmercury applies to a concentration of 0.30 mg/kg as wet weight in edible tissue for species of fish and shellfish resident in a waterbody that are commonly eaten in the area and have commercial, recreational, or subsistence value.

C. Application of freshwater and saltwater numerical criteria. The numerical water quality criteria listed in subsection B of this section (excluding dissolved oxygen, pH, temperature) shall be applied according to the following classes of waters (see 9VAC25-260-50) and boundary designations:

CLASS OF WATERS	NUMERICAL CRITERIA
I and II (Estuarine Waters)	Saltwater criteria apply
II (Transition Zone)	More stringent of either the freshwater or saltwater criteria apply
II (Tidal Freshwater), III, IV, V, VI and VII	Freshwater criteria apply

The following describes the boundary designations for Class II, (estuarine, transition zone and tidal freshwater waters) by river basin:

1. Rappahannock Basin. Tidal freshwater is from the fall line of the Rappahannock River to the upstream boundary of the transition zone including all tidal tributaries that enter the tidal freshwater Rappahannock River.

Transition zone upstream boundary – N38° 4' 56.59"/W76° 58' 47.93" (430 feet east of Hutchinson Swamp) to N38° 5' 23.33"/W76° 58' 24.39" (0.7 miles upstream of Peedee Creek).

Transition zone downstream boundary – N37° 58' 45.80"/W76° 55' 28.75" (1,000 feet downstream of Jenkins Landing) to N37° 59' 20.07/W76° 53' 45.09" (0.33 miles upstream of Mulberry Point). All tidal waters that enter the transition zone are themselves transition zone waters.

Estuarine waters are from the downstream boundary of the transition zone to the mouth of the Rappahannock River (Buoy 6), including all tidal tributaries that enter the estuarine waters of the Rappahannock River.

2. York Basin. Tidal freshwater is from the fall line of the Mattaponi River at N37° 47' 20.03"/W77° 6' 15.16" (800 feet upstream of the Route 360 bridge in Aylett) to the upstream boundary of the Mattaponi River transition zone, and from the fall line of the Pamunkey River at N37° 41' 22.64"/W77° 12' 50.83" (2,000 feet upstream of Totopotomy Creek) to the upstream boundary of the Pamunkey River transition zone, including all tidal tributaries that enter the tidal freshwaters of the Mattaponi and Pamunkey Rivers.

Mattaponi River transition zone upstream boundary – N37° 39' 29.65"/W76° 52' 53.29" (1,000 feet upstream of Mitchell Hill Creek) to N37° 39' 24.20"/W76° 52' 55.87" (across from Courthouse Landing).

Mattaponi River transition zone downstream boundary – N37° 32' 19.76"/W76° 47' 29.41" (old Lord Delaware Bridge, west side) to N37° 32' 13.25"/W76° 47' 10.30" (old Lord Delaware Bridge, east side).

Pamunkey River transition zone upstream boundary – N37° 32' 36.63"/W76° 58' 29.88" (Cohoke Marsh, 0.9 miles upstream of Turkey Creek) to N37° 32' 36.51"/W76° 58' 36.48" (0.75 miles upstream of creek at Cook Landing).

Pamunkey River transition zone downstream boundary – N37° 31' 57.90"/W76° 48' 38.22" (old Eltham Bridge, west side) to N37° 32' 6.25"/W76° 48' 18.82" (old Eltham Bridge, east side).

All tidal tributaries that enter the transition zones of the Mattaponi and Pamunkey Rivers are themselves in the transition zone.

Estuarine waters are from the downstream boundary of the transition zones of the Mattaponi and Pamunkey Rivers to the mouth of the York River (Tue Marsh Light) including all tidal tributaries that enter the estuarine waters of the York River.

3. James Basin. Tidal freshwater is from the fall line of the James River in the City of Richmond upstream of Mayo Bridge to the upstream boundary of the transition zone, including all tidal tributaries that enter the tidal freshwater James River.

James River transition zone upstream boundary – N37° 14' 28.25"/W76° 56' 44.47" (at Tettington) to N37° 13' 38.56"/W76° 56' 47.13" (0.3 miles downstream of Sloop Point).

Chickahominy River transition zone upstream boundary – N37° 25' 44.79"/W77° 1' 41.76" (Holly Landing).

Transition zone downstream boundary – N37° 12' 7.23"/W76° 37' 34.70" (near Carters Grove Home, 1.25 miles downstream of Grove Creek) to N37° 9' 17.23"/W76° 40' 13.45" (0.7 miles upstream of Hunnicutt Creek). All tidal waters that enter the transition zone are themselves transition zone waters.

Estuarine waters are from the downstream transition zone boundary to the mouth of the James River (Buoy 25) including all tidal tributaries that enter the estuarine waters of the James River.

4. Potomac Basin. Tidal freshwater includes all tidal tributaries that enter the Potomac River from its fall line at the Chain Bridge (N38° 55' 46.28"/W77° 6' 59.23") to the upstream transition zone boundary near Quantico, Virginia.

Transition zone includes all tidal tributaries that enter the Potomac River from N38° 31' 27.05"/W77° 17' 7.06" (midway between Shipping Point and Quantico Pier) to N38° 23' 22.78"/W77° 1' 45.50" (one mile southeast of Mathias Point).

Estuarine waters includes all tidal tributaries that enter the Potomac River from the downstream transition zone boundary to the mouth of the Potomac River (Buoy 44B).

5. Chesapeake Bay, Atlantic Ocean, and small coastal basins. Estuarine waters include the Atlantic Ocean tidal tributaries, and the Chesapeake Bay and its small coastal basins from the Virginia state line to the mouth of the bay (a line from Cape Henry drawn through Buoys 3 and 8 to Fishermans Island), and its tidal tributaries, excluding the Potomac tributaries and those tributaries listed in subdivisions 1 through 4 of this subsection.

6. Chowan River Basin. Tidal freshwater includes the Northwest River and its tidal tributaries from the Virginia-North Carolina state line to the free flowing portion, the Blackwater River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately state route 611 at river mile 20.90, the Nottoway River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately Route 674, and the North Landing River and its tidal tributaries from the Virginia-North Carolina state line to the Great Bridge Lock.

Transition zone includes Back Bay and its tributaries in the City of Virginia Beach to the Virginia-North Carolina state line.

D. Site-specific modifications to numerical water quality criteria.

1. The board may consider site-specific modifications to numerical water quality criteria in subsection B of this section where the applicant or permittee demonstrates that the alternate numerical water quality criteria are sufficient to protect all designated uses (see 9VAC25-260-10) of that particular surface water segment or body.

2. Any demonstration for site-specific human health criteria shall be restricted to a reevaluation of the bioconcentration or bioaccumulation properties of the pollutant. The exceptions to this restriction are for site-specific criteria for taste, odor, and aesthetic compounds noted by double asterisks in subsection B of this section and nitrates.

3. Procedures for promulgation and review of site-specific modifications to numerical water quality criteria resulting from subdivisions 1 and 2 of this subsection.

a. Proposals describing the details of the site-specific study shall be submitted to the board's staff for approval prior to commencing the study.

b. Any site-specific modification shall be promulgated as a regulation in accordance with the Administrative Process Act (§ 2.2-4000 et seq. of the Code of Virginia). All site-specific modifications shall be listed in 9VAC25-260-310 (Special standards and requirements).

E. Variances to water quality standards.

1. A variance from numeric criteria may be granted to a discharger if it can be demonstrated that one or more of the conditions in 9VAC25-260-10 H limit the attainment of one or more specific designated uses.

a. Variances shall apply only to the discharger to whom they are granted and shall be reevaluated and either continued, modified, or revoked at the time of permit issuance. At that time the permittee shall make a showing that the conditions for granting the variance still apply.

b. Variances shall be described in the public notice published for the permit. The decision to approve a variance shall be subject to the public participation requirements of the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation, 9VAC25-31.

c. Variances shall not prevent the maintenance and protection of existing uses or exempt the discharger or regulated activity from compliance with other appropriate technology or water quality-based limits or best management practices.

d. Variances granted under this section shall not apply to new discharges.

e. Variances shall be submitted by the department's Division of Scientific Research or its successors to the U.S. Environmental Protection Agency for review and approval or disapproval.

f. A list of variances granted shall be maintained by the department's Division of Scientific Research or its successors.

2. None of the variances in this subsection shall apply to the halogen ban section (9VAC25-260-110) or temperature criteria in 9VAC25-260-50 if superseded by § 316(a) of the Clean Water Act requirements. No variances in this subsection shall apply to the criteria that are designed to protect human health from carcinogenic and noncarcinogenic toxic effects (subsection B of this section) with the exception of the metals, and the taste, odor, and aesthetic compounds noted by double asterisks and nitrates, listed in subsection B of this section.

F. Water effect ratio.

1. A water effects ratio (WER) shall be determined by measuring the effect of receiving water (as it is or will be affected by any discharges) on the bioavailability or toxicity of a metal by using standard test organisms and a metal to conduct toxicity tests simultaneously in receiving water and laboratory water. The ratio of toxicities of the metals in the two waters is the WER (toxicity in receiving water divided by toxicity in laboratory water equals WER). Once an acceptable WER for a metal is established, the numerical value for the metal in subsection B of this section is multiplied by the WER to produce an instream concentration that will protect designated uses. This instream concentration shall be utilized in permitting decisions.

2. The WER shall be assigned a value of 1.0 unless the applicant or permittee demonstrates to the department's satisfaction in a permit proceeding that another value is appropriate, or unless available data allow the department to compute a WER for the receiving waters. The applicant or permittee is responsible for proposing and conducting the study to develop a WER. The study may require multiple testing over several seasons. The applicant or permittee shall obtain the department's Division of Scientific Research or its successor approval of the study protocol and the final WER.

3. 9VAC25-31-230 C requires that permit limits for metals be expressed as total recoverable measurements. To that end, the study used to establish the WER may be based on total recoverable measurements of the metals.

4. The WER is established in a permit proceeding, shall be described in the public notice associated with the permit proceeding, and applies only to the applicant or permittee in that proceeding. The department's action to approve or disapprove a WER is a case decision, not an amendment to the present regulation.

The decision to approve or disapprove a WER shall be subject to the public participation requirements of Virginia Pollutant Discharge Elimination System (VPDES) Regulation, Part IV (9VAC25-31-260 et seq.). A list of final WERs will be maintained by the department's Division of Scientific Research or its successor.

5. A WER shall not be used for the freshwater and saltwater chronic mercury criteria or the freshwater acute and chronic selenium criteria.

G. Biotic Ligand Model for copper. On a case-by-case basis, EPA's 2007 copper criteria (EPA-822-F-07-001) biotic ligand model (BLM) for copper may be used to determine alternate copper criteria for freshwater sites. The BLM is a bioavailability model that uses receiving water characteristics to develop site-specific criteria. Site-specific data for 10 parameters are needed to use the BLM. These parameters are temperature, pH, dissolved organic carbon, calcium, magnesium, sodium, potassium, sulfate, chloride, and alkalinity. If sufficient data for these parameters are available, the BLM can be used to calculate alternate criteria values for the copper criteria. The BLM would be used instead of the hardness-based criteria and takes the place of the hardness adjustment and the WER. A WER will not be applicable with the BLM.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-01.14B, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 19, Issue 23, eff. August 27, 2003; Volume 20, Issue 09, eff. February 12, 2004; amended, Virginia Register Volume 26, Issue 12, eff. February 1, 2010; Errata, 26:12 VA.R. 2065 February 15, 2010; Volume 32, Issue 26, eff. July 27, 2017; amended Virginia Register Volume 36, Issue 06, eff. October 21, 2019; Errata,36:14 VA.R. xx March 2, 2020.

9VAC25-260-150. (Repealed.)

Historical Notes

Derived from VR680-21-01.15, eff. May 20, 1992; amended, Virginia Register Volume 14, Issue 4, eff. December 10, 1997; repealed, Virginia Register Volume 20, Issue 9, eff. February 12, 2004.

9VAC25-260-155. Ammonia surface water quality criteria.

A. The Department of Environmental Quality, after consultation with the Virginia Department of Wildlife Resources and the U.S. Fish and Wildlife Service, has determined that the majority of Virginia freshwaters are likely to contain, or have contained in the past, freshwater mussel species in the family Unionidae and contain

early life stages of fish during most times of the year. Therefore, the ammonia criteria presented in subsections B and C of this section are designed to provide protection to these species and life stages. In an instance where it can be adequately demonstrated that either freshwater mussels or early life stages of fish are not present in a specific waterbody, potential options for alternate, site-specific criteria are presented in subsection D of this section. Acute criteria are a one-hour average concentration not to be exceeded more than once every three years[1] on the average, and chronic criteria are 30-day average concentrations not to be exceeded more than once every three years on the average.[2] In addition, the four-day average concentration of total ammonia nitrogen (in mg N/L) shall not exceed 2.5 times the chronic criterion within a 30-day period more than once every three years on the average.

[1]The default design flow for calculating steady state wasteload allocations for the acute ammonia criterion for freshwater is the 1Q10 (see 9VAC25-260-140 B footnote 6) unless statistically valid methods are employed that demonstrate compliance with the duration and return frequency of the water quality criteria.

[2]The default design flow for calculating steady state wasteload allocations for the chronic ammonia criterion for freshwater is the 30Q10 (see 9VAC25-260-140 B footnote 6) unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of the water quality criteria.

B. The acute criteria for total ammonia (in mg N/L) for freshwaters with trout absent or present are in the following tables:

Acute Ammonia Freshwater Criteria
Total Ammonia Nitrogen (mg N/L)

TROUT ABSENT

Temperature (°C)																					
pH	0-10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	51	48	44	41	37	34	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	49	46	42	39	36	33	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	46	44	40	37	34	31	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9.0
6.8	44	41	38	35	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	41	38	35	32	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	38	35	33	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9	7.3
7.1	34	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	31	29	27	25	23	21	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6.0
7.3	27	26	24	22	20	18	17	16	14	13	12	11	10	9.5	8.7	8.0	7.4	6.8	6.3	5.8	5.3
7.4	24	22	21	19	18	16	15	14	13	12	11	9.8	9.0	8.3	7.7	7.0	6.5	6.0	5.5	5.1	4.7
7.5	21	19	18	17	15	14	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4.0
7.6	18	17	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	2.9
7.8	13	12	11	10	9.3	8.5	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4.0	3.7	3.4	3.2	2.9	2.7	2.5
7.9	11	9.9	9.1	8.4	7.7	7.1	6.6	3.0	5.6	5.1	4.7	4.3	4.0	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	8.8	8.2	7.6	7.0	6.4	5.9	5.4	5.0	4.6	4.2	3.9	3.6	3.3	3.0	2.8	2.6	2.4	2.2	2.0	1.9	1.7
8.1	7.2	6.8	6.3	5.8	5.3	4.9	4.5	4.1	3.8	3.5	3.2	3.0	2.7	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4
8.2	6.0	5.6	5.2	4.8	4.4	4.0	3.7	3.4	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	4.9	4.6	4.3	3.9	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2.0	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1.0	0.96
8.4	4.1	3.8	3.5	3.2	3.0	2.7	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.93	0.86	0.79
8.5	3.3	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.90	0.83	0.77	0.71	0.65
8.6	2.8	2.6	2.4	2.2	2.0	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1.0	0.96	0.88	0.81	0.75	0.69	0.63	0.58	0.54
8.7	2.3	2.2	2.0	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1.0	0.94	0.87	0.80	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1.0	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.40	0.37	0.34	0.32
9.0	1.4	1.3	1.2	1.1	1.0	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

Acute Ammonia Freshwater Criteria
Total Ammonia Nitrogen (mg N/L)

TROUT PRESENT

Temperature (°C)																	
pH	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	33	33	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	31	31	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	30	30	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9.0
6.8	28	28	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	26	26	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	24	24	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	8.0	7.3
7.1	22	22	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	20	20	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6.0
7.3	18	18	17	16	14	13	12	11	10	9.5	8.7	8.0	7.4	6.8	6.3	5.8	5.3
7.4	15	15	15	14	13	12	11	9.8	9.0	8.3	7.7	7.0	6.5	6.0	5.5	5.1	4.7
7.5	13	13	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4.0
7.6	11	11	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	9.6	9.6	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	3.0
7.8	8.1	8.1	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4.0	3.7	3.4	3.2	2.9	2.7	2.5
7.9	6.8	6.8	6.6	6.0	5.6	5.1	4.7	4.3	4.0	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	5.6	5.6	5.4	5.0	4.6	4.2	3.9	3.6	3.3	3.0	2.8	2.6	2.4	2.2	2.0	1.9	1.7
8.1	4.6	4.6	4.5	4.1	3.8	3.5	3.2	3.0	2.7	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4
8.2	3.8	3.8	3.7	3.5	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2

8.3	3.1	3.1	3.1	2.8	2.6	2.4	2.2	2.0	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1.0	0.96
8.4	2.6	2.6	2.5	2.3	2.1	2.0	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1.0	0.93	0.86	0.79
8.5	2.1	2.1	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.90	0.83	0.77	0.71	0.65
8.6	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.1	1.0	0.96	0.88	0.81	0.75	0.69	0.63	0.59	0.54
8.7	1.5	1.5	1.4	1.3	1.2	1.1	1.0	0.94	0.87	0.80	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.2	1.2	1.2	1.1	1.0	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1.0	1.0	1.0	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.40	0.37	0.34	0.32
9.0	0.88	0.88	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

The acute criteria for trout present shall apply to all Class V-Stockable Trout Waters and Class VI-Natural Trout Waters as listed in 9VAC25-260-390 through 9VAC25-260-540. The acute criteria for trout absent apply to all other fresh waters.

To calculate total ammonia nitrogen acute criteria values in freshwater at different pH values than those listed in this subsection, use the following equations and round the result to two significant digits:

Where trout are absent:

Acute Criterion Concentration (mg N/L) =

$$0.7249 \text{ X } \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) \text{ X MIN}$$

Where MIN = 51.93 or $23.12 \text{ X } 10^{0.036 \text{ X } (20 - T)}$, whichever is less

T = Temperature in ^{o}C

Or where trout are present, whichever of the following calculation results is less:

Acute Criterion Concentration (mg N/L) =

$$\left(\frac{0.275}{1 + 10^{7.204-pH}} + \frac{39.0}{1 + 10^{pH-7.204}} \right)$$

or

$$0.7249 \text{ X } \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) \text{ X } \left(23.12 \text{ X } 10^{0.036X(20 - T)}\right)$$

T = Temperature in ^{o}C

C. The chronic criteria for total ammonia nitrogen (in mg N/L) where freshwater mussels and early life stages of fish are present in freshwater are in the following table:

Chronic Ammonia Freshwater Criteria
Mussels and Early Life Stages of Fish Present

Total Ammonia Nitrogen (mg N/L)

Temperature (°C)																								
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.2	1.1
6.6	4.8	4.5	4.3	4.0	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
6.7	4.8	4.5	4.2	3.9	3.7	3.5	3.2	3.0	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1
6.8	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
6.9	4.5	4.2	4.0	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0
7.0	4.4	4.1	3.8	3.6	3.4	3.2	3.0	2.8	2.6	2.4	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	0.99
7.1	4.2	3.9	3.7	3.5	3.2	3.0	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0	0.95
7.2	4.0	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0	0.96	0.90
7.3	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0	0.97	0.91	0.85
7.4	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0	0.96	0.90	0.85	0.79
7.5	3.2	3.0	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0	0.95	0.89	0.83	0.78	0.73
7.6	2.9	2.8	2.6	2.4	2.3	2.1	2.0	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1	1.1	0.98	0.92	0.86	0.81	0.76	0.71	0.67
7.7	2.6	2.4	2.3	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.60
7.8	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53
7.9	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.50	0.47
8.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1.0	0.94	0.88	0.83	0.78	0.73	0.68	0.64	0.60	0.56	0.53	0.50	0.44	0.44	0.41
8.1	1.5	1.5	1.4	1.3	1.2	1.1	1.1	0.99	0.92	0.87	0.81	0.76	0.71	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.40	0.38	0.35
8.2	1.3	1.2	1.2	1.1	1.0	0.96	0.90	0.84	0.79	0.74	0.70	0.65	0.61	0.57	0.54	0.50	0.47	0.44	0.42	0.39	0.37	0.34	0.32	0.30
8.3	1.1	1.1	0.99	0.93	0.87	0.82	0.76	0.72	0.67	0.63	0.59	0.55	0.52	0.49	0.46	0.43	0.40	0.38	0.35	0.33	0.31	0.29	0.27	0.26
8.4	0.95	0.89	0.84	0.79	0.74	0.69	0.65	0.61	0.57	0.53	0.50	0.47	0.44	0.41	0.39	0.36	0.34	0.32	0.30	0.28	0.26	0.25	0.23	0.22
8.5	0.80	0.75	0.71	0.67	0.62	0.58	0.55	0.51	0.48	0.45	0.42	0.40	0.37	0.35	0.33	0.31	0.29	0.27	0.25	0.24	0.22	0.21	0.20	0.18
8.6	0.68	0.64	0.60	0.56	0.53	0.49	0.46	0.43	0.41	0.38	0.36	0.33	0.31	0.29	0.28	0.26	0.24	0.23	0.21	0.20	0.19	0.18	0.16	0.15
8.7	0.57	0.54	0.51	0.47	0.44	0.42	0.39	0.37	0.34	0.32	0.30	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13
8.8	0.49	0.46	0.43	0.40	0.38	0.35	0.33	0.31	0.29	0.27	0.26	0.24	0.23	0.21	0.20	0.19	0.17	0.16	0.15	0.14	0.13	0.13	0.12	0.11

8.9	0.42	0.39	0.37	0.34	0.32	0.30	0.28	0.27	0.25	0.23	0.22	0.21	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.10	0.09
9.0	0.36	0.34	0.32	0.30	0.28	0.26	0.24	0.23	0.21	0.20	0.19	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.10	0.09	0.09	0.08

To calculate total ammonia nitrogen chronic criteria values in freshwater when freshwater mussels and early life stages of fish are present at different pH and temperature values than those listed in this subsection, use the following equation and round the result to two significant digits:

Chronic Criteria Concentration =

$$0.8876 \text{ X } \left(\frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \text{ X } \left(2.126 \text{ X } 10^{0.028 \text{ X } (20 - MAX(T,7))}\right)$$

Where MAX = 7 or temperature in degrees Celsius, whichever is greater

T = temperature in °C

D. Site-specific considerations and alternate criteria. If it can be adequately demonstrated that freshwater mussels or early life stages of fish are not present at a site, then alternate site-specific criteria can be considered using the information provided in this subsection. Recalculated site-specific criteria shall provide for the attainment and maintenance of the water quality standards of downstream waters.

1. Site-specific modifications to the ambient water quality criteria for ammonia to account for the absence of freshwater mussels or early life stages of fish shall be conducted in accordance with the procedures contained in this subdivision. Because the department presumes that most state waterbodies have freshwater mussels and early life stages of fish present during most times of the year, the criteria shall be calculated assuming freshwater mussels and early life stages of fish are present using subsections B and C of this section unless the following demonstration that freshwater mussels or early life stages of fish are absent is successfully completed. Determination of the absence of freshwater mussels requires special field survey methods. This determination must be made after an adequate survey of the waterbody is conducted by an individual certified by the Virginia Department of Wildlife Resources for freshwater mussel identification and surveys. Determination of absence of freshwater mussels will be done in consultation with the Department of Wildlife Resources. Early life stages of fish are defined in subdivision 2 of this subsection. Modifications to the ambient water quality criteria for ammonia based on the presence or absence of early life stages of fish shall only apply at temperatures below 15°C.

a. During the review of any new or existing activity that has a potential to discharge ammonia in amounts that may cause or contribute to a violation of the ammonia criteria contained in subsection B of this section, the department may examine data from the following approved sources in subdivisions 1 a (1) through (5) of this subsection or may require the gathering of data in accordance with subdivisions 1 a (1) through (5) on the presence or absence of early life stages of fish in the affected waterbody.

(1) Species and distribution data contained in the Virginia Department of Wildlife Resources Wildlife Information System database.

(2) Species and distribution data contained in Freshwater Fishes of Virginia, 1994.

(3) Data and fish species distribution maps contained in Handbook for Fishery Biology, Volume 3, 1997.

(4) Field data collected in accordance with U.S. EPA's Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers, Second Edition, EPA 841-B-99-002. Field data must comply with all quality assurance and quality control criteria.

(5) The American Society for Testing and Materials (ASTM) Standard E-1241-88, Standard Guide for Conducting Early Life-Stage Toxicity Tests with Fishes.

b. If data or information from sources other than subdivisions 1 a (1) through (5) of this subsection are considered, then any resulting site-specific criteria modifications shall be reviewed and adopted in accordance with the site-specific criteria provisions in 9VAC25-260-140 D and submitted to EPA for review and approval.

c. If the department determines that the data and information obtained from subdivisions 1 a (1) through (5) of this subsection demonstrate that there are periods of each year when no early life stages are expected to be present for any species of fish that occur at the site, the department shall issue a notice to the public and make available for public comment the supporting data and analysis along with the department's preliminary decision to authorize the site-specific modification to the ammonia criteria. Such information shall include, at a minimum:

(1) Sources of data and information.

(2) List of fish species that occur at the site as defined in subdivision 3 of this subsection.

(3) Definition of the site. Definition of a "site" can vary in geographic size from a stream segment to a watershed to an entire eco-region.

(4) Duration of early life stage for each species in subdivision 1 c (2) of this subsection.

(5) Dates when early life stages of fish are expected to be present for each species in subdivision 1 c (2) of this subsection.

(6) Based on subdivision 1 c (5) of this subsection, identify the dates (beginning date, ending date), if any, where no early life stages are expected to be present for any of the species identified in subdivision 1 c (2) of this subsection.

d. If, after reviewing the public comments received in subdivision 1 c of this subsection and supporting data and information, the department determines that there are times of the year when no early life stages are expected to be present for any fish species that occur at the site, then the applicable ambient water quality criteria for ammonia for those time periods shall be calculated using the table in this subsection, or the formula for calculating the chronic criterion concentration for ammonia when early life stages of fish are absent.

e. The department shall maintain a comprehensive list of all sites where the department has determined that early life stages of fish are absent. For each site the list will identify the waterbodies affected and the corresponding times of the year that early life stages of fish are absent. This list is available either upon request from the Office of Water Quality Programs at 1111 East Main Street, Suite 1400 Richmond, VA 23219, or from the department website at http://www.deq.virginia.gov/programs/water/waterqualityinformationtmdls/waterqualitystandards.aspx.

2. The duration of the "early life stages" extends from the beginning of spawning through the end of the early life stages. The early life stages include the prehatch embryonic period, the post-hatch free embryo or yolk-sac fry, and the larval period, during which the organism feeds. Juvenile fish, which are anatomically similar to

adults, are not considered an early life stage. The duration of early life stages can vary according to fish species. The department considers the sources of information in subdivisions 1 a (1) through (5) of this subsection to be the only acceptable sources of information for determining the duration of early life stages of fish under this procedure.

3. "Occur at the site" includes the species, genera, families, orders, classes, and phyla that are usually present at the site; are present at the site only seasonally due to migration; are present intermittently because they periodically return to or extend their ranges into the site; or were present at the site in the past or are present in nearby bodies of water, but are not currently present at the site due to degraded conditions, and are expected to return to the site when conditions improve. "Occur at the site" does not include taxa that were once present at the site but cannot exist at the site now due to permanent physical alteration of the habitat at the site.

4. Any modifications to ambient water quality criteria for ammonia in subdivision 1 of this subsection shall not likely jeopardize the continued existence of any federal or state listed, threatened, or endangered species or result in the destruction or adverse modification of such species' critical habitats.

5. Site-specific modifications to the ambient water quality criteria for ammonia to account for the absence of freshwater mussels shall be conducted in accordance with the procedures contained in this subsection. Because the department presumes that most state waterbodies have freshwater mussel species, the criteria shall be calculated assuming mussels are present using subsections B and C of this section unless the demonstration that freshwater mussels are absent is successfully completed and accepted by DEQ and the Department of Wildlife Resources.

6. Equations for calculating ammonia criteria for four different site-specific scenarios are provided in subdivisions 6 a through d of this subsection as follows: (i) acute criteria when mussels are absent but trout are present, (ii) acute criteria when mussels and trout are absent, (iii) chronic criteria when mussels are absent and early life stages of fish are present, and (iv) chronic criteria when mussels and early life stages of fish are absent. Additional information regarding site-specific criteria can be reviewed in appendix N (pages 225-242) of the EPA Aquatic Life Ambient Water Quality Criteria to Ammonia--Freshwater 2013 (EPA 822-R-13-001).

a. Acute criteria: freshwater mussels absent and trout present. To calculate total ammonia nitrogen acute criteria values (in mg N/L) in freshwater with freshwater mussels absent (procedures for making this determination are in subdivisions 1 through 5 of this subsection) and trout present, use the following equations. The acute criterion is the lesser of the following calculation results. Round the result to two significant digits.

$$\left(\frac{0.275}{1 + 10^{7.204-pH}} + \frac{39}{1 + 10^{pH-7.204}} \right)$$

or

$$0.7249 \text{ X } \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) \text{ X } (62.15 \text{ X } 10^{0.036X(20 - T)})$$

b. Acute criteria: freshwater mussels absent and trout absent. To calculate total ammonia nitrogen acute criteria values (in mg N/L) in freshwater where freshwater mussels are absent and trout are absent, use the following equation. Round the result to two significant digits.

$$0.7249 \text{ X } \left(\frac{0.0114}{1 + 10^{7.204-pH}} + \frac{1.6181}{1 + 10^{pH-7.204}} \right) \text{ X MIN}$$

Where MIN = 51.93 or $62.15 \text{ X } 10^{0.036 \text{ X } (20 - T)}$, whichever is less

T = Temperature in ^{o}C

c. Chronic criteria: freshwater mussels absent and early life stages of fish present. The chronic criteria for total ammonia nitrogen (in mg N/L) where freshwater mussels are absent (procedures for making this determination are in subdivisions 1 through 5 of this subsection) in freshwater shall not exceed concentration values calculated using the following equation. Round the result to two significant digits.

$$0.9405 \text{ X } \left(\frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \text{ X MIN}$$

Where MIN = 6.920 or $7.547 \text{ X } 10^{0.028 \text{ x } (20 - T)}$ whichever is less

T = temperature in °C

d. Chronic criteria: freshwater mussels absent and early life stages of fish absent. The chronic criteria for total ammonia nitrogen (in mg N/L) where freshwater mussels are absent and early life stages of fish are absent (procedures for making this determination are in subdivisions 1 through 5 of this subsection) in freshwater shall not exceed concentration values calculated using the following equation. Round the result to two significant digits.

$$0.9405 \text{ X } \left(\frac{0.0278}{1 + 10^{7.688-pH}} + \frac{1.1994}{1 + 10^{pH-7.688}} \right) \text{ X} (7.547 \text{ X } 10^{0.028 \text{ X } (20 - MAX(T,7))})$$

Where MAX = 7 or temperature in degrees Celsius, whichever is greater

T = temperature in °C

E. The one-hour average concentration of total ammonia nitrogen (in mg N/L) in saltwater shall not exceed, more than once every three years on the average, the acute criteria in the following table:

Acute Ammonia Saltwater Criteria Total Ammonia Nitrogen (mg N/L) Salinity = 10 g/kg								
	Temperature °C							
pH	0	5	10	15	20	25	30	35
7.00	231.9	159.8	110.1	75.88	52.31	36.08	24.91	17.21
7.20	146.4	100.9	69.54	47.95	33.08	22.84	15.79	10.93

7.40	92.45	63.73	43.94	30.32	20.94	14.48	10.03	6.97
7.60	58.40	40.28	27.80	19.20	13.28	9.21	6.40	4.47
7.80	36.92	25.48	17.61	12.19	8.45	5.88	4.11	2.89
8.00	23.37	16.15	11.18	7.76	5.40	3.78	2.66	1.89
8.20	14.81	10.26	7.13	4.97	3.48	2.46	1.75	1.27
8.40	9.42	6.54	4.57	3.20	2.27	1.62	1.18	0.87
8.60	6.01	4.20	2.95	2.09	1.50	1.09	0.81	0.62
8.80	3.86	2.72	1.93	1.39	1.02	0.76	0.58	0.46
9.00	2.51	1.79	1.29	0.95	0.71	0.55	0.44	0.36

Salinity = 20 g/kg

	Temperature °C							
pH	0	5	10	15	20	25	30	35
7.00	247.6	170.5	117.5	80.98	55.83	38.51	26.58	18.36
7.20	156.3	107.7	74.21	51.17	35.30	24.37	16.84	11.66
7.40	98.67	68.01	46.90	32.35	22.34	15.44	10.70	7.43
7.60	62.33	42.98	29.66	20.48	14.17	9.82	6.82	4.76
7.80	39.40	27.19	18.78	13.00	9.01	6.26	4.37	3.07
8.00	24.93	17.23	11.92	8.27	5.76	4.02	2.83	2.01
8.20	15.80	10.94	7.59	5.29	3.70	2.61	1.86	1.34
8.40	10.04	6.97	4.86	3.41	2.41	1.72	1.24	0.91
8.60	6.41	4.47	3.14	2.22	1.59	1.15	0.85	0.65
8.80	4.11	2.89	2.05	1.47	1.07	0.80	0.61	0.48
9.00	2.67	1.90	1.36	1.00	0.75	0.57	0.46	0.37

Salinity = 30 g/kg

	Temperature °C							
pH	0	5	10	15	20	25	30	35
7.00	264.6	182.3	125.6	86.55	59.66	41.15	28.39	19.61
7.20	167.0	115.1	79.31	54.68	37.71	26.03	17.99	12.45
7.40	105.5	72.68	50.11	34.57	23.87	16.50	11.42	7.92
7.60	66.61	45.93	31.69	21.88	15.13	10.48	7.28	5.07
7.80	42.10	29.05	20.07	13.88	9.62	6.68	4.66	3.27
8.00	26.63	18.40	12.73	8.83	6.14	4.29	3.01	2.13
8.20	16.88	11.68	8.10	5.64	3.94	2.78	1.97	1.42
8.40	10.72	7.44	5.18	3.63	2.56	1.82	1.31	0.96
8.60	6.83	4.77	3.34	2.36	1.69	1.22	0.90	0.68
8.80	4.38	3.08	2.18	1.56	1.13	0.84	0.64	0.50
9.00	2.84	2.01	1.45	1.06	0.79	0.60	0.47	0.39

To calculate total ammonia nitrogen acute criteria values in saltwater at different pH and temperature values than those listed in this subsection, use the following formulas:

$$I = \frac{19.9273S}{(1000 - 1.005109S)}$$

Where I = molal ionic strength of water

S = Salinity ppt (g/kg)

The regression model used to relate I to pKa (negative log of the ionization constant) is

pKa = 9.245 + 0.138(I)

pKa as defined by these equations is at 298 degrees Kelvin (25°C).

T °Kelvin = °C + 273

To correct for other temperatures:

$pKa^S_T = pKa^S_{298} + 0.0324(298 - T\ °Kelvin)$

The unionized ammonia fraction (UIA) is given by:

$$UIA = \frac{1}{1 + 10(pKa^S_T - pH)}$$

The acute ammonia criterion in saltwater is given by:

$$Acute = \frac{0.233}{UIA}$$

Multiply the acute value by 0.822 to get the ammonia-N acute criterion.

F. The 30-day average concentration of total ammonia nitrogen (in mg N/L) in saltwater shall not exceed, more than once every three years on the average, the chronic criteria in the following table:

Chronic Ammonia Saltwater Criteria

Total Ammonia Nitrogen (mg N/L)
Salinity = 10 g/kg

pH	Temperature °C 0	5	10	15	20	25	30	35
7.00	34.84	24.00	16.54	11.40	7.86	5.42	3.74	2.59
7.20	21.99	15.15	10.45	7.20	4.97	3.43	2.37	1.64
7.40	13.89	9.57	6.60	4.55	3.15	2.18	1.51	1.05
7.60	8.77	6.05	4.18	2.88	2.00	1.38	0.96	0.67
7.80	5.55	3.83	2.65	1.83	1.27	0.88	0.62	0.43
8.00	3.51	2.43	1.68	1.17	0.81	0.57	0.40	0.28
8.20	2.23	1.54	1.07	0.75	0.52	0.37	0.26	0.19
8.40	1.41	0.98	0.69	0.48	0.34	0.24	0.18	0.13
8.60	0.90	0.63	0.44	0.31	0.23	0.16	0.12	0.09
8.80	0.58	0.41	0.29	0.21	0.15	0.11	0.09	0.07
9.00	0.38	0.27	0.19	0.14	0.11	0.08	0.07	0.05

Salinity = 20 g/kg

pH	Temperature °C 0	5	10	15	20	25	30	35
7.00	37.19	25.62	17.65	12.16	8.39	5.78	3.99	2.76
7.20	23.47	16.17	11.15	7.69	5.30	3.66	2.53	1.75
7.40	14.82	10.22	7.04	4.86	3.36	2.32	1.61	1.12
7.60	9.36	6.46	4.46	3.08	2.13	1.47	1.02	0.71
7.80	5.92	4.08	2.82	1.95	1.35	0.94	0.66	0.46
8.00	3.74	2.59	1.79	1.24	0.86	0.60	0.43	0.30
8.20	2.37	1.64	1.14	0.79	0.56	0.39	0.28	0.20
8.40	1.51	1.05	0.73	0.51	0.36	0.26	0.19	0.14
8.60	0.96	0.67	0.47	0.33	0.24	0.17	0.13	0.10
8.80	0.62	0.43	0.31	0.22	0.16	0.12	0.09	0.07
9.00	0.40	0.28	0.20	0.15	0.11	0.09	0.07	0.06

Salinity = 30 g/kg

pH	Temperature °C 0	5	10	15	20	25	30	35
7.00	39.75	27.38	18.87	13.00	8.96	6.18	4.27	2.95
7.20	25.09	17.29	11.91	8.21	5.67	3.91	2.70	1.87
7.40	15.84	10.92	7.53	5.19	3.59	2.48	1.72	1.19
7.60	10.01	6.90	4.76	3.29	2.27	1.57	1.09	0.76
7.80	6.32	4.36	3.01	2.08	1.44	1.00	0.70	0.49
8.00	4.00	2.76	1.91	1.33	0.92	0.64	0.45	0.32
8.20	2.53	1.75	1.22	0.85	0.59	0.42	0.30	0.21
8.40	1.61	1.12	0.78	0.55	0.38	0.27	0.20	0.14
8.60	1.03	0.72	0.50	0.35	0.25	0.18	0.14	0.10
8.80	0.66	0.46	0.33	0.23	0.17	0.13	0.10	0.08
9.00	0.43	0.30	0.22	0.16	0.12	0.09	0.07	0.06

To calculate total ammonia nitrogen chronic criteria values in saltwater at different pH and temperature values than those listed in this subsection, use the following formulas:

$$I = \frac{19.9273S}{(1000 - 1.005109S)}$$

Where I = molal ionic strength of water

S = Salinity ppt (g/kg)

The regression model used to relate I to pKa (negative log of the ionization constant) is

pKa = 9.245 + 0.138(I)

pKa as defined by these equations is at 298 degrees Kelvin (25°C).

T °Kelvin = °C + 273

To correct for other temperatures:

$$pKa^{S}_{T} = pKa^{S}_{298} + 0.0324(298 - T\ °Kelvin)$$

The unionized ammonia fraction (UIA) is given by:

$$UIA = \frac{1}{1 + 10^{(pKa^{S}_{T} - pH)}}$$

The chronic ammonia criterion in saltwater is given by:

$$Chronic = \frac{0.035}{UIA}$$

Multiply the chronic value by 0.822 to get the ammonia-N chronic criterion.

G. Implementation of freshwater ammonia water quality criteria in subsections B and C of this section through VPDES permits issued pursuant to Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation (9VAC25-31).

1. The criteria in subsections B and C of this section shall be implemented in VPDES permits that are being reissued to facilities in accordance with the following schedule:

a. Major municipal facilities with design flows greater than or equal to five million gallons per day and major industrial facilities - 12 months following the Water Quality Standards effective date.

b. Municipal facilities with design flows greater than or equal to 500,000 gallons per day and less than five million gallons per day and all minor industrial facilities - 24 months following the Water Quality Standards effective date.

c. Minor municipal facilities with design flows that are less than 500,000 gallons per day - 36 months following the Water Quality Standards effective date.

2. VPDES permits shall not be revoked and reissued to avoid or delay being subject to the freshwater ammonia water quality criteria in subsections B and C of this section in accordance with the schedule in subdivision G 1 of this section.

3. The provisions of 9VAC25-31-250 A 3 notwithstanding, a permittee may request and the board may authorize, as appropriate, an extended schedule of compliance, which exceeds the term of the VPDES permit and may include multiple permit cycles to achieve effluent limits based on the freshwater ammonia water quality criteria in subsections B and C of this section.

a. Any extended schedule of compliance necessary for the implementation of the freshwater ammonia water quality criteria shall require compliance as soon as possible in accordance with 9VAC25-31-250 A 1. The board may consider the following factors on a case-by-case basis, relying on information provided by the permittee, in making a determination of the timeframe that meets the standard of "as soon as possible":

(1) The relative priority of freshwater ammonia water quality criteria and other water quality and water infrastructure needs of the local community or permittee;

(2) Availability of grant funding pursuant to § 10.1-2131 of the Code of Virginia and other treatment facility expansion and upgrade plans;

(3) Whether an extended schedule of compliance is appropriate for facilities or classes of facilities; and

(4) Appropriate mechanisms to address affordability limitations and financial hardship situations remaining notwithstanding subdivisions G 1 a, G 1 b, and G 1 c of this section.

b. Any request by the permittee for an extended schedule of compliance shall include at the time of permit application at a minimum the following information:

(1) Documentation of other water quality and water infrastructure projects that are in the planning, design, or construction process and the relative priority of the projects in relation to compliance with the freshwater ammonia water quality criteria.

(2) A preliminary engineering analysis of treatment facility upgrade or source reduction alternatives necessary to meet the freshwater ammonia criteria. The analysis may include any additional upgrade or expansion plans currently under consideration. The analysis shall be prepared by a professional engineer registered in Virginia and shall include an estimation of the capital and operations and maintenance costs.

(3) An assessment of project affordability and identification of all potential sources of funding for enhanced ammonia treatment. In the case of publicly owned treatment works, include an evaluation of the required sewer use fees versus median household income.

(4) Documentation that demonstrates the minimum estimated time required and schedule to design, fund, and construct the selected treatment or source reduction alternative.

(5) An evaluation prepared by a professional engineer registered in Virginia of the highest achievable condition (HAC) regarding nitrification capabilities of the existing treatment facility under the influent loading conditions expected during the term of the VPDES permit as well as under design loading conditions.

c. Any VPDES permit that authorizes an extended schedule of compliance for meeting the freshwater ammonia water quality criteria that exceeds the permit term shall include interim effluent limitations based on the HAC attainable during the term of the permit, final effluent limitations, and a final compliance date.

d. New dischargers defined in 9VAC25-31 are not eligible for extended schedules of compliance under this section; however, they remain eligible for schedules of compliance consistent with 9VAC25-31-250.

A permittee may seek a site-specific modification or variance to the freshwater ammonia water quality criteria under 9VAC25-260-140 D or E as applicable.

Statutory Authority

§ 62.1-44.15 the Code of Virginia; Clean Water Act (33 USC §1251 et seq.); 40 CFR 131.

Historical Notes

Derived from Volume 19, Issue 23, eff. August 27, 2003; amended, Virginia Register Volume 20, Issue 09, eff. February 12, 2004; Volume 28, Issue 18, eff. June 6, 2012; Volume 32, Issue 26, eff. July 27, 2017; Volume 36, Issue 22, eff. October 13, 2020.

Part II
Standards with More Specific Application

9VAC25-260-160. Fecal coliform bacteria; shellfish waters.

In all open ocean or estuarine waters capable of propagating shellfish or in specific areas where public or leased private shellfish beds are present, and including those waters on which condemnation are established by the State Department of Health, the following criteria for fecal coliform bacteria shall apply:

The geometric mean fecal coliform value for a sampling station shall not exceed an MPN (most probable number) or MF (membrane filtration using mTEC culture media) of 14 per 100 milliliters (ml). The estimated 90th percentile shall not exceed an MPN of 43 per 100 ml for a 5-tube decimal dilution test or an MPN of 49 per 100 ml for a 3-tube decimal dilution test or MF test of 31 CFU (colony forming units) per 100 ml.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-02.1, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 19, Issue 07, eff. January 15, 2003; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-170. Bacteria; other recreational waters.

A. The following bacteria criteria (counts/100ml) shall apply to protect primary contact recreational uses in surface waters, except waters identified in subsection B of this section:

In freshwater, E. coli bacteria shall not exceed a geometric mean of 126 counts/100ml and shall not have greater than a 10% excursion frequency of a statistical threshold value (STV) of 410 counts/100 ml, both in an assessment period of up to 90 days.

In transition and saltwater, Enterococci bacteria shall not exceed a geometric mean of 35 counts/100ml and shall not have greater than a 10% excursion frequency of a statistical threshold value (STV) of 130 counts/100ml, both in an assessment period of up to 90 days.

1. See 9VAC25-260-140 C for boundary delineations for freshwater, transition, and saltwater.

2. In VPDES discharges to freshwater, bacteria in effluent requiring disinfection shall not exceed a monthly geometric mean of E. coli bacteria of 126 counts/100ml. Alternative performance standards may be established where an approved long term control plan establishes an alternative level of disinfection for a combined sewer system.

In VPDES discharges to transition and saltwater, bacteria in effluent requiring disinfection shall not exceed a monthly geometric mean of enterococci bacteria of 35 counts/100ml.

B. The following bacteria criteria per 100 ml (CFU/100 ml) of water shall apply:

E. coli bacteria shall not exceed a monthly geometric mean of 630 CFU/100 ml in freshwater.

Enterococci bacteria shall not exceed a monthly geometric mean of 175 CFU/100 ml in transition and saltwater.

1. See 9VAC25-260-140 C for boundary delineations for freshwater, transition, and saltwater.

2. Geometric means shall be calculated using all data collected during any calendar month with a minimum of four weekly samples.

3. If there is insufficient data to calculate monthly geometric means in freshwater, no more than 10% of the total samples in the assessment period shall exceed 1173 E. coli CFU/100 ml.

4. If there is insufficient data to calculate monthly geometric means in transition and saltwater, no more than 10% of the total samples in the assessment period shall exceed 519 enterococci CFU/100 ml.

5. Where the existing water quality for bacteria is below the geometric mean criteria in a water body designated for secondary contact in subdivision 6 of this subsection that higher water quality will be maintained in accordance with 9VAC25-260-30 A 2.

6. Surface waters designated under this subsection are as follows:

a. (Reserved)

b. (Reserved)

c. (Reserved)

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-02.2, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 19, Issue 07, eff. January 15, 2003; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; amended Virginia Register Volume 36, Issue 06, eff. October 21, 2019.

9VAC25-260-180. [Deleted].

Historical Notes

Derived from VR680-21-02.3, eff. May 20, 1992.

9VAC25-260-185. Criteria to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries.

A. Dissolved oxygen. The dissolved oxygen criteria in the following table apply to all Chesapeake Bay waters according to their specified designated use and supersede the dissolved oxygen criteria in 9VAC25-260-50.

Designated Use	Criteria Concentration/Duration	Temporal Application

Migratory fish spawning and nursery	7-day mean ≥ 6 mg/l (tidal habitats with 0-0.5 ppt salinity)	February 1 - May 31
	Instantaneous minimum ≥ 5 mg/l	
Open water[1]	30-day mean ≥ 5.5 mg/l (tidal habitats with 0-0.5 ppt salinity)	year-round[2]
	30-day mean ≥ 5 mg/l (tidal habitats with > 0.5 ppt salinity)	
	7-day mean ≥ 4 mg/l	
	Instantaneous minimum ≥ 3.2 mg/l at temperatures < 29°C Instantaneous minimum ≥ 4.3 mg/l at temperatures ≥ 29°C	
Deep water	30-day mean ≥ 3 mg/l	June 1 - September 30
	1-day mean ≥ 2.3 mg/l	
	Instantaneous minimum ≥ 1.7 mg/l	
Deep channel	Instantaneous minimum ≥ 1 mg/l	June 1 - September 30

[1]In applying this open water instantaneous criterion to the Chesapeake Bay and its tidal tributaries where the existing water quality for dissolved oxygen exceeds an instantaneous minimum of 3.2 mg/l, that higher water quality for dissolved oxygen shall be provided antidegradation protection in accordance with 9VAC25-260-30 A 2.

[2]Open-water dissolved oxygen criteria attainment is assessed separately over two time periods: summer (June 1- September 30) and nonsummer (October 1-May 31) months.

B. Submerged aquatic vegetation (SAV) and water clarity. Attainment of the shallow-water submerged aquatic vegetation designated use shall be determined using any one of the following criteria:

Designated Use	Chesapeake Bay Program Segment	SAV Acres[1]	Percent Light-Through-Water[2]	Water Clarity Acres[1]	Temporal Application
Shallow water submerged aquatic vegetation use	CB5MH	7,633	22%	14,514	April 1 - October 31
	CB6PH	1,267	22%	3,168	March 1 - November 30
	CB7PH	15,107	22%	34,085	March 1 - November 30
	CB8PH	11	22%	28	March 1 - November 30
	POTTF	2,093	13%	5,233	April 1 - October 31
	POTOH	1,503	13%	3,758	April 1 - October 31
	POTMH	4,250	22%	10,625	April 1 - October 31
	RPPTF	66	13%	165	April 1 - October 31
	RPPOH	4	13%	10	April 1 - October 31
	RPPMH	1700	22%	5000	April 1 - October 31
	CRRMH	768	22%	1,920	April 1 - October 31
	PIAMH	3,479	22%	8,014	April 1 - October 31
	MPNTF	85	13%	213	April 1 - October 31
	MPNOH	-	-	-	-
	PMKTF	187	13%	468	April 1 - October 31
	PMKOH	-	-	-	-
	YRKMH	239	22%	598	April 1 - October 31
	YRKPH	2,793	22%	6,982	March 1 - November 30
	MOBPH	15,901	22%	33,990	March 1 - November 30
	JMSTF2	200	13%	500	April 1 - October 31
	JMSTF1	1000	13%	2500	April 1 - October 31
	APPTF	379	13%	948	April 1 - October 31
	JMSOH	15	13%	38	April 1 - October 31
	CHKOH	535	13%	1,338	April 1 - October 31
	JMSMH	200	22%	500	April 1 - October 31
	JMSPH	300	22%	750	March 1 - November 30
	WBEMH	-	-	-	-
	SBEMH	-	-	-	-
	EBEMH	-	-	-	-
	ELIPH	-	-	-	-
	LYNPH	107	22%	268	March 1 - November 30
	POCOH	-	-	-	-
	POCMH	4,066	22%	9,368	April 1 - October 31
	TANMH	13,579	22%	22,064	April 1 - October 31

[1]The assessment period for SAV and water clarity acres shall be the single best year in the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the data assessment window shall be used.

[2]Percent light-through-water = $100e^{(-KdZ)}$ where K_d is water column light attenuation coefficient and can be measured directly or converted from a measured secchi depth where K_d = 1.45/secchi depth. Z = depth at location of measurement of K_d.

C. Chlorophyll a.

Designated Use	Chlorophyll a Narrative Criterion	Temporal Application
Open water	Concentrations of chlorophyll a in free-floating microscopic aquatic plants (algae) shall not exceed levels that result in undesirable or nuisance aquatic plant life or render tidal waters unsuitable for the propagation and growth of a balanced, indigenous population of aquatic life or otherwise result in	March 1 - September 30

	ecologically undesirable water quality conditions such as reduced water clarity, low dissolved oxygen, food supply imbalances, proliferation of species deemed potentially harmful to aquatic life or humans, or aesthetically objectionable conditions.	
See 9VAC25-260-310 special standard bb for numerical chlorophyll criteria for the tidal James River.		

D. Implementation.

1. Chesapeake Bay program segmentation scheme as described in Chesapeake Bay Program, 2004 Chesapeake Bay Program Analytical Segmentation Scheme-Revisions, Decisions and Rationales: 1983–2003, CBP/TRS 268/04, EPA 903-R-04-008, Chesapeake Bay Program, Annapolis, Maryland, and the Chesapeake Bay Program published 2005 addendum (CBP/TRS 278-06; EPA 903-R-05-004) is listed in the following table and shall be used as the spatial assessment unit to determine attainment of the criteria in this section for each designated use.

Chesapeake Bay Segment Description	Segment Name[1]	Chesapeake Bay Segment Description	Segment Name[1]
Lower Central Chesapeake Bay	CB5MH	Mobjack Bay	MOBPH
Western Lower Chesapeake Bay	CB6PH	Upper Tidal Fresh James River	JMSTF2
Eastern Lower Chesapeake Bay	CB7PH	Lower Tidal Fresh James River	JMSTF1
Mouth of the Chesapeake Bay	CB8PH	Appomattox River	APPTF
Upper Potomac River	POTTF	Middle James River	JMSOH
Middle Potomac River	POTOH	Chickahominy River	CHKOH
Lower Potomac River	POTMH	Lower James River	JMSMH
Upper Rappahannock River	RPPTF	Mouth of the James River	JMSPH
Middle Rappahannock River	RPPOH	Western Branch Elizabeth River	WBEMH
Lower Rappahannock River	RPPMH	Southern Branch Elizabeth River	SBEMH
Corrotoman River	CRRMH	Eastern Branch Elizabeth River	EBEMH
Piankatank River	PIAMH	Lafayette River	LAFMH
Upper Mattaponi River	MPNTF	Mouth of the Elizabeth River	ELIPH
Lower Mattaponi River	MPNOH	Lynnhaven River	LYNPH
Upper Pamunkey River	PMKTF	Middle Pocomoke River	POCOH
Lower Pamunkey River	PMKOH	Lower Pocomoke River	POCMH
Middle York River	YRKMH	Tangier Sound	TANMH
Lower York River	YRKPH		
[1]First three letters of segment name represent Chesapeake Bay segment description, letters four and five represent the salinity regime of that segment (TF = Tidal Fresh, OH = Oligohaline, MH = Mesohaline, and PH = Polyhaline) and a sixth space is reserved for subdivisions of that segment.			

2. The assessment period shall be the most recent three consecutive years. When three consecutive years of data are not available, a minimum of three years within the data assessment window shall be used.

3. Attainment of these criteria shall be assessed through comparison of the generated cumulative frequency distribution of the monitoring data to the applicable criteria reference curve for each designated use. If the monitoring data cumulative frequency curve is completely contained inside the reference curve, then the segment is in attainment of the designated use. The reference curves and procedures to be followed are published in the USEPA, Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-03-002, April 2003 and the 2004 (EPA 903-R-03-002 October 2004), 2007 (CBP/TRS 285/07, EPA 903-R-07-003), 2007 (CBP/TRS 288/07, EPA 903-R-07-005), 2008 (CBP/TRS 290-08, EPA 903-R-08-001), 2010 (CBP/TRS 301-10, EPA 903-R-10-002), and 2017 (CBP/TRS 320-17, EPA 903-R-17-002) addenda. An exception to this requirement is in measuring attainment of the SAV and water clarity acres, which are compared directly to the criteria.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from Volume 21, Issue 23, eff. June 24, 2005; amended, Volume 26, Issue 12, eff. February 1, 2010; Volume 27, Issue 06, eff. January 6, 2011; Volume 32, Issue 26, eff. June 27, 2017; Volume 35, Issue 07, eff. January 10, 2019.

9VAC25-260-186. Virginia Pollutant Discharge Elimination System permits and schedules of compliance.

A. As deemed necessary to meet the requirements of 9VAC25-260-185, the board shall issue or modify Virginia Pollutant Discharge Elimination System permits for point source dischargers located throughout the tidal and nontidal sections of the following river basins: Potomac (9VAC25-260-390 and 9VAC25-260-400), James (9VAC25-260-410, 9VAC25-260-415, 9VAC25-260-420 and 9VAC25-260-430), Rappahannock (9VAC25-260-440), York (9VAC25-260-530) and Chesapeake Bay/Small Coastal Basins (subdivisions 2 through 3g of 9VAC25-260-520).

B. National Pollutant Discharge Elimination System permits issued by permitting authorities with the Chesapeake Bay watershed may include a compliance schedule in accordance with implementing regulations requiring compliance as soon as possible with nutrient load limitations assigned to individual dischargers.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia.

Historical Notes

Derived from Volume 21, Issue 23, eff. June 24, 2005.

9VAC25-260-187. Criteria for man-made lakes and reservoirs to protect aquatic life and recreational designated uses from the impacts of nutrients.

A. The criteria in subsection B of this section apply to the man-made lakes and reservoirs listed in this section. Additional man-made lakes and reservoirs may be added as new reservoirs are constructed or monitoring data become available from outside groups or future agency monitoring.

B. Whether or not algicide treatments are used, the chlorophyll a criteria apply to all waters on the list. The total phosphorus criteria apply only if a specific man-made lake or reservoir received algicide treatment during the monitoring and assessment period of April 1 through October 31.

The 90th percentile of the chlorophyll a data collected at one meter or less within the lacustrine portion of the man-made lake or reservoir between April 1 and October 31 shall not exceed the chlorophyll a criterion for that waterbody in each of the two most recent monitoring years that chlorophyll a data are available. For a waterbody that received algicide treatment, the median of the total phosphorus data collected at one meter or less within the lacustrine portion of the man-made lake or reservoir between April 1 and October 31 shall not exceed the total phosphorus criterion in each of the two most recent monitoring years that total phosphorus data are available.

Monitoring data used for assessment shall be from sampling location(s) within the lacustrine portion where observations are evenly distributed over the seven months from April 1 through October 31 and are in locations that are representative, either individually or collectively, of the condition of the man-made lake or reservoir.

Man-made Lake or Reservoir Name	Location	Chlorophyll a (µg/L)	Total Phosphorus (µg/L)
Abel Lake	Stafford County	35	40
Airfield Pond	Sussex County	35	40
Amelia Lake	Amelia County	35	40
Aquia Reservoir (Smith Lake)	Stafford County	35	40
Bark Camp Lake (Corder Bottom Lake, Lee/Scott/Wise Lake)	Scott County	35	40
Beaver Creek Reservoir	Albemarle County	35	40
Beaverdam Creek Reservoir (Beaverdam Reservoir)	Bedford County	35	40
Beaverdam Reservoir	Loudoun County	35	40
Bedford Reservoir (Stony Creek Reservoir)	Bedford County	35	40
Big Cherry Lake	Wise County	35	40
Breckenridge Reservoir	Prince William County	35	40
Briery Creek Lake	Prince Edward County	35	40
Brunswick Lake (County Pond)	Brunswick County	35	40
Burke Lake	Fairfax County	60	40
Carvin Cove Reservoir	Botetourt County	35	40
Cherrystone Reservoir	Pittsylvania County	35	40
Chickahominy Lake	Charles City County	35	40
Chris Green Lake	Albemarle County	35	40
Claytor Lake	Pulaski County	25	20
Clifton Forge Reservoir (Smith Creek Reservoir)	Alleghany County	35	20
Coles Run Reservoir	Augusta County	10	10
Curtis Lake	Stafford County	60	40
Diascund Creek Reservoir	New Kent County	35	40
Douthat Lake	Bath County	25	20
Elkhorn Lake	Augusta County	10	10
Emporia Lake (Meherrin Reservoir)	Greensville County	35	40
Fairystone Lake	Henry County	35	40
Falling Creek Reservoir	Chesterfield County	35	40
Fluvanna Ruritan Lake	Fluvanna County	60	40
Fort Pickett Reservoir	Nottoway/Brunswick County	35	40
Gatewood Reservoir	Pulaski County	35	40
Georges Creek Reservoir	Pittsylvania County	35	40
Goose Creek Reservoir	Loudoun County	35	40
Graham Creek Reservoir	Amherst County	35	40
Great Creek Reservoir	Lawrenceville	35	40
Harrison Lake	Charles City County	35	40
Harwood Mills Reservoir	York County	60	40
Hidden Valley Lake	Washington County	35	40
Hogan Lake	Pulaski County	35	40
Holiday Lake	Appomattox County	35	40
Hungry Mother Lake	Smyth County	35	40
Hunting Run Reservoir	Spotsylvania County	35	40
J. W. Flannagan Reservoir	Dickenson County	25	20
Kerr Reservoir, Virginia portion (Buggs Island Lake)	Halifax County	25	30
Keysville Reservoir	Charlotte County	35	40
Lake Albemarle	Albemarle County	35	40
Lake Anna	Louisa County	25	30
Lake Arrowhead	Page County	35	40
Lake Burnt Mills	Isle of Wight County	60	40
Lake Chesdin	Chesterfield County	35	40
Lake Cohoon	Suffolk City	60	40
Lake Conner	Halifax County	35	40
Lake Frederick	Frederick County	35	40

Lake Gaston, (Virginia portion)	Brunswick County	25	30
Lake Gordon	Mecklenburg County	35	40
Lake Keokee	Lee County	35	40
Lake Kilby	Suffolk City	60	40
Lake Lawson	Virginia Beach City	60	40
Lake Manassas	Prince William County	35	40
Lake Meade	Suffolk City	60	40
Lake Moomaw	Bath County	10	10
Lake Nelson	Nelson County	60	40
Lake Nottoway (Lee Lake, Nottoway Lake)	Nottoway County	35	40
Lake Orange	Orange County	60	40
Lake Pelham	Culpeper County	35	40
Lake Prince	Suffolk City	60	40
Lake Robertson	Rockbridge County	35	40
Lake Smith	Virginia Beach City	60	40
Lake Whitehurst	Norfolk City	60	40
Lake Wright	Norfolk City	60	40
Lakeview Reservoir	Chesterfield County	35	40
Laurel Bed Lake	Russell County	35	40
Lee Hall Reservoir (Newport News Reservoir)	Newport News City	60	40
Leesville Reservoir	Bedford County	25	30
Little Creek Reservoir	Virginia Beach City	60	40
Little Creek Reservoir	James City County	25	30
Little River Reservoir	Montgomery County	35	40
Lone Star Lake F (Crystal Lake)	Suffolk City	60	40
Lone Star Lake G (Crane Lake)	Suffolk City	60	40
Lone Star Lake I (Butler Lake)	Suffolk City	60	40
Lunga Reservoir	Prince William County	35	40
Lunenburg Beach Lake (Victoria Lake)	Town of Victoria	35	40
Martinsville Reservoir (Beaver Creek Reservoir)	Henry County	35	40
Mill Creek Reservoir	Amherst County	35	40
Modest Creek Reservoir	Town of Victoria	35	40
Motts Run Reservoir	Spotsylvania County	25	30
Mount Jackson Reservoir	Shenandoah County	35	40
Mountain Run Lake	Culpeper County	35	40
Ni Reservoir	Spotsylvania County	35	40
North Fork Pound Reservoir	Wise County	35	40
Northeast Creek Reservoir	Louisa County	35	40
Occoquan Reservoir	Fairfax County	35	40
Pedlar Lake	Amherst County	25	20
Philpott Reservoir	Henry County	25	30
Phelps Creek Reservoir (Brookneal Reservoir)	Campbell County	35	40
Powhatan Lakes (Upper and Lower)	Powhatan County	35	40
Ragged Mountain Reservoir	Albemarle County	35	40
Rivanna Reservoir (South Fork Rivanna Reservoir)	Albemarle County	35	40
Roaring Fork	Pittsylvania County	35	40
Rural Retreat Lake	Wythe County	35	40
Sandy River Reservoir	Prince Edward County	35	40
Shenandoah Lake	Rockingham County	35	40
Silver Lake	Rockingham County	35	40
Smith Mountain Lake	Bedford County	25	30
South Holston Reservoir	Washington County	25	20
Speights Run Lake	Suffolk City	60	40
Spring Hollow Reservoir	Roanoke County	25	20
Staunton Dam Lake	Augusta County	35	40
Stonehouse Creek Reservoir	Amherst County	60	40
Strasburg Reservoir	Shenandoah County	35	40
Stumpy Lake	Virginia Beach	60	40
Sugar Hollow Reservoir	Albemarle County	25	20
Swift Creek Lake	Chesterfield County	35	40
Swift Creek Reservoir	Chesterfield County	35	40
Switzer Lake	Rockingham County	10	10
Talbott Reservoir	Patrick County	35	40
Thrashers Creek Reservoir	Amherst County	35	40
Totier Creek Reservoir	Albemarle County	35	40
Townes Reservoir	Patrick County	25	20
Troublesome Creek Reservoir	Buckingham County	35	40
Waller Mill Reservoir	York County	25	30
Western Branch Reservoir	Suffolk City	25	20

Wise Reservoir	Wise County	25	20

C. When the board determines that the applicable criteria in subsection B of this section for a specific man-made lake or reservoir are exceeded, the board shall consult with the Department of Game and Inland Fisheries regarding the status of the fishery in determining whether or not the designated use for that waterbody is being attained. If the designated use of the subject waterbody is not being attained, the board shall assess the waterbody as impaired in accordance with § 62.1-44.19:5 of the Code of Virginia. If the designated use is being attained, the board shall assess the waterbody as impaired in accordance with § 62.1-44.19:5 of the Code of Virginia until site-specific criteria are adopted and become effective for that waterbody.

D. If the nutrient criteria specified for a man-made lake or reservoir in subsection B of this section do not provide for the attainment and maintenance of the water quality standards of downstream waters as required in 9VAC25-260-10 C, the nutrient criteria herein may be modified on a site-specific basis to protect the water quality standards of downstream waters.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from Volume 24, Issue 04, eff. August 14, 2007; amended, Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

Part III
[Deleted]
Part IV
Groundwater Standards [Repealed]

9VAC25-260-190. (Repealed.)

Part IV
Groundwater Standards [Repealed]

Historical Notes

Derived from VR680-21-04.1 to VR680-21-04.4, eff. May 20, 1992; repealed, Virginia Register Volume 20, Issue 9, eff. February 12, 2004.

Part V
Water Quality Criteria for Groundwater [Repealed]

9VAC25-260-230. (Repealed.)

Historical Notes

Derived from VR680-21-05.1 to VR680-21-05.2, eff. May 20, 1992; amended, Virginia Register Volume 14, Issue 4, eff. December 10, 1997; repealed, Virginia Register Volume 20, Issue 9, eff. February 12, 2004.

Part VI
Procedural Requirements

9VAC25-260-250. Procedural requirements for variances due to natural conditions, temperature and §316(a) thermal variances.

A. The standards in this chapter notwithstanding, as a result of natural conditions, water quality may from time to time vary from established limits as a result of natural conditions.

B. When the maximum temperature of stockable trout waters exceeds, solely due to natural conditions, the maximum allowable temperature criterion specified in 9VAC25-260-50, the board, on a case-by-case basis, may grant a variance to the maximum temperature criterion and will use the naturally occurring maximum temperature in setting effluent limits in permits. The public notice for any permit proposed to be issued or reissued by the board will contain reference to any proposed granting of such a variance.

C. Variances under § 316(a) of the Clean Water Act and under subsection B of this section are site-specific case decisions that do not require a standards amendment.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-06.1, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-260. Modification, amendment, and cancellation of standards.

A. Under the authority of § 62.1-44.15(3)(b) of the State Water Control Law, the board reserves the right at any time to modify, amend, or cancel any of the rules, policies, or standards set forth here. Such modification, amendment, or cancellation shall be consistent with requirements of § 303 of the Clean Water Act, as amended, and regulations promulgated under it.

B. Within three years after December 10, 1997, the department shall perform an analysis on this chapter and provide the board with a report on the results. The analysis shall include (i) the purpose and need for the chapter; (ii) alternatives which would achieve the stated purpose of this chapter in a less burdensome and less intrusive manner; (iii) an assessment of the effectiveness of this chapter; (iv) the results of a review of current state and federal statutory and regulatory requirements, including identification and justification of requirements of this chapter which are more stringent than federal requirements; and (v) the results of a review as to whether this chapter is clearly written and easily understandable by affected entities.

Upon review of the department's analysis, the board shall confirm the need to (i) continue this chapter without amendment; (ii) repeal this chapter; or (iii) amend this chapter. If the board's decision is to repeal or amend this chapter, the board shall authorize the department to initiate the applicable regulatory process to carry out the decision of the board.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-06.2, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-270. Shellfish buffer zones; public hearing.

Before acting on any proposal for a project that, while not contravening established numeric criteria for shellfish waters, would result in condemnation by the State Health Department of shellfish beds, the board shall convene a public hearing to determine the socio-economic effect of the proposal. Such proposals include discharge of treated waste or proposals to otherwise alter the biological, chemical or physical properties of state waters. If the Marine Resources Commission or the Virginia Institute of Marine Science certify that the project would have no effect on the shellfish use now and in the foreseeable future, the board may dispense with such hearing.

When the board finds that the proposed project will result in shellfish bed condemnation and if the condemnation will violate the general standard, it shall disapprove the proposal.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-06.3, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997.

9VAC25-260-275. Protection of Eastern Shore tidal waters for clams and oysters.

A. This section applies to applications for individual Virginia Pollutant Discharge Elimination System (VPDES) permits authorizing new or expanded discharges to or otherwise affecting Eastern Shore tidal waters, which include all tidal rivers and creeks on the Eastern Shore (Accomack and Northampton counties) including the tidal waters within the barrier islands on the eastern seaside of the Eastern Shore (does not include Atlantic Ocean waters) and all tidal rivers and creeks on the western bayside and including the Chesapeake Bay to a point one mile offshore from any point of land on the Eastern Shore.

B. When such application proposes a new or expanded discharge that would not be denied pursuant to 9VAC25-260-270 but would result in shellfish water condemnation, then the application shall be amended to contain an analysis of wastewater management alternatives to the proposed discharge. An application shall be deemed incomplete until this analysis is provided to the department.

C. For purposes of this part, condemnation shall mean a reclassification of shellfish waters by the state Department of Health to prohibited or restricted (as defined by the U.S. Food and Drug Administration, National Shellfish Sanitation Program, Guide for the Control of Molluscan Shellfish, 2007, Section II, Model Ordinance, Definitions, and Chapter 4, Classification of Shellfish Growing Areas) thereby signifying that shellfish from such waters are unfit for market.

D. The alternatives analysis shall first identify and describe the technical feasibility of each wastewater management alternative to the proposed new or expanded discharge. If the analysis demonstrates that any of the identified alternatives are technically feasible, then the analysis shall further describe the environmental, social and economic impacts and opportunities to mitigate any adverse impacts for those alternatives.

E. If the alternatives analysis demonstrates that the proposed new or expanded discharge is the only technically feasible alternative or produces the least environmental impact of all the technically feasible alternatives, the application will be processed in accordance with 9VAC25-31 (VPDES Permit Regulation). If the analysis demonstrates that a technically feasible alternative produces less of an environmental impact than that associated with the proposed new or expanded discharge but results in significant adverse social and economic impacts to beneficial uses and to the locality and its citizens, the application shall be processed in accordance with 9VAC25-31. If the analysis demonstrates that a technically feasible alternative produces less of an environmental impact than that associated with the proposed new or expanded discharge and does not result in significant adverse social and economic impacts to beneficial uses and to the locality and its citizens, then processing of the VPDES application shall be suspended while the applicant makes a good faith effort to obtain approval from the appropriate regulatory authorities for the alternative. Processing of the application shall be resumed only if the alternative form of wastewater management is disapproved by the appropriate regulatory authorities.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq.; 40 CFR Part 131.

Historical Notes

Derived from Volume 25, Issue 23, eff. August 20, 2009.

9VAC25-260-280. Analytical procedures.

Analytical testing should be done in accordance with accepted procedures in 40 CFR 136, as amended or other board/EPA recognized and approved methods.

Statutory Authority

§§ 62.1-44.15(3) and (10) of the Code of Virginia.

Historical Notes

Derived from VR680-21-06.4, eff. May 20, 1992.

9VAC25-260-290. (Repealed.)

Historical Notes

Derived from VR680-21-06.5, eff. May 20, 1992; repealed, Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-300. Classification of tributary streams.

Any tributary stream which is not named in a specific section description in Part IX (River Basin Section Tables), shall carry the same classification and standards of quality assigned to the stream or section to which it is tributary, except in the case of trout streams. Streams classified as trout waters are specifically named.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia.

Historical Notes

Derived from VR680-21-06.6, eff. May 20, 1992; amended, Volume 20, Issue 09, eff. February 12, 2004.

Part VII
Special Standards and Scenic Rivers Listings

9VAC25-260-310. Special standards and requirements.

The special standards are shown in small letters to correspond to lettering in the basin tables. The special standards are as follows:

a. Shellfish waters. In all open ocean or estuarine waters capable of propagating shellfish or in specific areas where public or leased private shellfish beds are present, including those waters on which condemnation classifications are established by the Virginia Department of Health, the following criteria for fecal coliform bacteria will apply:

The geometric mean fecal coliform value for a sampling station shall not exceed an MPN (most probable number) or MF (membrane filtration using mTEC culture media) of 14 per 100 milliliters (ml) of sample and the estimated 90th percentile shall not exceed an MPN of 43 per 100 ml for a 5-tube decimal dilution test or an MPN of 49 per 100 ml for a 3-tube decimal dilution test or MF test of 31 CFU (colony forming units) per 100 ml.

The shellfish area is not to be so contaminated by radionuclides, pesticides, herbicides, or fecal material that the consumption of shellfish might be hazardous.

b. Policy for the Potomac Embayments. At its meeting on September 12, 1996, the board adopted a policy (9VAC25-415. Policy for the Potomac Embayments) to control point source discharges of conventional pollutants into the Virginia embayment waters of the Potomac River, and their tributaries, from the fall line at Chain Bridge in Arlington County to the Route 301 bridge in King George County. The policy sets effluent limits for BOD_5, total suspended solids, phosphorus, and ammonia, to protect the water quality of these high profile waterbodies.

c. Canceled.

d. Canceled.

e. Canceled.

f. Canceled.

g. Occoquan watershed policy. At its meeting on July 26, 1971 (Minute 10), the board adopted a comprehensive pollution abatement and water quality management policy for the Occoquan watershed. The policy set stringent treatment and discharge requirements in order to improve and protect water quality, particularly since the waters are an important water supply for Northern Virginia. Following a public hearing on November 20, 1980, the board, at its December 10-12, 1980, meeting, adopted as of February 1, 1981, revisions to this policy (Minute 20). These revisions became effective March 4, 1981. Additional amendments were made following a public hearing on August 22, 1990, and adopted by the board at its September 24, 1990, meeting (Minute 24) and became effective on December 5, 1990. Copies are available upon request from the Department of Environmental Quality.

h. Canceled.

i. Canceled.

j. Canceled.

k. Canceled.

l. Canceled.

m. The following effluent limitations apply to wastewater treatment facilities treating an organic nutrient source in the entire Chickahominy watershed above Walker's Dam (this excludes discharges consisting solely of stormwater):

CONSTITUENT	CONCENTRATION
1. Biochemical oxygen demand 5-day	6 mg/l monthly average, with not more than 5% of individual samples to exceed 8 mg/l.
2. Settleable solids	Not to exceed 0.1 ml/l monthly average.
3. Suspended solids	5.0 mg/l monthly average, with not more than 5% of individual samples to exceed 7.5 mg/l.
4. Ammonia nitrogen	Not to exceed 2.0 mg/l monthly average as N.
5. Total phosphorus	Not to exceed 0.10 mg/l monthly average for all discharges with the exception of Tyson Foods, Inc., which shall meet 0.30 mg/l monthly average and 0.50 mg/l daily maximum.

6. Other physical and chemical constituents	Other physical or chemical constituents not specifically mentioned will be covered by additional specifications as conditions detrimental to the stream arise. The specific mention of items 1 through 5 does not necessarily mean that the addition of other physical or chemical constituents will be condoned.

n. No sewage discharges, regardless of degree of treatment, should be allowed into the James River between Bosher and Williams Island Dams.

o. The concentration and total amount of impurities in Tuckahoe Creek and its tributaries of sewage origin shall be limited to those amounts from sewage, industrial wastes, and other wastes that are now present in the stream from natural sources and from existing discharges in the watershed.

p. Canceled.

q. Canceled.

r. Canceled.

s. Canceled.

t. Canceled.

u. Maximum temperature for the New River Basin from the Virginia-West Virginia state line upstream to the Giles-Montgomery County line:

The maximum temperature shall be 27°C (81°F) unless caused by natural conditions; the maximum rise above natural temperatures shall not exceed 2.8°C (5°F).

This maximum temperature limit of 81°F was established in the 1970 water quality standards amendments so that Virginia temperature criteria for the New River would be consistent with those of West Virginia, since the stream flows into that state.

v. The maximum temperature of the New River and its tributaries (except trout waters) from the Montgomery-Giles County line upstream to the Virginia-North Carolina state line shall be 29°C (84°F).

w. Canceled.

x. Clinch River from the confluence of Dumps Creek at river mile 268 at Carbo downstream to river mile 255.4. The special water quality criteria for copper (measured as total recoverable) in this section of the Clinch River are 12.4 µg/l for protection from chronic effects and 19.5 µg/l for protection from acute effects. These site-specific criteria are needed to provide protection to several endangered species of freshwater mussels.

y. Tidal freshwater Potomac River and tidal tributaries that enter the tidal freshwater Potomac River from Cockpit Point (below Occoquan Bay) to the fall line at Chain Bridge. During November 1 through February 14 of each year the 30-day average concentration of total ammonia nitrogen (in mg N/L) shall not exceed, more than once every three years on the average, the following chronic ammonia criterion:

$$\left(\frac{0.0577}{1 + 10^{7.688-pH}} + \frac{2.487}{1 + 10^{pH-7.688}}\right) \times 1.45(10^{0.028(25-MAX)})$$

MAX = temperature in °C or 7, whichever is greater.

The default design flow for calculating steady state wasteload allocations for this chronic ammonia criterion is the 30Q10, unless statistically valid methods are employed which demonstrate compliance with the duration and return frequency of this water quality criterion.

z. A site specific dissolved copper aquatic life criterion of 16.3 µg/l for protection from acute effects and 10.5 µg/l for protection from chronic effects applies in the following area:

Little Creek to the Route 60 (Shore Drive) bridge including Little Channel, Desert Cove, Fishermans Cove, and Little Creek Cove.

Hampton Roads Harbor including the waters within the boundary lines formed by I-664 (Monitor-Merrimac Memorial Bridge Tunnel) and I-64 (Hampton Roads Bridge Tunnel), Willoughby Bay, and the Elizabeth River and its tidal tributaries.

This criterion reflects the acute and chronic copper aquatic life criterion for saltwater in 9VAC25-260-140 B X a water effect ratio. The water effect ratio was derived in accordance with 9VAC25-260-140 F.

aa. The following site-specific dissolved oxygen criteria apply to the tidal Mattaponi and Pamunkey Rivers and their tidal tributaries because of seasonal lower dissolved oxygen concentration due to the natural oxygen depleting processes present in the extensive surrounding tidal wetlands. These criteria apply June 1 through September 30 to Chesapeake Bay segments MPNTF, MPNOH, PMKTF, PMKOH and are implemented in accordance with subsection D of 9VAC25-260-185. These criteria supersede the open water criteria listed in subsection A of 9VAC25-260-185.

Designated use	Criteria Concentration/Duration	Temporal Application
Open water	30 day mean ≥ 4.0 mg/l	June 1 - September 30
	Instantaneous minimum ≥ 3.2 mg/l at temperatures <29°C Instantaneous minimum ≥ 4.3 mg/l at temperatures ≥ 29°C	

A site-specific pH criterion of 5.0-8.0 applies to the tidal freshwater Mattaponi Chesapeake Bay segment MPNTF to reflect natural conditions.

bb. The following site-specific seasonal mean criteria should not be exceeded in the specified tidal James River segment more than twice in six years. Should consecutive exceedances of the same seasonal mean criterion occur in a waterbody segment after the effective date, January 9, 2020, of these chlorophyll a criteria, the department will examine additional lines of evidence, including the occurrence of harmful algae blooms, physicochemical monitoring and phytoplankton datasets, and fish kill reports in the evaluation of the appropriate assessment category for the waterbody segment. The department will develop guidance for inclusion in the Water

Quality Assessment Guidance Manual to address evaluating the appropriate assessment category when consecutive exceedances of the same seasonal mean criterion occur. The department will determine if additional monitoring for harmful algal blooms is warranted.

Designated Use	Chlorophyll a µ/l	Chesapeake Bay Program Segment	Temporal Application
Open water	8	JMSTF2	March 1 - May 31 (spring)
	10	JMSTF1	
	13	JMSOH	
	7	JMSMH	
	8	JMSPH	
	21	JMSTF2	July 1 - September 30 (summer)
	24	JMSTF1	
	11	JMSOH	
	7	JMSMH	
	7	JMSPH	

The following site-specific chlorophyll a concentrations at the specified duration should not be exceeded more than 10% of the time over six summer seasons in the specified area of the tidal James River. These criteria protect against aquatic life effects due to harmful algal blooms. Such effects have not been documented in the upper portion of JMSTF2 or in JMSOH.

Chlorophyll a µg/l	Chesapeake Bay Program Segment	Spatial Application	Duration
--	JMSTF2	Upstream boundary of JMSTF2 to river mile 95	--
52	JMSTF2	River mile 95 to downstream boundary of JMSTF2	1-month median
52	JMSTF1	Upstream boundary of JMSTF1 to river mile 67	1-month median
34	JMSTF1	River mile 67 to downstream boundary of JMSTF1	1-month median
--	JMSOH	Entire segment	--
59	JMSMH	Entire segment	1-day median
20	JMSPH	Entire segment	1-day median

(1) The site-specific numerical chlorophyll a criteria apply to the tidal James River segments (excludes tributaries) JMSTF2, JMSTF1, JMSOH, JMSMH, and JMSPH, the boundaries of which are described in EPA 903-R-05-004.

(2) For segments JMSOH, JMSMH, and JMSPH, the median of same-day samples collected one meter or less in a segment should be calculated to represent the chlorophyll a expression of a segment over that day, and the median of same-month chlorophyll a values should be calculated to represent the chlorophyll a expression of a segment over that month. The seasonal geometric mean shall be calculated from the monthly chlorophyll a values for a segment.

(3) For segment JMSTF2, chlorophyll a data collected in the "upper zone" (from the upstream boundary at the fall line to approximately river mile 95 (N37° 23' 15.27" / W77° 18' 45.05" to N37° 23' 19.31" / W77° 18' 54.03")) should be pooled, in the manner described in subdivision bb (2) of this section, separately from chlorophyll a data collected in the "lower zone" (from river mile 95 to the downstream boundary of JMSTF2). The seasonal geometric mean for each of these zones should be calculated from their respective monthly chlorophyll a values. To calculate the seasonal segment-wide geometric mean, an area-weighted average of the zonal geometric means should be calculated using the following equation:

Upper Zone Geometric Mean x 0.41 + Lower Zone Geometric Mean x 0.59

(4) For segment JMSTF1, chlorophyll a data collected in the "upper zone" (from the upstream boundary of JMSTF1 to approximately river mile 67 (N37° 17' 46.21" / W77° 7' 9.55" to N37° 18' 58.94" / W77° 6' 57.14")) should be pooled, in the manner described in subdivision bb (2) of this section, separately from chlorophyll a data collected in the "lower zone" (between river mile 67 to the downstream boundary of JMSTF1). The seasonal geometric mean for each of these zones should be calculated from their respective monthly chlorophyll a values. To calculate the seasonal segment-wide geometric mean, an area-weighted average of the zonal geometric means should be calculated using the following equation:

Upper Zone Geometric Mean x 0.49 + Lower Zone Geometric Mean x 0.51

cc. For Mountain Lake in Giles County, chlorophyll a shall not exceed 6 µg/L at a depth of six meters and orthophosphate-P shall not exceed 8 µg/L at a depth of one meter or less.

dd. For Lake Drummond, located within the boundaries of Chesapeake and Suffolk in the Great Dismal Swamp, chlorophyll a shall not exceed 35 µg/L and total phosphorus shall not exceed 40 µg/L at a depth of one meter or less.

ee. Maximum temperature for these seasonally stockable trout waters is 26°C and applies May 1 through October 31.

ff. Maximum temperature for these seasonally stockable trout waters is 28°C and applies May 1 through October 31.

gg. Little Calfpasture River from the Goshen Dam to 0.76 miles above its confluence with the Calfpasture River has a stream condition index (A Stream Condition Index for Virginia Non-Coastal Streams, September 2003, Tetra Tech, Inc.) of at least 20.5 to protect the subcategory of aquatic life that exists in this river section as a result of the hydrologic modification. From 0.76 miles to 0.02 miles above its confluence with the Calfpasture River, aquatic life conditions are expected to gradually recover and meet the general aquatic life uses at 0.02 miles above its confluence with the Calfpasture River.

hh. Maximum temperature for these seasonally stockable trout waters is 31°C and applies May 1 through October 31.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq.; 40 CFR 131.

Historical Notes

Derived from VR680-21-07.1, eff. May 20, 1992; amended July 1, 1992; amended, Volume 13, Issue 12, eff. April 2, 1997; Volume 14, Issue 04, eff. December 10, 1997; Volume 19, Issue 23, eff. August 27, 2003; Volume 20, Issue 09, eff. February 12, 2004; Volume 22, Issue 11, eff. January 12, 2006; Volume 24, Issue 04, eff. August 14, 2007; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017; Volume 36, Issue 11, eff. January 9, 2020; Errata, 36:22 VA.R. xx June 22, 2020.

9VAC25-260-320. (Repealed.)

Historical Notes

Derived from VR680-21-07.2, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; repealed, Volume 26, Issue 12, eff. February 1, 2010.

Part VIII
Nutrient Enriched Waters

9VAC25-260-330. Purpose.

The board recognizes that nutrients are contributing to undesirable growths of aquatic plant life in surface waters of the Commonwealth. This standard establishes a designation of "nutrient enriched waters". Designations of surface waters of the Commonwealth as "nutrient enriched waters" are determined by the board based upon an evaluation of the historical water quality data for one or more of the following indicators of nutrient enrichment: chlorophyll "a" concentrations, dissolved oxygen fluctuations, and concentrations of total phosphorus.

Statutory Authority

§§ 62.1-44.15(3) and (10) of the Code of Virginia.

Historical Notes

Derived from VR680-21-07.3-1, eff. May 20, 1992.

9VAC25-260-340. (Repealed.)

Historical Notes

Derived from VR680-21-07.3-2, eff. May 20, 1992; repealed, Virginia Register Volume 20, Issue 9, eff. February 12, 2004.

9VAC25-260-350. Designation of nutrient enriched waters.

A. The following state waters are hereby designated as "nutrient enriched waters":

1. Smith Mountain Lake and all tributaries* of the impoundment upstream to their headwaters;

2. (Repealed.)

3. (Repealed.)

4. New River and its tributaries, except Peak Creek above Interstate 81, from Claytor Dam upstream to Big Reed Island Creek (Claytor Lake).

5. Peak Creek from its headwaters to its mouth (confluence with Claytor Lake), including all tributaries to their headwaters;

6. through 20. (Repealed.)

21. Tidal freshwater Blackwater River from the Norfolk and Western railway bridge at Burdette, Virginia, and tidal freshwater Nottoway River from the Norfolk and Western railway bridge at Courtland, Virginia, to the state line, including all tributaries to their headwaters that enter the tidal freshwater portions of the Blackwater River and the Nottoway River; and

22. (Repealed.)

B. Whenever any water body is designated as "nutrient enriched waters," the board shall modify the VPDES permits of point source dischargers into the "nutrient enriched waters" as provided in the board's Policy for Nutrient Enriched Waters (9VAC25-40).

*When the word "tributaries" is used in this standard, it does not refer to the mainstem of the water body that has been named.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

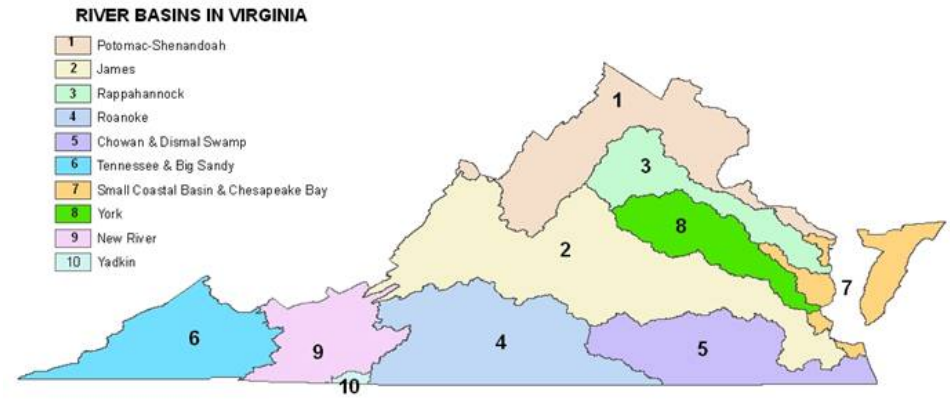
Derived from VR680-21-07.3-3, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 16, Issue 17, eff. June 7, 2000; Volume 21, Issue 23, eff. June 24, 2005; Volume 26, Issue 12, eff. February 1, 2010.

Part IX
River Basin Section Tables

9VAC25-260-360. Section number and description columns.

A. Basin descriptions. The tables that follow divide the state's surface waters into 10 river basins, some with subbasins: Potomac River Basin (Potomac and Shenandoah Subbasins), James River Basin (Appomattox River Subbasin), Rappahannock River Basin, Roanoke River Basin, Yadkin River Basin, Chowan and Dismal Swamp Basin (Chowan and Albemarle Sound Subbasins), Tennessee and Big Sandy Basins (Big Sandy, Clinch and Holston Subbasins), Chesapeake Bay, Atlantic Ocean and Small Coastal Basin, York River Basin and New River Basin. (See Figure 2.)

Figure 2.



Each basin is further divided into sections. Each section is assigned a class, represented by Roman Numerals I through VII, based on its geographic location or, in the case of trout waters, on its use. Descriptions of these classes are found in 9VAC25-260-50.

B. Potomac water supplies (raw water intakes). The Leesburg and County of Fairfax intakes in the Potomac are in Maryland waters and the board cannot adopt the public water supply criteria in 9VAC25-260-140 B to apply at the raw water intake points. However, applications to discharge into, or otherwise alter the physical, chemical, or biological properties of Virginia waters within an area five miles upstream of the intake will be reviewed on a case-by-case basis to ensure that they will protect the water supply. Basin sections where this would be applicable are shown with an asterisk (*) in the basin and section description columns.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.1, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-370. Classification column.

A. DO, pH and temperature criteria. The classification column defines the class of waters to which the basin section belongs in accordance with the class descriptions given in 9VAC25-260-50. 9VAC25-260-50 defines the state's seven classes (I through VII) and the dissolved oxygen (DO), pH and maximum temperature that apply to each class. By finding the class of waters for a basin section in the classification column and referring to 9VAC25-260-50, the DO, pH and maximum temperature criteria can be found for each basin section.

B. DGIF trout waters. The Department of Game and Inland Fisheries (DGIF) has established a classification system for trout waters based on aesthetics, productivity, resident fish population and stream structure. Classes i through iv rate wild trout habitat; Classes v through viii rate cold water habitat not suitable for wild trout but adequate for year-round hold-over of stocked trout. The DGIF classification system is included in this publication with the board's trout water classes (Class V—Stockable trout waters and Class VI—Natural trout waters) in the class column of the River Basin Section Tables 9VAC25-260-390 et seq.

DGIF trout water classifications which are not consistent with board classifications for stockable trout waters or natural trout waters are shown with a double asterisk (**) in the class column of the River Basin Section Tables 9VAC25-260-390 et seq. These trout waters have been identified for reevaluation by the DGIF. Those trout waters which have no DGIF classification are shown with a triple asterisk (***). The DGIF classes are described below. Inclusion of these DGIF classes provides additional information about specific streams for permit writers and other interested persons. Trout waters classified as classes i or ii by the DGIF are also recognized in 9VAC25-260-110.

DGIF STREAM CLASS DESCRIPTIONS.

Wild natural trout streams.

Class i. Stream of outstanding natural beauty possessing wilderness or at least remote characteristics, an abundance of large deep pools, and excellent fish cover. Substrate is variable with an abundance of coarse gravel and rubble. Stream contains a good population of wild trout or has the potential for such. Would be considered an exceptional wild trout stream.

Class ii. Stream contains a good wild trout population or the potential for one but is lacking in aesthetic quality, productivity, and/or in some structural characteristic. Stream maintains good water quality and temperature, maintains at least a fair summer flow, and adjacent land is not extensively developed. Stream would be considered a good wild trout stream and would represent a major portion of Virginia's wild trout waters.

Class iii. Stream which contains a fair population of wild trout with carrying capacity depressed by natural factors or more commonly man-related landuse practices. Land use activities may result in heavy siltation of the stream, destruction of banks and fish cover, water quality degradation, increased water temperature, etc. Most streams would be considered to be in the active state of degradation or recovery from degradation. Alteration in landuse practices would generally improve carrying capacity of the stream.

Class iv. Stream which contains an adequately reproducing wild trout population but has severely reduced summer flow characteristics. Fish are trapped in isolated pools where they are highly susceptible to predators and fishermen. Such streams could quickly be over-exploited and, therefore, provide difficult management

problems.

Stockable trout streams.

Class v. Stream does not contain an adequately reproducing wild trout population nor does it have the potential for such. However, water quality is adequate, water temperature is good, and invertebrate productivity is exceptional. Pools are abundant with good size and depth and fish cover is excellent. Stream would be good for stocked trout but may offer more potential for a fingerling stocking program.

Class vi. Stream does not contain a significant number of trout nor a significant population of warmwater gamefish. Water quality is adequate and water temperature good for summer carryover of stocked trout. Summer flow remains fair and adjacent land is not extensively developed. All streams in this class would be considered good trout stocking water.

Class vii. Stream does not contain a significant number of trout nor a significant population of warmwater gamefish. Water quality and temperature are adequate for trout survival but productivity is marginal as are structural characteristics. Streams in this class could be included in a stocking program but they would be considered marginal and generally would not be recommended for stocking.

Class viii. Stream does not contain a significant number of trout nor a significant population of warmwater gamefish. Water quality and temperature are adequate for trout but summer flows are very poor (less than 30% of channel). Streams in this class can provide good trout fishing during spring and early summer but would not be recommended for summer or fall stocking.

Other. Remaining streams would be considered unsuitable for any type of trout fishery. Streams would be considered unsuitable under any of the following conditions:

(a) summer temperatures unsuitable for trout survival;

(b) stream contains a significant population of warmwater gamefish;

(c) insufficient flow; or

(d) intolerable water quality.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from VR680-21-08.2, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998.

9VAC25-260-380. Special standards column.

A. Bacteria criteria. All surface waters have criteria for fecal coliform bacteria. The bacteria criteria for shellfish waters are set forth in 9VAC25-260-160; the criteria applying to recreational waters are found in 9VAC25-260-170. The letter "a" in the special standards column next to a river basin section indicates that there are shellfish waters somewhere within that section and the bacteria criteria for shellfish waters applies to those shellfish waters. (It should be noted that even though the column contains the letter "a" the entire section may not be shellfish waters.)

B. Natural variation. In some cases natural water quality does not fall within the criteria set by these standards. (For example streams in some areas of the state may naturally exceed the usual pH range of 6.0 to 9.0.) In these instances the board may have set more appropriate criteria that reflect natural quality, and this special limit is shown in the special standards column.

C. Additional requirements. In other cases the basic water quality parameters of DO, pH, temperature, and bacteria have not been sufficient to protect water quality in certain areas, and effluent limits or treatment requirements have been established for these areas. This fact is also indicated in the special standards column. If the applicable standard was too long to print in its entirety in that column, the column contains only a lower case letter, and the standard itself will be found in the special standards 9VAC25-260-310 under that letter.

D. Other special standards or designations.

1. Public water supplies (PWS). Sections that are public water supplies are indicated in the special standards column with a PWS. This designation indicates that additional criteria are applicable in this section. See 9VAC25-260-140 B for applicable criteria. Taste and odor criteria to maintain acceptable taste, odor or aesthetic quality of drinking water apply at the drinking water intake.

2. Nutrient enriched waters (NEW). If a section contains a waterbody that has been designated as nutrient enriched in 9VAC25-260-350, the special standards column indicates this with the letters "NEW-" followed by a number. The appropriate waterway can be found listed in 9VAC25-260-350. The entire section is not necessarily nutrient enriched, only that portion specifically listed in 9VAC25-260-350.

3. Exceptional state waters (ESW). If a section contains a waterbody that has been designated as exceptional state waters in 9VAC25-260-30 A 3 the special standard column indicates this with ESW followed by a number. The appropriate waterway can be found listed in 9VAC25-260-30 A 3 c. The entire section within the basin table is not necessarily designated as exceptional state waters, only that portion specifically listed in 9VAC25-260-30 A 3 c.

4. If a section contains a waterbody that has been assigned a special standard (indicated by lower case letters in the special standards column), the appropriate waterway can be found listed in 9VAC25-260-310. The special standard does not necessarily apply to the entire section, only that portion specifically listed in 9VAC25-260-310.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.3, eff. May 20, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-390. Potomac River Basin (Potomac River Subbasin).

Potomac River Subbasin

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a	Tidal tributaries of the Potomac River from Smith Point to Upper Machodoc Creek (Baber Point).
1a	III		All free flowing portions of tributaries to the Potomac River from Smith Point to the Route 301 Bridge in King George County unless otherwise designated in this chapter.
	VII		Swamp waters in Section 1a Mattox Creek and its tributaries from the head of tidal waters to their headwaters. Monroe Creek and tributaries from the head of tidal waters at Route 658 to their headwaters. Pine Hill Creek and its tributaries from the confluence with Rosier Creek to their headwaters. Popes Creek and Canal Swamp (a tributary to the tidal portion of Popes Creek) and their tributaries from the head of tidal waters to their respective headwaters.
1b	III	b	All free flowing portions of tributaries to the Potomac River from the Route 301 Bridge in King George County to, and including, Potomac Creek, unless otherwise designated in this chapter.
1c	III	PWS,b	Potomac Creek and its tributaries from the Stafford County water supply dam (Abel Lake Reservoir) to their headwaters.
2	II	a	Tidal Upper Machodoc Creek and the tidal portions of its tributaries.
2a	III		Free flowing portions of Upper Machodoc Creek and its tributaries.
3	II	b	Tidal portions of the tributaries to the Potomac River from the Route 301 Bridge in King George County to Marlboro Point.
4	II	b	Tidal portions of the tributaries to the Potomac River from Marlboro Point to Brent Point (to include Aquia Creek and its tributaries).
4a	III	b	Free flowing portions of tributaries to the Potomac River in Section 4 up to the Aquia Sanitary District Water Impoundment.
4b	III	PWS,b	Aquia Creek from the Aquia Sanitary District Water Impoundment, and other tributaries into the impoundment, including Beaverdam Run and the Lunga Reservoir upstream to their headwaters.
5	II	b	Tidal portions of tributaries to the Potomac River from Brent Point to Shipping Point, including tidal portions of Chopawamsic Creek and its tidal tributaries.
5a	III	b	Free flowing portions of Chopawamsic Creek and its tributaries upstream to Quantico Marine Base water supply dam.
5b	III	PWS,b	Chopawamsic Creek and its tributaries above the Quantico Marine Base water supply intakes at the Gray and Breckenridge Reservoirs to their headwaters.
6	II	b, y	Tidal portions of tributaries to the Potomac River from Shipping Point to Chain Bridge.
7	III	b	Free flowing portions of tributaries to the Potomac River from Shipping Point to Chain Bridge, unless otherwise designated in this chapter.
7a	III	g	Occoquan River and its tributaries to their headwaters above Fairfax County Water Authority's water supply impoundment, unless otherwise designated in this chapter.
7b	III	PWS,g	The impounded waters of Occoquan River above the water supply dam of the Fairfax County Water Authority to backwater of the impoundment on Bull Run and Occoquan River, and the tributaries of Occoquan above the dam to points 5 miles above the dam.
7c	III	PWS,g	Broad Run and its tributaries above the water supply dam of the City of Manassas upstream to points 5 miles above the dam.
7d			(Deleted)
7e	III	PWS,g	Cedar Run and its tributaries from the Town of Warrenton's raw water intake to points 5 miles upstream (Fauquier County).
7f	III	PWS,g	The Quantico Marine Base Camp Upshur and its tributaries' raw water intake on Cedar Run (located approximately 0.2 mile above its confluence with Lucky Run) to points 5 miles upstream.
7g	III	PWS,g	The proposed impounded waters of Licking Run above the multiple purpose impoundment structure in Licking Run near Midland (Fauquier County) upstream to points 5 miles above the proposed impoundment.
7h	III	PWS,g	The proposed impounded waters of Cedar Run above the

			proposed multiple purpose impoundment structure on the main stem of Cedar Run near Auburn (Fauquier County), to points 5 miles above the impoundment.
8	III	PWS	Tributaries to the Potomac River in Virginia between Chain Bridge and the Monacacy River from their confluence with the Potomac upstream 5 miles, to include Goose Creek to the City of Fairfax's raw water intake, unless otherwise designated in this chapter.
8a	VI	PWS	Big Spring Creek and its tributaries in Loudoun County, from its confluence with the Potomac River upstream to their headwaters. (The temperature standard for natural trout water may be exceeded in the area above Big Spring and Little Spring at Routes 15 and 740 due to natural conditions). This section was given a PWS designation due to the Town of Leesburg's intake on the Potomac as referenced in Section 8b.
	iii		Big Spring Creek from its confluence with the Potomac River upstream to Big Spring.
8b	III	PWS	Those portions of Virginia tributaries into the Potomac River that are within a 5 mile distance upstream of the Town of Leesburg's intake on the Potomac River, unless otherwise designated in this chapter.*
8c	III	PWS	Those portions of Virginia tributaries into the Potomac River that are within a 5 mile distance upstream of the County of Fairfax's intake on the Potomac River.*
9	III		Broad Run, Sugarland Run, Difficult Run, Tuscarora Creek, Sycolin Creek, and other streams tributary to streams in Section 8 from a point 5 miles above their confluence with the Potomac River to their headwaters, unless otherwise designated in this chapter.
9a	III	PWS	All the impounded water of Goose Creek from the City of Fairfax's water supply dam upstream to backwater, and its tributaries above the dam to points 5 miles above the dam.
9b	III	PWS	The Town of Round Hill's (inactive-early 1980s) raw water intake at the Round Hill Reservoir, and including the two spring impoundments located northwest of the town on the eastern slope of the Blue Ridge Mountains.
9c	III	PWS	Unnamed tributary to Goose Creek, from Camp Highroad's (inactive-late 1980s) raw water intake (Loudoun County) located in an old quarry to its headwaters.
9d	III	PWS	Sleeter Lake (Loudoun County).
10	III		Tributaries of the Potomac River from the Monacacy River to the West Virginia-Virginia state line in Loudoun County, from their confluence with the Potomac River upstream to their headwaters, unless otherwise designated in this chapter.
10a	III	PWS	North Fork Catoctin Creek and its tributaries from Purcellville's raw water intake to their headwaters.
10b	III		South Fork Catoctin Creek and its tributaries from its confluence with the North Fork Catoctin Creek to its headwaters.
11	IV	pH-6.5-9.5	Tributaries of the Potomac River in Frederick and Clarke Counties, Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 11
	***	pH-6.5-9.5	Back Creek (upper) from Rock Enon 4 miles upstream.
	***	pH-6.5-9.5	Back Creek (lower) from Route 600 to the mouth of Hogue Creek - 2 miles.
	***	hh	Hogue Creek from Route 679 upstream 6 miles to the Forks below Route 612.
	vi	pH-6.5-9.5	Opequon Creek (in Frederick County) from its confluence with Hoge Run upstream to the point at which Route 620 first crosses the stream.
	vi	pH-6.5-9.6	Turkey Run (Frederick County) from its confluence with Opequon Creek 3.6 miles upstream.
	VI		Natural Trout Waters in Section 11
	ii	pH-6.5-9.5	Bear Garden Run from its confluence with Sleepy Creek 3.1 miles upstream.
	iii	pH-6.5-9.5	Redbud Run from its confluence with Opequon Creek 4.4 miles upstream.
11a	IV	pH-6.5-9.5	Hot Run and its tributaries from its confluence with Opequon Creek to its headwaters.
	V		Stockable Trout Waters in Section 11a
	vi	pH-6.5-9.5	Clearbrook Run from its confluence with Hot Run 2.1 miles upstream.
12	IV	ESW-6	South Branch Potomac River and its tributaries, such as Strait Creek, and the North Fork River and its tributaries from the Virginia-West Virginia state line to their headwaters.

V		Stockable Trout Waters in Section 12
vi		Frank Run from its confluence with the South Branch Potomac River 0.8 mile upstream.
vii	pH-6.5-9.5	South Branch Potomac River (in Highland County) from 69.2 miles above its confluence with the Potomac River 4.9 miles upstream.
VI		Natural Trout Waters in Section 12
ii		Blights Run from its confluence with Laurel Fork (Highland County) upstream including all named and unnamed tributaries.
ii		Buck Run (Highland County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Collins Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Laurel Fork (Highland County) from 1.9 miles above its confluence with the North Fork South Branch Potomac River upstream including all named and unnamed tributaries.
iii	pH-6.5-9.5	Laurel Run (Highland County) from its confluence with Strait Creek upstream including all named and unnamed tributaries.
ii		Locust Spring Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Lost Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Mullenax Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Newman Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii		Slabcamp Run from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iii	pH-6.5-9.5	Strait Creek (Highland County) from its confluence with the South Branch Potomac River upstream to the confluence of West Strait Creek.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.4, eff. May 20, 1992; amended, Volume 13, Issue 12, eff. April 2, 1997; Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 19, Issue 23, eff. August 27, 2003; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-400. Potomac River Basin (Shenandoah River Subbasin).

Shenandoah River Subbasin

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV	pH-6.5-9.5	Shenandoah River and its tributaries in Clarke County, Virginia, from the Virginia-West Virginia state line to Lockes Landing, unless otherwise designated in this chapter.
1a	IV	PWS pH-6.5-9.5	Shenandoah River and its tributaries from river mile 24.66 (latitude 39°16'19"; longitude 77°54'33") approximately 0.7 mile downstream of the confluence of the Shenandoah River and Dog Run to 5 miles above Berryville's raw water intake, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 1a
	vi	pH-6.5-9.5	Chapel Run (Clarke County) from its confluence with the Shenandoah River 5.7 miles upstream.
	vi	pH-6.5-9.5	Spout Run (Clarke County) from its confluence with the Shenandoah River (in the vicinity of the Ebenezer Church at Route 604) to its headwaters.
1b			(Deleted)
1c	IV	pH-6.5-9.5	Shenandoah River and its tributaries from a point 5 miles above Berryville's raw water intake to the confluence of the North and South Forks of the Shenandoah River.
	VI		Natural Trout Waters in Section 1c
	iii	pH-6.5-9.5	Page Brook from its confluence with Spout Run, 1 mile upstream.
	***	pH-6.5-9.5	Roseville Run (Clarke County) from its confluence with Spout Run upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Spout Run (Clarke County) from its confluence with the Shenandoah River (in the vicinity of Calmes Neck at Routes 651 and 621), 3.9 miles upstream.
	***	pH-6.5-9.5	Westbrook Run (Clarke County) from its confluence with Spout Run upstream including all named and unnamed tributaries.
1d			(Note: Moved to Section 2b).
2	IV	ESW-12,14,15	South Fork Shenandoah River from its confluence with the North Fork Shenandoah River, upstream to a point 5 miles above the Town of Shenandoah's raw water intake and its tributaries to their headwaters in this section, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 2

	vii	pH-6.5-9.5	Bear Lithia Spring from its confluence with the South Fork Shenandoah River 0.8 miles upstream.
	vi	pH-6.5-9.5	Flint Run from its confluence with the South Fork Shenandoah River 4 miles upstream.
	***	pH-6.5-9.5	Gooney Run from the mouth to its confluence with Broad Run above Browntown (in the vicinity of Route 632).
	***	pH-6.5-9.5, hh	Hawksbill Creek from Route 675 in Luray to 1 mile above Route 631.
	VI		Natural Trout Waters in Section 2
	ii	pH-6.5-9.5	Big Creek (Page County) from its confluence with the East Branch Naked Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Big Ugly Run from its confluence with the South Branch Naked Creek upstream including all named and unnamed tributaries.
	ii		Boone Run from 4.6 miles above its confluence with the South Fork Shenandoah River (in the vicinity of Route 637) upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Browns Run from its confluence with Big Run upstream including all named and unnamed tributaries.
	ii		Cub Run (Page County) from Pitt Spring Run upstream including all named and unnamed tributaries.
	***	pH-6.5-9.5	Cub Run from its mouth to Pitt Spring Run.
	i	pH-6.5-9.5	East Branch Naked Creek from its confluence with Naked Creek at Route 759 upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Fultz Run from the Park boundary (river mile 1.8) upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Gooney Run (Warren County) from 6.6 miles above its confluence with the South Fork Shenandoah River 3.9 miles upstream.
	ii	pH-6.5-9.5	Hawksbill Creek in the vicinity of Pine Grove at Route 624 (river mile 17.7) 1.5 miles upstream.
	ii	pH-6.5-9.5	Jeremys Run from the Shenandoah National Park boundary upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Lands Run from its confluence with Gooney Run upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Little Creek (Page County) from its confluence with Big Creek upstream including all named and unnamed tributaries.
	i	pH-6.5-9.5	Little Hawksbill Creek from Route 626 upstream including all named and unnamed tributaries.
	ii		Morgan Run (Page County) from its confluence with Cub Run upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Overall Run from its confluence with the South Fork Shenandoah River 4.8 miles upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Pass Run (Page County) from its confluence with Hawksbill Creek upstream including all named and unnamed tributaries.
	ii		Pitt Spring Run from its confluence with Cub Run upstream including all named and unnamed tributaries.
	ii		Roaring Run from its confluence with Cub Run upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	South Branch Naked Creek from 1.7 miles above its confluence with Naked Creek (in the vicinity of Route 607) upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Stony Run (Page County) from 1.6 miles above its confluence with Naked Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	West Branch Naked Creek from 2.1 miles above its confluence with Naked Creek upstream including all named and unnamed tributaries.
2a	IV	PWS, pH-6.5-9.5	Happy Creek and Sloan Creek from Front Royal's raw water intake to its headwaters.
2b	IV	PWS	The South Fork Shenandoah River and its tributaries from the Town of Front Royal's raw water intake (at the State Route 619 bridge at Front Royal) to points 5 miles upstream.
2c			(Deleted)
2d			(Deleted)
	V		Stockable Trout Waters in Section 2d
	VI		Natural Trout Waters in Section 2d
3	IV	pH-6.5-9.5, ESW-16	South Fork Shenandoah River from 5 miles above the Town of Shenandoah's raw water intake to its confluence with the North and South Rivers and its tributaries to their headwaters in this section, and the South River and its tributaries from its confluence with the South Fork Shenandoah River to their headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 3
	vi	pH-6.5-9.5	Hawksbill Creek (Rockingham County) from 0.8 mile above its confluence with the South Fork Shenandoah River 6.6 miles upstream.
	vi	pH-6.5-9.5	Mills Creek (Augusta County) from 1.8 miles above its confluence with Back Creek 2 miles upstream.
	vi	pH-6.5-9.5	North Fork Back Creek (Augusta County) from its confluence with Back Creek 2.6 miles upstream, unless otherwise designated in this chapter.

	VI		Natural Trout Waters in Section 3
	i	pH-6.5-9.5	Bearwallow Run from its confluence with Onemile Run upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Big Run (Rockingham County) from 3.3 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Cold Spring Branch (Augusta County) from Sengers Mountain Lake (Rhema Lake) upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Cool Springs Hollow (Augusta County) from Route 612 upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Deep Run (Rockingham County) from 1.8 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	East Fork Back Creek from its confluence with the South Fork Back Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Gap Run from 1.7 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iii		Inch Branch (Augusta County) from the dam upstream including all named and unnamed tributaries.
	ii		Johns Run (Augusta County) from its confluence with the South River upstream including all named and unnamed tributaries.
	iv		Jones Hollow (Augusta County) from 1.1 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii		Kennedy Creek from its confluence with the South River upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Lee Run from 0.6 mile above its confluence with Elk Run 3.3 miles upstream.
	iii	pH-6.5-9.5	Loves Run (Augusta County) from 2.7 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Lower Lewis Run (Rockingham County) from 1.7 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Madison Run (Rockingham County) from 2.9 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Meadow Run (Augusta County) from its confluence with the South River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	North Fork Back Creek (Augusta County) from river mile 2.6 (in the vicinity of its confluence with Williams Creek) upstream including all named and unnamed tributaries.
	i	pH-6.5-9.5	Onemile Run (Rockingham County) from 1.5 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iv		Orebank Creek from its confluence with Back Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Paine Run (Augusta County) from 1.7 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii		Robinson Hollow (Augusta County) from the dam upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Rocky Mountain Run from its confluence with Big Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Sawmill Run from 2.5 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	South Fork Back Creek from its confluence with Back Creek at Route 814 (river mile 2.1) upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Stony Run (Augusta County) from 3.5 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Stony Run (Rockingham County) from 4.1 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iii		Toms Branch (Augusta County) from 1.1 miles above its confluence with Back Creek upstream including all named and unnamed tributaries.
	i	pH-6.5-9.5	Twomile Run from 1.4 miles above its confluence with the South Fork Shenandoah River upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Upper Lewis Run from 0.5 mile above its confluence with Lower Lewis Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	West Swift Run (Rockingham County) from the Route 33 crossing upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Whiteoak Run from its confluence with Madison Run upstream including all named and unnamed tributaries.
3a	IV	pH-6.5-9.5	South River from the dam above Waynesboro (all waters of the impoundment).
3b	IV	PWS	Coles Run and Mills Creek from South River Sanitary District's raw water intake to their headwaters.
	VI	PWS	Natural Trout Waters in Section 3b
	ii		Coles Run (Augusta County) from 3.9 miles above its confluence with the South

			River Sanitary District's raw water intake (Coles Run Dam) upstream including all named and unnamed tributaries.
	ii		Mills Creek (Augusta County) from the South River Sanitary District's raw water intake (river mile 3.8) upstream including all named and unnamed tributaries.
3c	IV	PWS pH-6.5-9.5	A tributary to Coles Run from Stuarts Draft raw water intake approximately 0.5 mile south of Stuarts Draft and just off Route 610, to its headwaters.
4	IV	pH-6.5-9.5	Middle River and its tributaries from the confluence with the North River upstream to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 4
	v	pH-6.5-9.5	Barterbrook Branch from its confluence with Christians Creek 2.8 miles upstream.
	***	pH-6.5-9.5	East Dry Branch from its confluence with the Buffalo Branch to its confluence with Mountain Run.
	vi	pH-6.5-9.5	Folly Mills Creek from 2.4 miles above its confluence with Christians Creek (in the vicinity of Route 81) 4.5 miles upstream.
	VI		Natural Trout Waters in Section 4
	iv		Buffalo Branch from Route 703 upstream including all named and unnamed tributaries.
	ii		Cabin Mill Run (Augusta County) from the Camp Shenandoah Boy Scout Lake upstream including all named and unnamed tributaries.
	iv		East Dry Branch (Augusta County) from the confluence of Mountain Run upstream including all named and unnamed tributaries.
	iv		Jennings Branch (Augusta County) from the confluence of White Oak Draft upstream including all named and unnamed tributaries.
4a	IV	PWS pH-6.5-9.5	Middle River and its tributaries from Staunton's raw water intake at Gardner Spring to points 5 miles upstream.
5	IV	pH-6.5-9.5	North River and its tributaries from its confluence with the South River upstream to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5
	v	pH-6.5-9.5	Beaver Creek (Rockingham County) from its confluence with Briery Branch to the spring at a point 2.75 miles upstream.
	v	pH-6.5-9.5	Naked Creek (Augusta County) from 3.7 miles above its confluence with the North River at Route 696, 2 miles upstream.
	VI		Natural Trout Waters in Section 5
	iv		Big Run (Augusta County) from 0.9 mile above its confluence with Little River upstream including all named and unnamed tributaries.
	ii		Black Run (Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	iii		Briery Branch (Rockingham County) from river mile 6.9 upstream including all named and unnamed tributaries.
	iv		Gum Run from its mouth upstream including all named and unnamed tributaries.
	iii		Hone Quarry Run from its confluence with Briery Branch upstream including all named and unnamed tributaries.
	iv		Little River from its confluence with the North River at Route 718 upstream including all named and unnamed tributaries.
	iv		Maple Spring Run from its mouth upstream including all named and unnamed tributaries.
	iv		Mines Run from its confluence with Briery Branch upstream including all named and unnamed tributaries.
	iv		Rocky Run (which is tributary to Briery Branch in Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	iii		Rocky Run (which is tributary to Dry River in Rockingham County) from its mouth upstream including all named and unnamed tributaries.
	ii		Union Springs Run from 3 miles above its confluence with Beaver Creek upstream including all named and unnamed tributaries.
	iv		Wolf Run (Augusta County) from its confluence with Briery Branch upstream including all named and unnamed tributaries.
5a	IV	PWS pH-6.5-9.5	Silver Lake
5b	IV	PWS pH-6.5-9.5	North River and its tributaries from Harrisonburg's raw water intake at Bridgewater to points 5 miles above Bridgewater's raw water intake to include Dry River and Muddy Creek.
	V	PWS	Stockable Trout Waters in Section 5b
	v	pH-6.5-9.5	Mossy Creek from its confluence with the North River 7.1 miles upstream.
	v	pH-6.5-9.5	Spring Creek (Rockingham County) from its confluence with the North River 2 miles upstream.
5c	IV	PWS	Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River) to a point 5 miles upstream, unless otherwise designated in this chapter.
	V	PWS	Stockable Trout Waters in Section 5c
	viii		Raccoon Run (Rockingham County) from its confluence with Dry River to its headwaters.
	VI	PWS	Natural Trout Waters in Section 5c
	iv		Dry River (Rockingham County) from Harrisonburg's raw water intake (approximately 11.7 miles above its confluence with the North River) to a point 5

			miles upstream.
	iv		Dry Run (Rockingham County) from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Hopkins Hollow from its confluence with Peach Run upstream including all named and unnamed tributaries.
	iv		Kephart Run from its confluence with Dry River upstream including all named and unnamed tributaries.
5d	VI		Dry River and its tributaries from 5 miles above Harrisonburg's raw water intake to its headwaters.
	VI		Natural Trout Waters in Section 5d
	iv		Dry River (Rockingham County) from 5 miles above Harrisonburg's raw water intake upstream including all named and unnamed tributaries.
	ii		Laurel Run (Rockingham County) from its confluence with Dry River upstream including all named and unnamed tributaries.
	ii		Little Laurel Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	ii		Low Place Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Miller Spring Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	iii		Sand Run from its confluence with Dry River upstream including all named and unnamed tributaries.
	iv		Skidmore Fork from its confluence with Dry River upstream including all named and unnamed tributaries.
5e	VI	PWS	North River and its tributaries from Staunton Dam to their headwaters.
	VI		Natural Trout Waters in Section 5e
	iv		North River from Elkhorn Dam upstream including all named and unnamed tributaries.
6	IV	pH-6.5-9.5	North Fork Shenandoah River from its confluence with the Shenandoah River to its headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 6
	vi	pH-6.5-9.5	Bear Run from its confluence with Foltz Creek to its headwaters.
	vi	pH-6.5-9.5	Bull Run (Shenandoah County) from its confluence with Foltz Creek to its headwaters.
	vi	pH-6.5-9.5	Falls Run from its confluence with Stony Creek to its headwaters.
	vi	pH-6.5-9.5	Foltz Creek from its confluence with Stony Creek to its headwaters.
	vi	pH-6.5-9.5	Little Passage Creek from its confluence with Passage Creek to the Strasburg Reservoir Dam.
	***	pH-6.5-9.5, hh	Mill Creek from Mount Jackson to Route 720 - 3.5 miles.
	vi	pH-6.5-9.5	Mountain Run from its mouth at Passage Creek to its headwaters.
	***	pH-6.5-9.5	Passage Creek from the U.S. Forest Service line (in the vicinity of Blue Hole and Buzzard Rock) 4 miles upstream.
	vi	pH-6.5-9.5	Passage Creek from 29.6 miles above its confluence with the North Fork Shenandoah River to its headwaters.
	vi	pH-6.5-9.5	Peters Mill Run from the mouth to its headwaters.
	***	pH-6.5-9.5	Shoemaker River from 612 at Hebron Church to its junction with Route 817 at its confluence with Slate Lick Branch.
	v	pH-6.5-9.5	Stony Creek from its confluence with the North Fork Shenandoah River to Route 682.
	***	pH-6.5-9.5	Stony Creek from Route 682 above Edinburg upstream to Basye.
	VI		Natural Trout Waters in Section 6
	ii	pH-6.5-9.5	Anderson Run (Shenandoah County) from 1.1 miles above its confluence with Stony Creek upstream including all named and unnamed tributaries.
	iv		Beech Lick Run from its confluence with the German River upstream including all named and unnamed tributaries.
	iii		Bible Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
	ii		Camp Rader Run from its confluence with the German River upstream including all named and unnamed tributaries.
	iv		Carr Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
	iv		Clay Lick Hollow from its confluence with Carr Run upstream including all named and unnamed tributaries.
	iv		Gate Run from its confluence with Little Dry River upstream including all named and unnamed tributaries.
	iv		German River (Rockingham County) from its confluence with the North Fork Shenandoah River at Route 820 upstream including all named and unnamed tributaries.
	ii		Laurel Run (Shenandoah County) from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Little Stony Creek from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	iv		Marshall Run (Rockingham County) from 1.2 miles above its confluence with the North Fork Shenandoah River upstream including all named and unnamed

			tributaries.
	iii	pH-6.5-9.5	Mine Run (Shenandoah County) from its confluence with Passage Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Poplar Run (Shenandoah County) from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Rattlesnake Run (Rockingham County) from its confluence with Spruce Run upstream including all named and unnamed tributaries.
	iv		Root Run from its confluence with Marshall Run upstream including all named and unnamed tributaries.
	iv		Seventy Buck Lick Run from its confluence with Carr Run upstream including all named and unnamed tributaries.
	iv		Sirks Run (Spring Run) from 1.3 miles above its confluence with Crab Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Spruce Run (Rockingham County) from its confluence with Capon Run upstream including all named and unnamed tributaries.
	iv	pH-6.5-9.5	Sumac Run from its confluence with the German River upstream including all named and unnamed tributaries.
6a	IV	PWS pH-6.5-9.5	Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters, unless otherwise designated in this chapter.
	V	PWS	Stockable Trout Waters in Section 6a
	vi	pH-6.5-9.5	Little Passage Creek from the Strasburg Reservoir Dam upstream to its headwaters.
6b	IV	PWS pH-6.5-9.5	North Fork Shenandoah River and its tributaries from the Winchester raw water intake to points 5 miles upstream (to include Cedar Creek and its tributaries to their headwaters).
	V	PWS	Stockable Trout Waters in Section 6b
	***	pH-6.5-9.5	Cedar Creek (Shenandoah County) from Route 55 (river mile 23.56) to the U.S. Forest Service Boundary (river mile 32.0) - approximately 7 miles.
	v	PWS pH-6.5-9.5	Meadow Brook (Frederick County) from its confluence with Cedar Creek 5 miles upstream.
	VI	PWS	Natural Trout Waters in Section 6b
	iii	pH-6.5-9.5	Cedar Creek (Shenandoah County) from the U.S. Forest Service boundary (river mile 32.0) near Route 600 upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Duck Run from its confluence with Cedar Creek upstream including all named and unnamed tributaries.
			Paddy Run (Frederick County) from the mouth upstream including all named and unnamed tributaries.
	***		Paddy Run (Frederick County) from its mouth (0.0) to river mile 1.8.
	vi**		Paddy Run (Frederick County) from river mile 1.8 to river mile 8.1-6.3 miles.
	iii	pH-6.5-9.5	Sulphur Springs Gap (Shenandoah County) from its confluence with Cedar Creek 1.9 miles upstream.
6c	IV	PWS pH-6.5-9.5	North Fork Shenandoah River and its tributaries from Strasburg's raw water intake to points 5 miles upstream.
6d	IV	PWS pH-6.5-9.5	North Fork Shenandoah River and its tributaries from Woodstock's raw water intake (approximately 0.25 mile upstream of State Route 609 bridge near Woodstock) to points 5 miles upstream.
6e	IV	PWS pH-6.5-9.5	Smith Creek and its tributaries from New Market's raw water intake to their headwaters.
			Natural Trout Waters in Section 6e
	iv	pH-6.5-9.5	Mountain Run (Fridley Branch, Rockingham County) from Route 722 upstream including all named and unnamed tributaries.
6f	IV	PWS pH-6.5-9.5	North Fork Shenandoah River and its tributaries from the Food Processors Water Coop, Inc. dam at Timberville and the Town of Broadway's intakes on Linville Creek and the North Fork Shenandoah to points 5 miles upstream.
6g	IV		Shoemaker River and its tributaries from Slate Lick Run, and including Slate Lick Run, to its headwaters.
	V		Stockable Trout Waters in Section 6g
	***		Slate Lick Run from its confluence with the Shoemaker River upstream to the 1500 foot elevation.
	VI		Natural Trout Waters in Section 6g
	iv		Long Run (Rockingham County) from its confluence with the Shoemaker River upstream including all named and unnamed tributaries.
	iv		Slate Lick Run from the 1500 foot elevation upstream including all named and unnamed tributaries.
6h	IV	PWS pH-6.5-9.5	Unnamed tributary of North Fork Shenandoah River (on the western slope of Short Mountain opposite Mt. Jackson) from the Town of Mt. Jackson's (inactive mid-1992) raw water intake (north and east dams) to its headwaters.
6i	IV	PWS pH-6.5-9.5	Little Sulfur Creek, Dan's Hollow and Horns Gully (tributaries of the North Fork Shenandoah River on the western slope of Short Mountain opposite Mt. Jackson) which served as a water supply for the Town of Edinburg until March 31, 1992, from the Edinburg intakes upstream to their headwaters.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.5, eff. December 5, 1990; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Volume 16, Issue 17, eff. June 7, 2000; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-410. James River Basin (Lower).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a,z, bb, ESW-11	James River and its tidal tributaries from Old Point Comfort - Fort Wool to the end of tidal waters (fall line, Mayo's Bridge, 14th Street, Richmond), except prohibited or spoil areas, unless otherwise designated in this chapter.
1a	III		Free flowing or nontidal portions of streams in Section 1, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 1a
			Gunns Run and its tributaries from the head of tide at river mile 2.64 to its headwaters.
1b	II	a,z	Eastern and Western Branches of the Elizabeth River and tidal portions of their tributaries from their confluence with the Elizabeth River to the end of tidal waters.
1c	III		Free flowing portions of the Eastern Branch of the Elizabeth River and its tributaries. Includes Salem Canal up to its intersection with Timberlake Road at N36°48'35.67"/W76°08'31.70".
1d	II	a,z	Southern Branch of the Elizabeth River from its confluence with the Elizabeth River to the lock at Great Bridge.
1e	III		Free flowing portions of the Western Branch of the Elizabeth River and of the Southern Branch of the Elizabeth River from their confluence with the Elizabeth River to the lock at Great Bridge.
1f	II	a	Nansemond River and its tributaries from its confluence with the James River to Suffolk (dam at Lake Meade), unless otherwise designated in this chapter.
1g	III		Shingle Creek from its confluence with the Nansemond River to its headwaters in the Dismal Swamp.
	VII		Swamp waters in Section 1g
			Shingle Creek and its tributaries from the head of tide (approximately 500 feet downstream of Route 13/337) to their headwaters.
1h	III	PWS	Lake Prince, Lake Burnt Mills and Western Branch impoundments for Norfolk raw water supply and Lake Kilby - Cahoon Pond, Lake Meade and Lake Speight impoundments for Portsmouth raw water supply and including all tributaries to these impoundments.
	VII		Swamp waters in Section 1h
			Eley Swamp and its tributaries from Route 736 upstream to their headwaters.
1i	III		Free flowing portions of the Pagan River and its free flowing tributaries.
1j			(Deleted)
1k	III	PWS	Skiffes Creek Reservoir (Newport News water impoundment).
1l	III	PWS	The Lone Star lakes and impoundments in the City of Suffolk, Chuckatuck Creek watershed which serve as a water source for the City of Suffolk.
1m	III	PWS	The Lee Hall Reservoir system, near Skiffes Creek and the Warwick River, in the City of Newport News.
1n	III	PWS	Chuckatuck Creek and its tributaries from Suffolk's raw water intake (at Godwin's Millpond) to a point 5 miles upstream.
1o	II	PWS, bb	James River from City Point (Hopewell) to a point 5 miles upstream.
1p	III	PWS	Free flowing tributaries to section 1o.
2	III		Free flowing tributaries of the Chickahominy River to Walkers Dam, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2
			Morris Creek and its tributaries from the head of tide at river mile 5.97 upstream to its headwaters.
2a	III	PWS	Diascund Creek and its tributaries from Newport News's raw water intake dam to its headwaters.
2b	III	PWS	Little Creek Reservoir and its tributaries from the City of Newport News impoundment dam to 5 miles upstream of the raw water intake.
3	III	m	Chickahominy River and its tributaries from Walkers Dam to Bottoms Bridge (Route 60 bridge), unless otherwise designated in this chapter.
	VII		Swamp waters in Section 3
		m	Chickahominy River from its confluence with Toe Ink Swamp at river mile 43.07 upstream to Bottoms Bridge (Route 60).
		m	Rumley Marsh and tributaries from the confluence of an unnamed tributary at river mile 2.61, upstream to the confluence with Beus Swamp. Beus Swamp, Piney Branch, and Pelham Swamp above the confluence of Beus Swamp are excluded.
		m	White Oak Swamp and its tributaries from its confluence with the Chickahominy River to their headwaters.
3a	III	PWS,m	Chickahominy River and its tributaries from Walkers Dam to points 5 miles upstream.

4	III	m	Chickahominy River and its tributaries, unless otherwise designated in this chapter, from Bottoms Bridge (Route 60 bridge) to its headwaters.
	VII		Swamp waters in Section 4
		m	Chickahominy River from Bottoms Bridge (Route 60) upstream to its confluence with Stony Run at rivermile 71.03.
		m	Stony Run and tributaries from the confluence with Chickahominy River to their headwaters.
4a	III		Free flowing tributaries to the James River from Brandon to the fall line at Richmond, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 4a
			Fourmile Creek and its tributaries to their headwaters.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.6, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 22, Issue 11, eff. January 12, 2006; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-415. James River Basin (Lower) (Appomattox River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
5	II		Appomattox River and its tidal tributaries from its confluence with the James River to the end of tidal waters.
5a	II	PWS	Appomattox River and its tidal tributaries from its mouth to 5 miles upstream of the Virginia-American Water Company's raw water intake.
5b	III	PWS	Free flowing tributaries to Section 5a.
5c	III		Appomattox River from the head of tidal waters, and free flowing tributaries to the Appomattox River, to their headwaters, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 5c
			Skinquarter Creek from its confluence with the Appomattox River upstream to river mile 5.27.
			Deep Creek from the confluence with Winningham Creek downstream to the confluence of Little Creek, a distance of 5.4 river miles.
			Winticomack Creek from its confluence with the Appomattox River to its headwaters including unnamed tributaries at river miles 1.92, 3.15, 8.77, and 11.16.
5d	III		Swift Creek and its tributaries from the dam at Pocahontas State Park upstream to Chesterfield County's raw water impoundment dam.
5e	III	PWS	Swift Creek and its tributaries from Chesterfield County's raw water impoundment dam to points 5 miles upstream.
5f	III	PWS	Appomattox River and its tributaries from Appomattox River Water Authority's raw water intake located at the dam at Lake Chesdin to the headwaters of the lake.
	VII		Swamp waters in Section 5f
			Winterpock Creek and its tributaries (excluding Surline Branch) from its confluence with Lake Chesdin upstream to river mile 8.47.
5g	III	PWS	The Appomattox River and its tributaries from Farmville's raw water intake (approximately 2.5 miles above the Route 15/45 bridge) to points 5 miles upstream.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from Volume 20, Issue 09, eff. February 12, 2004; amended, Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-420. James River Basin (Middle).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
6	III		James River and its tributaries from the fall line at Richmond (Mayo's Bridge, 14th Street) to the Rockfish River unless otherwise designated in this chapter.
7			(Deleted)
7a			(Deleted)
8	III		James River and its tributaries from the low water dam above 14th Street Bridge to Richmond's raw water intake at Williams Island Dam.
9	III	PWS,n	James River and its tributaries, unless otherwise designated in this chapter, from Richmond's raw water intake at Douglasdale Road, inclusive of the Williams Island Dam intake, the Henrico County raw water intake and the Benedictine Society's raw water intake to river mile 127.26 (at latitude 37°35'24"; longitude 77°42'33") near public landing site.

9a	III	PWS,o	Tuckahoe Creek and its tributaries from its confluence with the James River to its headwaters.
	VII		Swamp waters in Section 9a
			Tuckahoe Creek from its confluence with Little Tuckahoe Creek to the confluence with the James River.
10	III		James River and its tributaries from a point at latitude 37°40'32"; longitude 77°54'08" to, and including the Rockfish River, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 10
	vii		Lynch River from the upper Route 810 crossing near the intersection of Route 628 2.9 miles upstream (to Ivy Creek).
	***		Rockfish Creek from its confluence with the South Fork Rockfish River to its headwaters.
	VI		Natural Trout Waters in Section 10
	ii		Doyles River from 6.4 miles above its confluence with Moormans River above Browns Cove at Route 629 including all named and unnamed tributaries.
	iii		Fork Hollow from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
	iii		Ivy Creek (Greene County) from its confluence with the Lynch River upstream including all named and unnamed tributaries.
	ii		Jones Falls Run from its confluence with Doyles River upstream including all named and unnamed tributaries.
	ii		Little Stony Creek (Nelson County) from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	iv		Mill Creek (Nelson County) from its confluence with Goodwin Creek upstream including all named and unnamed tributaries.
	ii		Mutton Hollow from its confluence with Swift Run upstream including all named and unnamed tributaries.
	iv		Pauls Creek (Nelson County) from 1.3 miles above its confluence with the North Fork Rockfish River upstream including all named and unnamed tributaries.
	iv		Rodes Creek from its confluence with Goodwin Creek upstream including all named and unnamed tributaries.
	ii		South Fork Rockfish River from 8 miles above its confluence with the Rockfish River upstream including all named and unnamed tributaries.
	ii		Spruce Creek (Nelson County) from 1.5 miles above its confluence with the South Fork Rockfish River upstream including all named and unnamed tributaries.
	ii		Stony Creek (Nelson County) from 1 mile above its confluence with the South Fork Rockfish River upstream including all named and unnamed tributaries.
	ii		Swift Run from 14.5 miles above its confluence with the North Fork Rivanna River upstream including all named and unnamed tributaries.
10a	III	PWS	James River at river mile 127.26 near the public landing site and its tributaries from, and including, Little River to 5 miles above State Farm's raw water intake, including Beaverdam and Courthouse Creeks, to their headwaters.
10b			(Deleted.)
10c	III		Willis River and its tributaries within Cumberland State Forest.
10d	III	PWS	Johnson Creek above the Schuyler (Nelson County Service Authority) raw water intake to its headwaters.
10e	III	PWS	Totier Creek and its tributaries from the Scottsville (Rivanna Water and Sewer Authority) raw water intake to their headwaters (including the Reservoir).
10f	III		Powell Creek and its tributaries from its confluence with the Rivanna River upstream to their headwaters.
10g	III	PWS	Beaver Creek and its tributaries from the Crozet (Rivanna Water and Sewer Authority) raw water intake upstream to their headwaters (including the reservoir).
10h	III	PWS	Mechums River and its tributaries from the Rivanna Water and Sewer Authority's raw water intake to points 5 miles upstream.
10i	III	PWS	Moormans River and its tributaries from the Rivanna Water and Sewer Authority's raw water intake to points 5 miles upstream (including Sugar Hollow Reservoir).
	VI		Natural Trout Waters in Section 10i
	ii		North Fork Moormans River from its confluence with Moormans River upstream including all named and unnamed tributaries.
	ii		Pond Ridge Branch from its confluence with the North Fork Moormans River upstream including all named and unnamed tributaries.
	iii		South Fork Moormans River from its confluence with Moormans River upstream including all named and unnamed tributaries.
10j	III	PWS	South Fork Rivanna River and its tributaries to their headwaters; except Ivy Creek, from the Rivanna Water and Sewer Authority's South Fork Rivanna River Dam to its confluence with the Moormans River, and Ivy Creek to a point 5 miles above the dam.
10k	III	PWS	James River and its tributaries from Fork Union Sanitary District's raw water intake (just below the Route 15 bridge) to points 5 miles upstream, including the Slate River to a point 5 miles above the intake.
10l	III		Lake Monticello in Fluvanna County.
10m	III	PWS	Rivanna River and its tributaries from the raw water intake for Lake Monticello (about 2.76 miles above the Route 600 bridge in Fluvanna County) to points 5 miles upstream.
10n	III	PWS	Ragged Mountain Reservoir (intake for the Rivanna Water and Sewer Authority) including its tributaries to their headwaters.
10o	III	PWS	The North Fork Rivanna River and its tributaries from the Rivanna Water and Sewer Authority's raw water intake (approximately 1/4 mile upstream of the U. S. Route 29 bridge north of Charlottesville) to points 5 miles upstream.
10p	III	PWS	Troublesome Creek in Buckingham County from Buckingham County's raw water intake point at a flood control dam south of the Route 631 bridge to a point 5 miles upstream.
10q	III	PWS	Allen Creek and its tributaries from the Wintergreen Mountain Village's primary raw water intake at Lake Monocan to a point upstream at latitude 37°53'59"; longitude 78°53'14".
10r	III	PWS	Stony Creek from the diversion structure at latitude 37°54'00"; longitude 78°53'47" to its headwaters inclusive of the Stony Creek raw water intake just upstream of the Peggy's Pinch booster pump station.
10s	III	PWS	Mechunk Creek and its tributaries from the Department of Corrections raw water intake (at the US Route 250 bridge) to points 5 miles upstream.
11	III	ESW-7, 8, 22, 23, 24, 25, 26, 27	James River and its tributaries from, but not including, the Rockfish River to Balcony Falls, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 11
	vi		Dancing Creek from the junction of Routes 610 and 641 to its headwaters.
	vi		North Fork Buffalo River from its confluence with the Buffalo River 1.8 miles upstream.
	vi		Pedlar River from the confluence of Enchanted Creek to Lynchburg's raw water intake.
	vi		Terrapin Creek from its confluence with Otter Creek to its headwaters.
	***		Tye River from Tyro upstream to its confluence with the South and North Fork Tye Rivers.
	VI		Natural Trout Waters in Section 11
	ii		Big Branch from its confluence with the Pedlar River upstream including all named and unnamed tributaries.

	ii		Bluff Creek from its confluence with Enchanted Creek upstream including all named and unnamed tributaries.
	ii		Browns Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		Campbell Creek (Nelson County) from its confluence with the Tye River upstream including all named and unnamed tributaries.
	ii		Cove Creek from its confluence with the North Fork Buffalo River upstream including all named and unnamed tributaries.
	ii		Coxs Creek from its confluence with the Tye River upstream including all named and unnamed tributaries.
	ii		Crabtree Creek (Nelson County) from its confluence with the South Fork Tye River upstream including all named and unnamed tributaries.
	ii		Crawleys Creek from its confluence with the Piney River upstream including all named and unnamed tributaries.
	ii		Cub Creek (Nelson County) from 1.4 miles above its confluence with the Tye River (in the vicinity of Route 699), upstream including all named and unnamed tributaries.
	ii		Davis Mill Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		Durham Run from its confluence with the North Fork Tye River upstream including all named and unnamed tributaries.
	ii		Elk Pond Branch from its confluence with the North Fork Piney River upstream including all named and unnamed tributaries.
	ii		Enchanted Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		Georges Creek from its confluence with the Little Piney River upstream including all named and unnamed tributaries.
	ii		Greasy Spring Branch from its confluence with the South Fork Piney River upstream including all named and unnamed tributaries.
	ii		Harpers Creek from its confluence with the Tye River upstream including all named and unnamed tributaries.
	ii		King Creek from its confluence with the Little Piney River upstream including all named and unnamed tributaries.
	ii		Lady Slipper Run from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		Little Cove Creek from its confluence with the North Fork Buffalo River upstream including all named and unnamed tributaries.
	iii		Little Irish Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		Little Piney River from its confluence with the Piney River upstream including all named and unnamed tributaries.
	i		Louisa Spring Branch from its confluence with the North Fork Piney River 1.6 miles upstream.
	ii		Maidenhead Branch from its confluence with the South Fork Tye River upstream including all named and unnamed tributaries.
	ii		Meadow Creek (Nelson County) from its confluence with the South Fork Tye River upstream including all named and unnamed tributaries.
	ii		Mill Creek (Nelson County) from its confluence with the North Fork Tye River upstream including all named and unnamed tributaries.
	ii		Mill Creek (Nelson County) from its confluence with the South Fork Tye River upstream including all named and unnamed tributaries.
	ii		Nicholson Run from its confluence with Lady Slipper Run upstream including all named and unnamed tributaries.
	ii		North Fork Buffalo River from 1.8 miles above its confluence with the Buffalo River upstream including all named and unnamed tributaries.
	i		North Fork Piney River from its confluence with the Piney River upstream including all named and unnamed tributaries.
	iii		North Fork Thrashers Creek from its confluence with Thrashers Creek upstream including all named and unnamed tributaries.
			North Fork Tye River from its confluence with the Tye River upstream including all named and unnamed tributaries.
	iii		(North Fork Tye River from its confluence with the Tye River 1.6 miles upstream.)
	ii		(North Fork Tye River from 1.6 miles above its confluence with the Tye River 8.3 miles upstream.)
	iii		Pedlar River from 5 miles above Lynchburg's raw water intake upstream including all named and unnamed tributaries.
	ii		Piney River from river mile 13.3 upstream including all named and unnamed tributaries.
	ii		Pompey Creek from its confluence with the Little Piney River upstream including all named and unnamed tributaries.
	ii		Reed Creek from the junction of Routes 764 and 638 upstream including all named and unnamed tributaries.
	ii		Rocky Branch from its confluence with the North Fork Buffalo River upstream including all named and unnamed tributaries.
	ii		Rocky Run (Nelson County) from 1.6 miles above its confluence with the Tye River upstream including all named and unnamed tributaries.
	i		Shoe Creek (Nelson County) from its confluence with Piney River upstream including all named and unnamed tributaries.
	iii		Silver Creek from its confluence with the Tye River upstream including all named and unnamed tributaries.
	ii		South Fork Piney River from its confluence with the Piney River upstream including all named and unnamed tributaries.
	ii		South Fork Tye River from its confluence with the Tye River upstream including all named and unnamed tributaries.
	ii		Statons Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	iii		Wheelers Run from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	ii		White Rock Creek (Nelson County) from its confluence with the North Fork Tye River upstream including all named and unnamed tributaries.
	ii		Wiggins Branch from its confluence with Statons Creek upstream including all named and unnamed tributaries.
11a	III	PWS	Unnamed tributary to Williams Creek from Sweet Briar College's (inactive) raw water intake to its headwaters.
11b	III	PWS	Buffalo River and its tributaries from Amherst's raw water intake to points 5 miles upstream.
11c	III	PWS	Black Creek and its tributaries from the Nelson County Service Authority intake (approximately 1000 feet downstream of the Route 56 bridge) upstream to their headwaters (including the reservoir).
11d	III		James River and its tributaries from a point 0.25 mile above the confluence of the Tye River to Six Mile Bridge.
11e	III		James River and its tributaries, excluding Blackwater Creek, from Six Mile Bridge to the Business Route 29 bridge in Lynchburg.
11f			(Deleted)
11g	III	PWS	James River and its tributaries from the Business Route 29 bridge in Lynchburg to Reusens Dam to include the City of Lynchburg's alternate raw water intake at the Route 29 bridge and the Amherst County Service Authority's intake on Harris and Graham Creeks.
11h	III	PWS	James River and its tributaries, excluding the Pedlar River, from Reusens Dam to Coleman Dam, including the Eagle Eyrie raw water intake on an unnamed tributary to Judith Creek 1.0 mile from the confluence with Judith Creek, to its headwaters, and also the City of Lynchburg's raw water intake on the James River at Abert.
11i	III	PWS,ESW-5, 8, 2, 23	Pedlar River and its tributaries from Lynchburg's raw water intake to points 5 miles upstream.
	V		Stockable Trout Waters in Section 11i
	vi		Pedlar River from Lynchburg's raw water intake to a point 5 miles upstream.
	VI		Natural Trout Waters in Section 11i
	ii		Brown Mountain Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
	iii		Roberts Creek from its confluence with the Pedlar River upstream including all named and unnamed tributaries.
11j	III		James River and its tributaries from the Owens-Illinois raw water intake near Big Island to Balcony Falls.

	V		Stockable Trout Waters in Section 11j
	vi		Battery Creek from its confluence with the James River to its headwaters.
	vi		Cashaw Creek from its confluence with the James River to its headwaters.
	vi		Otter Creek from its confluence with the James River to a point 4.9 miles upstream.
	vi		Rocky Row Run from its confluence with the James River to its headwaters.
	VI		Natural Trout Waters in Section 11j
	iii		Falling Rock Creek from its confluence with Peters Creek upstream including all named and unnamed tributaries.
	ii		Hunting Creek from a point 3.7 miles from its confluence with the James River upstream including all named and unnamed tributaries.
	iii		Otter Creek from 4.9 miles above its confluence with the James River upstream including all named and unnamed tributaries.
	ii		Peters Creek from a point 0.2 mile above its confluence with the James River upstream including all named and unnamed tributaries.
11k			(Deleted)

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.7, eff. July 1, 1992; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-430. James River Basin (Upper).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
12	IV	ESW-4,9,19,20, 21,gg	James River and its tributaries from Balcony Falls to their headwaters, unless otherwise designated in this chapter. (The Maury River between its confluence with the James River upstream to its headwaters (the confluence of the Calfpasture and Little Calfpasture Rivers) and the tributaries within this section to their headwaters have a special pH standard of 6.5-9.5 due to natural conditions.)
	V		Stockable Trout Waters in Section 12
	vi		Alum Creek from its confluence with Brattons Creek 1.7 miles upstream.
	vi		Back Creek (Highland County) from 37.1 miles above its confluence with the Jackson River 3.2 miles upstream.
	vi		Back Run from its confluence with the James River 2.1 miles upstream.
	vi		Borden Creek from its confluence with Catawba Creek to a point 1.7 miles upstream.
	v	pH-6.5-9.5	Buffalo Creek (Rockbridge County) from the confluence with Colliers Creek 3 miles upstream.
	v		Bullpasture River from the junction of the Cowpasture River and Route 678 to its headwaters.
	vi		Cowpasture River (Highland County) from 75.4 miles above its confluence with the James River 2.7 miles upstream.
	vi		Craig Creek from the confluence of Muddy Branch to its headwaters.
	vi		Crush Run from its confluence with Catawba Creek to a point 2.8 miles upstream.
	vi		Elk Creek from its mouth to 0.6 mile upstream.
	vi		Elk Creek from 1.9 miles above its confluence with the James River 1.2 miles upstream.
	vi		Ellis Run from its confluence with Back Creek in Botetourt County to a point 1.6 miles upstream.
	v		Falling Spring Creek from its confluence with the Jackson River to its headwaters.
	v		Jackson River from 1.8 miles above Route 39 (river mile 65.4) 12.2 miles upstream.
	vi		Jackson River from 77.6 miles above its confluence with the James River to river mile 85.4.
	***		Jackson River from river mile 89.2 to headwaters.
	vi		Jennings Creek from the Norfolk and Western Railroad to the confluence of Yellowstone Branch.
	viii		Jerrys Run from its confluence with Dunlap Creek to the C&O Railroad crossing.
	***		Johns Creek (Craig County) from the junction of Routes 632 and 658 to Eliber Springs Branch.
	vi		Lees Creek from its confluence with Catawba Creek to a point 2 miles upstream.
	vi		McFalls Creek from its confluence with Jennings Creek to its headwaters.
	vi		Mill Creek (Bath County) from 2.2 miles above its confluence with the Calfpasture River to its headwaters.
	vi		Mill Creek from its confluence with Craig Creek to a point 2.1 miles upstream (Craig County).
	vi		Miller Branch from its confluence with Tygers Creek to its headwaters.
	vi	pH-6.5-9.5	North Buffalo Creek from its confluence with Buffalo Creek 2.8 miles upstream.
	viii		Pads Creek from river mile 2.2 - 8.2 (6 miles), unless otherwise designated in this chapter.
	vi		Pheasanty Run (Spring Run) from its confluence with the Cowpasture River 0.7 mile upstream.
	v		Potts Creek from the junction of Route 614 upstream to Boiling Spring.
	***		Potts Creek from the Craig County line to its headwaters.
	v		Roaring Run from Route 615 to its headwaters.
	vi		South Fork Pads Creek from its confluence with Pads Creek approximately to its headwaters.
	vi		Spreading Spring Branch from its confluence with the James River to the intersection of Routes 635 and 630.
	v		Sweet Springs Creek from its confluence with Dunlap Creek to the West Virginia state line.
	vi		Trout Creek and all of its tributaries (except Pickles Branch) from its confluence with Craig Creek to their headwaters (including the tributaries' headwaters).
	vii		Tygers Creek from its confluence with Dunlap Creek to its headwaters.
	VI		Natural Trout Waters in Section 12
	iv		Als Run from its confluence with Jerrys Run upstream including all named and unnamed tributaries.
	ii		Back Creek from its confluence with the James River near Buchanan upstream including all named and unnamed tributaries.
	ii		Barbours Creek from its confluence with Craig Creek upstream including all named and unnamed tributaries.
	ii		Barney Run from its confluence with Mare Run upstream including all named and unnamed tributaries.
	ii		Bear Hole Run from its confluence with Dry Run upstream including all named and unnamed tributaries.
	ii		Bear Loop Branch from its confluence with Wilson Creek upstream including all named and unnamed tributaries.
	ii		Beaver Run (Bath County) from its confluence with Back Creek upstream including all named and unnamed tributaries.
	ii		Bennetts Run (Rockbridge County) from its confluence with the Maury River upstream including all named and unnamed tributaries.
	iv		Benson Run from its confluence with the Cowpasture River upstream including all named and unnamed tributaries.
	iii		Biggs Run from its confluence with Craig Creek upstream including all named and unnamed tributaries.

ii	Big Laurel Branch from its confluence with Johns Creek upstream including all named and unnamed tributaries.
ii	Big Lick Run from its confluence with Little Back Creek upstream including all named and unnamed tributaries.
iii	Big Run from its confluence with Little Back Creek upstream including all named and unnamed tributaries.
iv	Black Run (Augusta County) from its confluence with Smith Creek upstream including all named and unnamed tributaries.
ii	Blue Spring Run from its confluence with Potts Creek upstream including all named and unnamed tributaries.
iii	Blue Suck Branch from its confluence with Simpson Creek upstream including all named and unnamed tributaries.
iii	Bolar Run from its confluence with the Jackson River to Bolar Spring.
ii	Brattons Run from the confluence of Alum Creek upstream including all named and unnamed tributaries.
***	Broad Run from its junction with Routes 311 and 618 upstream including all named and unnamed tributaries.
ii	Cascades Creek from its confluence with Cedar Creek (Bath County) upstream including all named and unnamed tributaries.
ii	Castle Run from its confluence with the Jackson River upstream including all named and unnamed tributaries.
ii	Cast Steel Run from its confluence with Potts Creek upstream including all named and unnamed tributaries.
***	Cedar Creek from its confluence with the Jackson River upstream to a spring on the west bank located downstream of Route 605.
ii	Cedar Creek (Rockbridge County) from 6.4 miles above its confluence with the James River upstream including all named and unnamed tributaries.
ii	Chestnut Run from its confluence with Jennings Creek upstream including all named and unnamed tributaries.
iii	Christleys Run from its confluence with Kempers Run upstream including all named and unnamed tributaries.
ii	Clayton Mill Creek from its confluence with the Calfpasture River upstream including all named and unnamed tributaries.
ii	Cornelius Creek from its confluence with North Creek upstream including all named and unnamed tributaries.
ii	Cove Branch from its confluence with Barbours Creek upstream including all named and unnamed tributaries.
ii	Cowardin Run from its confluence with Rowan Run upstream including all named and unnamed tributaries.
ii	Crab Run from its confluence with the Bullpasture River upstream including all named and unnamed tributaries.
ii	Crow Run from its confluence with Dunlap Creek upstream including all named and unnamed tributaries.
ii	Cub Run (Bath County) from its confluence with Dry Run upstream including all named and unnamed tributaries.
iv	Davidson Run (Rockbridge County) from Route 501 upstream including all named and unnamed tributaries.
ii	Davis Run from Route 678 upstream including all named and unnamed tributaries.
iii	Downey Branch from its confluence with Blue Suck Branch upstream including all named and unnamed tributaries.
iv	Dry Run (Allegheny County) from the Covington City limits upstream including all named and unnamed tributaries.
ii	Dry Run (Bath County) from 1.5 miles above its confluence with the Cowpasture River upstream including all named and unnamed tributaries.
ii	Duffs Run from its confluence with the Bullpasture River upstream 1.0 miles.
ii	East Fork Elk Creek from 0.8 mile above its confluence with Elk Creek upstream including all named and unnamed tributaries.
ii	Eliber Springs Branch from its confluence with Johns Creek upstream including all named and unnamed tributaries.
ii	Ewin Run from its confluence with Potts Creek to the West Virginia state line.
ii	Falling Springs Creek from its confluence with the Jackson River to Route 220.
ii	Fallingwater Creek from its confluence with Jennings Creek upstream including all named and unnamed tributaries.
iv	Ferrol Creek from its confluence with the Little Calfpasture River upstream including all named and unnamed tributaries.
ii	Ford Run (Bath County) from its confluence with Back Creek upstream including all named and unnamed tributaries.
***	Fridleys Branch from its confluence with the Calfpasture River upstream including all named and unnamed tributaries.
iii	Furnace Branch from its confluence with Craig Creek upstream including all named and unnamed tributaries.
ii	Glover Run from its confluence with Allen Run upstream including all named and unnamed tributaries.
ii	Gochenour Branch from its confluence with Brattons Run upstream including all named and unnamed tributaries.
ii	Grannys Creek from its confluence with Johns Creek upstream including all named and unnamed tributaries.
***	Guys Run (Bath County) from its confluence with the Cowpasture River upstream including all named and unnamed tributaries.
ii	Guys Run (Rockbridge County) from its confluence with the Calfpasture River (at Camp Virginia, Route 39) upstream including all named and unnamed tributaries.
iii	Hays Creek from its confluence with Potts Creek upstream including all named and unnamed tributaries.
ii	Hidden Valley Spring from its confluence with the Jackson River 1.1 miles upstream.
ii	Hipes Branch from its confluence with Craig Creek upstream including all named and unnamed tributaries.
iv	Hite Hollow (Augusta County) from 0.8 miles above its mouth upstream including all named and unnamed tributaries.
***	Hypes Creek from Route 696 upstream including all named and unnamed tributaries.
iii	Indian Draft from its confluence with the Jackson River upstream including all named and unnamed tributaries.
ii	Jackson River from 5 miles above the City of Covington's raw water intake to the Gathright Dam.
ii	Jackson River from river mile 85.4 to river mile 89.2.
ii	Jennings Creek from the confluence of Yellowstone Branch upstream including all named and unnamed tributaries.
iv	Jerkemtight Branch from its confluence with the Calfpasture River upstream including all named and unnamed tributaries.
iv	Jerrys Run (Allegheny County) from the C&O railroad upstream including all named and unnamed tributaries.
iv	Jerrys Run (Augusta County) from its confluence with Ramseys Draft upstream including all named and unnamed tributaries.
ii	Johns Creek from the confluence of Eliber Springs Branch upstream including all named and unnamed tributaries.
ii	Jordan Run (Bath County) from its confluence with Thompson Creek upstream including all named and unnamed tributaries.
ii	Karnes Creek from a point 1.4 miles upstream of its confluence with the Jackson River upstream including all named and unnamed tributaries.
ii	Kelly Run (Bath County) from its confluence with the Jackson River upstream including all named and unnamed tributaries.
ii	Kelso Spring Branch from its confluence with the Little Calfpasture River 1.3 miles upstream.
ii	Laurel Run (Bath County) from its confluence with Dry Run upstream including all named and unnamed tributaries.
iv	Left Prong Ramseys Draft from its confluence with Ramseys Draft upstream including all named and unnamed tributaries.
ii	Left Prong Wilson Creek from its confluence with Wilson Creek upstream including all named and unnamed tributaries.
ii	Lick Block Run from its confluence with the Left Prong Wilson Creek upstream including all named and unnamed tributaries.
***	Lick Branch from its confluence with Craig Creek upstream including all named and unnamed tributaries.
ii	Lick Run (Bath County) from 3.3 miles above its confluence with Stuart Run 3.3 miles upstream.
ii	Little Back Creek (Bath County) from Route 600 upstream including all named and unnamed tributaries.
iv	Little Calfpasture River from 17.2 miles above its confluence with the Maury River upstream including all named and unnamed tributaries.
ii	Little Crow Run from its confluence with Crow Run upstream including all named and unnamed tributaries.

	ii		Little Mill Creek (Bath County) from its confluence with Mill Creek upstream including all named and unnamed tributaries.
	ii		Little Wilson Creek (from 1 mile above its confluence with Mill Creek) upstream including all named and unnamed tributaries.
	ii		Long Spring Run from its confluence with Little Back Creek upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Lowry Run from 0.2 mile above its confluence with the Maury River upstream including all named and unnamed tributaries.
	ii		Madison Creek from Route 682 upstream including all named and unnamed tributaries.
	ii		Mare Run from its junction with Route 39 at Bath Alum upstream including all named and unnamed tributaries.
	ii		Meadow Creek from its confluence with Craig Creek upstream including all named and unnamed tributaries.
	iii		Middle Creek from its confluence with Jennings Creek upstream including all named and unnamed tributaries.
	ii		Mill Branch from its confluence with Potts Creek upstream including all named and unnamed tributaries.
	i		Mill Creek (Bath County) from its confluence with the Cowpasture River 3.2 miles upstream.
	iii		Mill Creek from Rebecca Furnace upstream including all named and unnamed tributaries.
	ii		Mill Creek from its confluence with Craig Creek near Webbs Mill in Craig County upstream including all named and unnamed tributaries.
	ii		Mill Creek (Bath County) from its confluence with the Jackson River (Lake Moomaw) upstream including all named and unnamed tributaries.
	ii		Mill Run (Highland County) from its confluence with the Bullpasture River 0.5 mile upstream.
	ii		Muddy Run (Bath County) from its confluence with the Jackson River upstream including all named and unnamed tributaries.
	ii		Nelse Branch from its confluence with Mill Branch upstream including all named and unnamed tributaries.
	ii		North Branch Simpson Creek from its confluence with Simpson Creek upstream including all named and unnamed tributaries.
	ii		North Creek from its confluence with Jennings Creek upstream including all named and unnamed tributaries.
	ii		Paint Bank Branch from its confluence with Potts Creek upstream including all named and unnamed tributaries.
	ii		Panther Run from its confluence with Mare Run upstream including all named and unnamed tributaries.
	ii		Paxton Branch from its confluence with Johns Creek upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Pedlar Gap Run from 1 mile above its confluence with the Maury River upstream including all named and unnamed tributaries.
	ii		Pickles Branch (a tributary to Trout Creek) from its mouth upstream including all named and unnamed tributaries.
	ii		Piney Branch (Rockbridge County) from its confluence with Guys Run upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Poplar Cove Run from its confluence with Lowry Run upstream including all named and unnamed tributaries.
	iii		Porters Mill Creek from its confluence with Mill Creek upstream including all named and unnamed tributaries.
	ii		Pounding Mill Creek from its confluence with the Jackson River upstream including all named and unnamed tributaries.
	ii		Purgatory Creek from its confluence with the James River upstream including all named and unnamed tributaries.
	iv		Ramseys Draft from its confluence with the Calfpasture River upstream including all named and unnamed tributaries.
	ii		Reservoir Hollow from 0.7 mile above its confluence with Indian Gap Run upstream including all named and unnamed tributaries.
	iv		Right Prong Ramseys Draft from its confluence with Ramseys Draft upstream including all named and unnamed tributaries.
	ii		Rocky Creek from its confluence with Ramseys Draft upstream including all named and unnamed tributaries.
	ii		Rocky Run (Bath County) from its confluence with the Jackson River upstream including all named and unnamed tributaries.
	ii		Rowan Run from its confluence with the Jackson River to the confluence with Cowardin Run.
	ii		Sawmill Run (Bath County) from its confluence with Back Creek upstream including all named and unnamed tributaries.
	ii		Shawvers Run from its confluence with Potts Creek upstream including all named and unnamed tributaries.
	ii		Simpson Creek from the junction of Route 776 and U. S. Route 60 upstream including all named and unnamed tributaries.
	ii		Sinking Creek from Route 697 upstream including all named and unnamed tributaries.
	iii		Smith Branch from its confluence with Mill Creek upstream including all named and unnamed tributaries.
	iii		Smith Creek (Alleghany-Clifton Forge City) from Interstate 64, 2.4 miles upstream.
	ii		Snake Run from its confluence with Dunlap Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	South Buffalo Creek from its confluence with Buffalo Creek upstream including all named and unnamed tributaries.
	ii		Spring Branch (Bath County) from its confluence with Mill Creek 0.8 mile upstream.
	ii		Spring Run (Bath County) from its confluence with Back Creek upstream including all named and unnamed tributaries.
	iv		Still Run from its confluence with the Calfpasture River upstream including all named and unnamed tributaries.
	iii		Stony Run from its confluence with Craig Creek upstream including all named and unnamed tributaries.
	ii		Stony Run (Highland County) from its confluence with the Jackson River upstream including all named and unnamed tributaries.
	ii		Sugar Run (Allegheny County) from its confluence with Potts Creek upstream 0.75 miles.
	iii		Thompson Creek from the Route 39 crossing upstream to the confluence of Mares and Jordan Runs.
	ii		Trout Run from its confluence with Sinking Creek upstream including all named and unnamed tributaries.
	ii		Unnamed tributary to Brattons Run 0.7 mile above the confluence of Gochenour Branch from its mouth upstream including all named and unnamed tributaries.
	ii		Valley Branch from its confluence with Potts Creek upstream including all named and unnamed tributaries.
	ii		Vinegar Run from its confluence with the Jackson River upstream 0.4 miles.
	iii		Wildcat Hollow from its confluence with Little Back Creek upstream including all named and unnamed tributaries.
	ii		Wilson Creek (Bath County) within Douthat State Park Lake upstream including all named and unnamed tributaries.
12a	IV	pH-6.5-9.5	Maury River and its tributaries, unless otherwise designated in this chapter, from U.S. Route 60 upstream bridge to its headwaters (the confluence of the Calfpasture and Little Calfpasture Rivers).
	V		Stockable Trout Waters in Section 12a
	***	hh	Hays Creek from its confluence with the Maury River to Brownsburg (9.5 miles).
	***		Irish Creek from its confluence with the South River to river mile 8.9.
	v	pH-6.5-9.5	Marlbrook Creek from its confluence with the South River 2.2 miles upstream.
	VI		Natural Trout Waters in Section 12a
	iv		Big Bend Creek from its confluence with Irish Creek upstream including all named and unnamed tributaries.
	ii		Big Marys Creek from its confluence with the South River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Chimney Branch from its confluence with Saint Marys River upstream including all named and unnamed tributaries.
	ii		Hogback Creek from its confluence with Saint Marys River upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Irish Creek from river mile 8.9 upstream including all named and unnamed tributaries.
	i	pH-6.5-9.5	Laurel Run from its confluence with the Maury River upstream including all named and unnamed tributaries.
	ii		Little Marys Creek from its confluence with the South River upstream including all named and unnamed tributaries.
	ii		Mine Bank Creek from its confluence with Saint Marys River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Nettle Creek from its confluence with Irish Creek upstream including all named and unnamed tributaries.

	ii	pH-6.5-9.5	Nettle Spring Branch from its confluence with Nettle Creek upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Otts Creek from its confluence with Hayes Creek upstream to Route 726.
	iv		Rock Branch from its confluence with Irish Creek upstream including all named and unnamed tributaries.
			Saint Marys River from its confluence with the South River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Saint Marys River from its confluence with the South River 3.6 miles upstream.
	i		Saint Marys River from 3.6 miles above its confluence with the South River upstream including all named and unnamed tributaries.
	ii		Spy Run from its confluence with the South River upstream including all named and unnamed tributaries.
	ii		Sugartree Branch from its confluence with Saint Marys River upstream including all named and unnamed tributaries.
	ii		Wigwam Creek from its confluence with Nettle Creek upstream including all named and unnamed tributaries.
12b	IV	PWS pH-6.5-9.5	Maury River and its tributaries from Lexington's raw water intake to a point 5 miles upstream.
12c	IV	PWS	Black Run from Craigsville's raw water intake to its headwaters.
12d	IV	PWS	Moores Creek located on Brushy Mountain.
12e	IV		Cowpasture River from the Alleghany-Botetourt County line upstream to U.S. Route 60 bridge.
12f	IV	PWS	Smith Creek and Clifton Forge Reservoir from Clifton Forge's raw water intake to their headwaters.
	VI	PWS	Natural Trout Waters in Section 12f
	ii		Piney Branch from its confluence with Smith Creek upstream including all named and unnamed tributaries.
	ii		Smith Creek (Alleghany County) from 4 miles north of Clifton Forge near Route 606 (at the stream gage upstream of the filtration plant) upstream including all named and unnamed tributaries.
12g	IV	PWS	Mill Branch and its tributaries located on Horse Mountain.
12h	IV	PWS	Potts Creek and its tributaries from Hercules, Inc.'s raw water intake to points 5 miles upstream.
12i	IV	PWS	Dunlap Creek and its tributaries from the Covington Boys Home raw water intake to points 5 miles upstream.
12j	IV	PWS	Jackson River and its tributaries from Covington's raw water intake to points 5 miles upstream.
	VI		Natural Trout Waters in Section 12j
	ii		Jackson River from Covington's raw water intake to a point 5 miles upstream.
12k	IV	PWS	Roaring Run above Clearwater Park's raw water intake to its headwaters.
12l	IV	PWS	Catawba Creek and its tributaries from the City of Roanoke's raw water intake 0.1 mile upstream from its confluence with Buchanan Branch to points 5 miles upstream.
12m	IV	PWS	Unnamed tributary to Catawba Creek from the Catawba State Hospital's raw water intake (approximately 1,000 feet north of the Hospital's main building), upstream to its headwaters.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.8, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 15, Issue 21, eff. August 4, 1999; Volume 20, Issue 09, eff. February 12, 2004; amended, Virginia Register Volume 26, Issue 12, eff. February 1, 2010; Errata, 26:12 VA.R. 2065 February 15, 2010.

9VAC25-260-440. Rappahannock River Basin.

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	a	Rappahannock River and the tidal portions of its tributaries from Stingray and Windmill Points to Route 1 Alternate Bridge at Fredericksburg.
1a	II		Hoskins Creek from the confluence with the Rappahannock River to its tidal headwaters.
2	III		Free flowing tributaries of the Rappahannock from Stingray and Windmill Points upstream to Blandfield Point, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2
			Cat Point Creek and its tributaries, from their headwaters to the head of tide at river mile 10.54.
			Hoskins Creek and its nontidal tributaries from the head of tidal waters to their headwaters.
			Mount Landing Creek and its tributaries from the end of tidal waters at river mile 4.4 to their headwaters.
			Piscataway Creek and its tributaries from the confluence of Sturgeon Swamp to their headwaters.
3	III		The Rappahannock River from the Route 1 Alternate Bridge at Fredericksburg upstream to the low dam water intake at Waterloo (Fauquier County).
3a	III	PWS	The Rappahannock River and its tributaries from Spotsylvania County's raw water intake near Golin Run to points 5 miles upstream (excluding Motts Run and tributaries, which is in Section 4c).
3b	III	PWS	The Rappahannock River and its tributaries from the low dam water intake at Waterloo (Fauquier County) to points 5 miles upstream.
4	III	ESW 17,18	Free flowing tributaries of the Rappahannock from Blandfield Point to its headwaters, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 4
			Goldenvale Creek from the head of tidal waters near the confluence with the Rappahannock River to its headwaters.
			Occupacia Creek and its tributaries from the end of tidal waters at river mile 8.89 on Occupacia Creek to their headwaters.
	V		Stockable Trout Waters in Section 4
	***		Hughes River (Madison County) from Route 231 upstream to the upper crossing of Route 707 near the confluence of Rocky Run.
	***		Robinson River from Route 231 to river mile 26.7.
	***		Rose River from its confluence with the Robinson River 2.6 miles upstream.
	***		South River from 5 miles above its confluence with the Rapidan River 3.9 miles upstream.
	VI		Natural Trout Waters in Section 4
	ii		Berry Hollow from its confluence with the Robinson River upstream including all named and unnamed tributaries.
	ii		Bolton Branch from 1.7 miles above its confluence with Hittles Mill Stream upstream including all named and unnamed tributaries.
	ii		Broad Hollow Run from its confluence with Hazel River upstream including all named and unnamed tributaries.

	i		Brokenback Run from its confluence with the Hughes River upstream including all named and unnamed tributaries.
	i		Bush Mountain Stream from its confluence with the Conway River upstream including all named and unnamed tributaries.
	i		Cedar Run (Madison County) from 0.8 mile above its confluence with the Robinson River upstream including all named and unnamed tributaries.
	i		Conway River (Greene County) from the Town of Fletcher upstream including all named and unnamed tributaries.
	ii		Dark Hollow from its confluence with the Rose River upstream including all named and unnamed tributaries.
	i		Devils Ditch from its confluence with the Conway River upstream including all named and unnamed tributaries.
	iii		Entry Run from its confluence with the South River upstream including all named and unnamed tributaries.
	iii		Garth Run from 1.9 miles above its confluence with the Rapidan River at the Route 665 crossing upstream including all named and unnamed tributaries.
	ii		Hannah Run from its confluence with the Hughes River upstream including all named and unnamed tributaries.
	ii		Hazel River (Rappahannock County) from the Route 707 bridge upstream including all named and unnamed tributaries.
	ii		Hogcamp Branch from its confluence with the Rose River upstream including all named and unnamed tributaries.
	i		Hughes River (Madison County) from the upper crossing of Route 707 near the confluence of Rocky Run upstream including all named and unnamed tributaries.
	iii		Indian Run (Rappahannock County) from 3.4 miles above its confluence with the Hittles Mill Stream upstream including all named and unnamed tributaries.
	ii		Jordan River (Rappahannock County) from 10.9 miles above its confluence with the Rappahannock River upstream including all named and unnamed tributaries.
	iii		Kinsey Run from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Laurel Prong from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Mill Prong from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Negro Run (Madison County) from its confluence with the Robinson River upstream including all named and unnamed tributaries.
	ii		North Fork Thornton River from 3.2 miles above its confluence with the Thornton River upstream including all named and unnamed tributaries.
	ii		Piney River (Rappahannock County) from 0.8 mile above its confluence with the North Fork Thornton River upstream including all named and unnamed tributaries.
	ii		Pocosin Hollow from its confluence with the Conway River upstream including all named and unnamed tributaries.
	ii		Ragged Run from 0.6 mile above its confluence with Popham Run upstream including all named and unnamed tributaries.
	i		Rapidan River from Graves Mill (Route 615) upstream including all named and unnamed tributaries.
	ii		Robinson River (Madison County) from river mile 26.7 to river mile 29.7.
	i		Robinson River (Madison County) from river mile 29.7 upstream including all named and unnamed tributaries.
	i		Rose River from river mile 2.6 upstream including all named and unnamed tributaries.
	iv		Rush River (Rappahannock County) from the confluence of Big Devil Stairs (approximate river mile 10.2) upstream including all named and unnamed tributaries.
	ii		Sams Run from its confluence with the Hazel River upstream including all named and unnamed tributaries.
	ii		South River from 8.9 miles above its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Sprucepine Branch from its confluence with Bearwallow Creek upstream including all named and unnamed tributaries.
	i		Staunton River (Madison County) from its confluence with the Rapidan River upstream including all named and unnamed tributaries.
	ii		Strother Run from its confluence with the Rose River upstream including all named and unnamed tributaries.
	iii		Thornton River (Rappahannock County) from 25.7 miles above its confluence with the Hazel River upstream including all named and unnamed tributaries.
	ii		Wilson Run from its confluence with the Staunton River upstream including all named and unnamed tributaries.
4a			(Deleted)
4b	III	PWS	The Rappahannock River and its tributaries, to include the VEPCO Canal, from Fredericksburg's (inactive May 2000) raw water intake to points 5 miles upstream.
4c	III	PWS	Motts Run and its tributaries.
4d	III		Horsepen Run and its tributaries.
4e	III	PWS	Hunting Run and its tributaries.
4f	III		Wilderness Run and its tributaries.
4g	III		Deep Run and its tributaries.
4h			(Deleted)
4i	III	PWS	Mountain Run and its tributaries from Culpeper's raw water intake to points 5 miles upstream.
4j	III	PWS	White Oak Run and its tributaries from the Town of Madison's raw water intake to points 5 miles upstream.
4k	III	PWS	Rapidan River and its tributaries from Orange's raw water intake near Poplar Run to points 5 miles upstream.
4l	III	PWS	Rapidan River and its tributaries from the Rapidan Service Authority's raw water intake (just upstream of the Route 29 bridge) upstream to points 5 miles above the intake.
4m	III	PWS	Rapidan River and its tributaries from the Wilderness Shores raw water intake (Orange County - Rapidan Service Authority) to points 5 miles upstream.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.9, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-450. Roanoke River Basin.

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	III	PWS	Lake Gaston and the John Kerr Reservoir in Virginia and their tributaries in Virginia, unless otherwise designated in this chapter (not including the Roanoke or the Dan Rivers). The Roanoke River Service Authority's water supply intake is in this section.
1a	III		Dockery Creek and its tributaries to their headwaters.
2	III		Dan River and its tributaries from the John Kerr Reservoir to the Virginia-North Carolina state line just east of the Pittsylvania-Halifax County line, unless otherwise designated in this chapter.
2a	III	PWS	Dan River and its tributaries from South Boston's raw water intake to points 5 miles upstream.
2b	III	PWS	Banister River and its tributaries from Burlington Industries' inactive raw water intake (about 2000 feet downstream of Route 360) inclusive of the Town of Halifax intake at the Banister Lake dam upstream to the Pittsylvania-Halifax County line (designation for main stem and tributaries ends at the county line).
2c			(Deleted)
2d	III	PWS	Cherrystone Creek and its tributaries from Chatham's raw water intake upstream to their headwaters.
2e	III	PWS	Georges Creek from Gretna's raw water intake upstream to its headwaters.
2f	III	PWS	Banister River and its tributaries from point below its confluence with Bearskin Creek (at latitude 36°46'15"; longitude 79°27'08") just east of Route 703, upstream to their headwaters.
2g	III	PWS	Whitethorn Creek and its tributaries from its confluence with Georges Creek upstream to their headwaters.
3	III		Dan River and its tributaries from the Virginia-North Carolina state line just east of the Pittsylvania-Halifax County line upstream to the state line just east of Draper, North Carolina, unless otherwise designated in this chapter.
	III	PWS	Dan River and its tributaries from the Virginia-North Carolina state line just south of Danville to points 1.34 miles upstream and the first unnamed tributary to Hogans Creek from the Virginia-North Carolina state line to a point 0.45 mile upstream.
3a	III	PWS	Dan River and its tributaries from the Schoolfield Dam including the City of Danville's main water intake located just upstream of the Schoolfield Dam, upstream to the Virginia-North Carolina state line.
3b	IV	PWS	Cascade Creek and its tributaries.
3c	IV	PWS	Smith River and its tributaries from the Virginia-North Carolina state line to, but not including, Home Creek.
3d	VI	PWS	Smith River from DuPont's (inactive) raw water intake upstream to the Philpott Dam, unless otherwise designated in this chapter.
	VI	PWS	Natural Trout Waters in Section 3d
	ii		Smith River from DuPont's (inactive) raw water intake upstream to the Philpott Dam, unless otherwise designated in this chapter.
3e	IV		Philpott Reservoir, Fairystone Lake and their tributaries.
	V		Stockable Trout Waters in Section 3e
	v		Otter Creek from its confluence with Rennet Bag Creek (Philpott Reservoir) to its headwaters.
	v		Smith River (Philpott Reservoir portion) from the Philpott Dam (river mile 46.80) to river mile 61.14, just above the confluence with Small Creek.
	v		Rennet Bag Creek from its confluence with the Smith River to the confluence of Long Branch Creek.
	VI		Natural Trout Waters in Section 3e
	ii		Brogan Branch from its confluence with Rennet Bag Creek upstream including all named and unnamed tributaries.
	ii		Rennet Bag Creek from the confluence of Long Branch Creek upstream including all named and unnamed tributaries.
	ii		Roaring Run from its confluence with Rennet Bag Creek upstream including all named and unnamed tributaries.
3f	IV	PWS	North Mayo River and South Mayo River and their tributaries from the Virginia-North Carolina state line to points 5 miles upstream.
3g	IV		Interstate streams in the Dan River watershed above the point where the Dan crosses the Virginia-North Carolina state line just east of Draper, North Carolina, (including the Mayo and the Smith watersheds), unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 3g
	vi		Dan River from the Virginia-North Carolina state line upstream to the Pinnacles Power House.
	***		Little Dan River from its confluence with the Dan River 7.8 miles upstream.
	v		Smith River from river mile 61.14 (just below the confluence of Small Creek), to Route 704 (river mile 69.20).
	VI		Natural Trout Waters in Section 3g
	ii		Dan River from Pinnacles Power House to Townes Dam.
	ii		Dan River from headwaters of Townes Reservoir to Talbott Dam.
	iii		Little Dan River from 7.8 miles above its confluence with the Dan River upstream including all named and unnamed tributaries.
	i		North Prong of the North Fork Smith River from its confluence with the North Fork Smith River upstream including all named and unnamed tributaries.
	ii		North Fork Smith River from its confluence with the Smith River upstream including all named and unnamed tributaries.
	iii		Smith River from Route 704 (river mile 69.20) to Route 8 (river mile 77.55).
	ii		Smith River from Route 8 (approximate river mile 77.55) upstream including all named and unnamed tributaries.
	ii		South Mayo River from river mile 38.8 upstream including all named and unnamed tributaries.
3h	IV	PWS	South Mayo River and its tributaries from the Town of Stuart's raw water intake 0.4 mile upstream of its confluence with the North Fork Mayo River to points 5 miles upstream.
	VI		Natural Trout Waters in Section 3h
	iii		Brushy Fork from its confluence with the South Mayo River upstream including all named and unnamed

			tributaries.
	iii		Lily Cove Branch from its confluence with Rye Cove Creek upstream including all named and unnamed tributaries.
	iii		Rye Cove Creek from its confluence with the South Mayo River upstream including all named and unnamed tributaries.
	iii		South Mayo River from river mile 33.8 upstream including all named and unnamed tributaries.
3i	IV	PWS	Hale Creek and its tributaries from the Fairy Stone State Park's raw water intake 1.7 miles from its confluence with Fairy Stone Lake upstream to its headwaters.
3j	VI	PWS	Smith River and its tributaries from the Henry County Public Service Authority's raw water intake about 0.2 mile upstream of its confluence with Town Creek to points 5 miles upstream.
4	III		Intrastate tributaries to the Dan River above the Virginia-North Carolina state line just east of Draper, North Carolina, to their headwaters, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 4
	vi		Browns Dan River from the intersection of Routes 647 and 646 to its headwaters.
	vi		Little Spencer Creek from its confluence with Spencer Creek to its headwaters.
	vi		Poorhouse Creek from its confluence with North Fork South Mayo River upstream to Route 817.
	***		Rock Castle Creek from its confluence with the Smith River upstream to Route 40.
	VI		Natural Trout Waters in Section 4
	ii		Barnard Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	ii		Big Cherry Creek from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
	iii		Ivy Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	iii		Camp Branch from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
	iii		Haunted Branch from its confluence with Barnard Creek upstream including all named and unnamed tributaries.
	ii		Hookers Creek from its confluence with the Little Dan River upstream including all named and unnamed tributaries.
	iii		Ivy Creek from Coleman's Mill Pond upstream to Route 58 (approximately 2.5 miles).
	iii		Little Ivy Creek from its confluence with Ivy Creek upstream including all named and unnamed tributaries.
	iii		Little Rock Castle Creek from its confluence with Rock Castle Creek upstream including all named and unnamed tributaries.
	ii		Maple Swamp Branch from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.
	iii		Mayberry Creek from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.
	ii		Mill Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	iii		North Fork South Mayo River from its confluence with the South Mayo River upstream including all named and unnamed tributaries.
	vi**		Patrick Springs Branch from its confluence with Laurel Branch upstream including all named and unnamed tributaries.
	iii		Polebridge Creek from Route 692 upstream including all named and unnamed tributaries.
	ii		Poorhouse Creek from Route 817 upstream including all named and unnamed tributaries.
	ii		Rhody Creek from its confluence with the South Mayo River upstream including all named and unnamed tributaries.
	iii		Rich Creek from Route 58 upstream including all named and unnamed tributaries.
	ii		Roaring Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	i		Rock Castle Creek from Route 40 upstream including all named and unnamed tributaries.
	iii		Round Meadow Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	ii		Sawpit Branch from its confluence with Round Meadow Creek upstream including all named and unnamed tributaries.
	ii		Shooting Creek from its confluence with the Smith River upstream including all named and unnamed tributaries.
	vi**		Spencer Creek from Route 692 upstream including all named and unnamed tributaries.
	iii		Squall Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	ii		Tuggle Creek from its confluence with the Dan River upstream including all named and unnamed tributaries.
	ii		Widgeon Creek from its confluence with the Smith River upstream including all named and unnamed tributaries.
4a	III	PWS	Intrastate tributaries (includes Beaver Creek, Little Beaver Creek, and Jones Creek, for the City of Martinsville) to the Smith River from DuPont's (inactive) raw water intake to points 5 miles upstream from Fieldcrest Cannon's raw water intake.
4b	III	PWS	Marrowbone Creek and its tributaries from the Henry County Public Service Authority's raw water intake (about 0.25 mile upstream from Route 220) to their headwaters.
4c	III	PWS	Leatherwood Creek and its tributaries from the Henry County Public Service Authority's raw water intake 8 miles upstream of its confluence with the Smith River to points 5 miles upstream.
5	IV	PWS	Roanoke Staunton River from the headwaters of the John Kerr Reservoir to Leesville Dam unless otherwise designated in this chapter.
5a	III	PWS	Tributaries to the Roanoke Staunton River from the headwaters of the John Kerr Reservoir to Leesville Dam, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5a

	vi		Day Creek from Route 741 to its headwaters.
	VI		Natural Trout Waters in Section 5a
	iii		Gunstock Creek from its confluence with Overstreet Creek upstream including all named and unnamed tributaries.
	ii		Overstreet Creek from its confluence with North Otter Creek upstream including all named and unnamed tributaries.
5b	III	PWS	Spring Creek from Keysville's raw water intake upstream to its headwaters.
5c	III	PWS	Falling River and its tributaries from a point just upstream from State Route 40 (the raw water source for Dan River, Inc.) to points 5 miles upstream and including the entire Phelps Creek watershed which contains the Brookneal Reservoir.
5d	III		Falling River and its tributaries from 5 miles above Dan River, Inc. raw water intake to its headwaters.
5e	III	PWS	Reed Creek and its tributaries from Altavista's raw water intake upstream to their headwaters.
5f	III	PWS	Big Otter River and its tributaries from Bedford's raw water intake to points 5 miles upstream, and Stony Creek and Little Stony Creek upstream to their headwaters.
	VI	PWS	Natural Trout Waters in Section 5f
	ii		Little Stony Creek from 1 mile above its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Stony Creek from the Bedford Reservoir upstream including all named and unnamed tributaries.
5g	III		Big Otter River and its tributaries from 5 miles above Bedford's raw water intake upstream to their headwaters.
5h	III		Ash Camp Creek and that portion of Little Roanoke Creek from its confluence with Ash Camp Creek to the Route 47 bridge.
5i	III	PWS	The Roanoke River and its tributaries from the Town of Altavista's raw water intake, 0.1 mile upstream from the confluence of Sycamore Creek, to points 5 miles upstream.
5j	III	PWS	Big Otter River and its tributaries from the Campbell County Utilities and Service Authority's raw water intake to points 5 miles upstream.
6	IV	pH-6.5-9.5	Roanoke River from a point (at latitude 37°15'53"; longitude 79°54'00") 5 miles above the headwaters of Smith Mountain Lake upstream to Salem's #1 raw water intake.
	V		Stockable Trout Waters in Section 6
	***	pH-6.5-9.5, ff	Roanoke River from its junction from Routes 11 and 419 to Salem's #1 raw water intake.
6a	III	NEW-1	Tributaries of the Roanoke River from Leesville Dam to Niagra Reservoir, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 6a
	vi		Gourd Creek from 1.3 miles above its confluence with Snow Creek to its headwaters.
	vi		Maggodee Creek from Boones Mill upstream to Route 862 (approximately 3.8 miles).
	vii		South Fork Blackwater River from its confluence with the Blackwater River upstream to Roaring Run.
	vi		South Prong Pigg River from its confluence with the Pigg River to its headwaters.
	VI		Natural Trout Waters in Section 6a
	iii		Daniels Branch from its confluence with the South Fork Blackwater River upstream including all named and unnamed tributaries.
	ii		Green Creek from Roaring Run upstream including all named and unnamed tributaries.
	ii		Pigg River from 1 mile above the confluence of the South Prong Pigg River upstream including all named and unnamed tributaries.
	ii		Roaring Run from its confluence with the South Fork Blackwater River upstream including all named and unnamed tributaries.
6b			(Deleted)
6c	III	PWS	Falling Creek Reservoir and Beaverdam Reservoir.
6d	IV		Tributaries of the Roanoke River from Niagra Reservoir to Salem's #1 raw water intake, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 6d
	vii	ee	Tinker Creek from its confluence with the Roanoke River north to Routes 11 and 220.
	VI		Natural Trout Waters in Section 6d
	iii		Glade Creek from its junction with Berkley Road NE to the confluence of Coyner Branch.
6e	IV	PWS	Carvin Cove Reservoir and its tributaries to their headwaters.
6f	IV	PWS, NEW-1	Blackwater River and its tributaries from the Town of Rocky Mount's raw water intake (just upstream of State Route 220) to points 5 miles upstream.
6g	IV	PWS	Tinker Creek and its tributaries from the City of Roanoke's raw water intake (about 0.4 mile downstream from Glebe Mills) to points 5 miles upstream.
6h	IV	PWS	Roanoke River from Leesville Dam to Smith Mountain Dam (Gap of Smith Mountain), excluding all tributaries to Leesville Lake.
6i	IV	PWS, NEW-1	Roanoke River from Smith Mountain Dam (Gap of Smith Mountain) upstream to a point (at latitude 37°15'53"; longitude 79°54'00" and its tributaries to points 5 miles above the 795.0 foot contour (normal pool elevation) of Smith Mountain Lake.
7	IV	pH-6.5-9.5, ESW-2	Roanoke River and its tributaries, unless otherwise designated in this chapter, from Salem's #1 raw water intake to their headwaters.
	V		Stockable Trout Waters in Section 7
	vi	pH-6.5-9.5	Elliott Creek from the confluence of Rocky Branch to its headwaters.
	vi	pH-6.5-9.5	Goose Creek from its confluence with the South Fork Roanoke River to its headwaters.
	vi	pH-6.5-9.5	Mill Creek from its confluence with Bottom Creek to its headwaters.
	***	pH-6.5-9.5	Roanoke River from 5 miles above Salem's #2 raw water intake to the Spring Hollow Reservoir intake (see Section 7b).
	vi	pH-6.5-9.5	Smith Creek from its confluence with Elliott Creek to its headwaters.
	vi	pH-6.5-9.5	South Fork Roanoke River from 5 miles above the Spring Hollow Reservoir intake (see Section 7b) to the mouth of Bottom Creek (river mile 17.1).

	VI		Natural Trout Waters in Section 7
	ii	pH-6.5-9.5	Big Laurel Creek from its confluence with Bottom Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Bottom Creek from its confluence with the South Fork Roanoke River upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Lick Fork (Floyd County) from its confluence with Goose Creek upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Mill Creek from its confluence with the North Fork Roanoke River upstream including all named and unnamed tributaries.
	iii	pH-6.5-9.5	Purgatory Creek from Camp Alta Mons upstream including all named and unnamed tributaries.
	ii	pH-6.5-9.5	Spring Branch from its confluence with the South Fork Roanoke River upstream including all named and unnamed tributaries.
7a	IV	PWS pH-6.5-9.5	Roanoke River and its tributaries from Salem's #1 raw water intake to points 5 miles upstream from Salem's #2 raw water intake.
	V	PWS	Stockable Trout Waters in Section 7a
	***	pH-6.5-9.5, ff	Roanoke River from Salem's #1 raw water intake to a point 5 miles upstream from Salem's #2 raw water intake.
7b	IV	PWS pH-6.5-9.5	Roanoke River and its tributaries from the Spring Hollow Reservoir intake upstream to points 5 miles upstream.
	V	PWS	Stockable Trout Waters in Section 7b
	***	pH-6.5-9.5, ff	Roanoke River from the Spring Hollow Reservoir intake to the Floyd-Montgomery County line.
	vi	pH-6.5-9.5	South Fork Roanoke River from its confluence with the Roanoke River to 5 miles above the Spring Hollow Reservoir intake.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.10, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; amended, Virginia Register Volume 30, Issue 18, eff. April 23, 2014; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-460. Yadkin River Basin.

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV	PWS	Yadkin River Basin in Virginia including Ararat River, Johnson Creek, Little Fisher River, Lovills Creek, Pauls Creek and Stewarts Creek - the entire reach of these streams from the Virginia-North Carolina state line to their headwaters.
	V	PWS	Stockable Trout Waters in Section 1
	***		Ararat River from Route 823 upstream to Route 671.
	vi		Halls Branch from its confluence with Lovills Creek 4.5 miles upstream.
	vi		Johnson Creek from the Virginia-North Carolina state line to its headwaters.
	vii		Lovills Creek from the Virginia-North Carolina state line 1.8 miles upstream (to the Natural Resource Conservation Service dam).
	vii		Pauls Creek (at the Carroll County line at Route 690) from 6.7 miles above its confluence with Stewarts Creek 4.2 miles upstream.
	VI	PWS	Natural Trout Waters in Section 1
	iii		Ararat River from Route 671 upstream including all named and unnamed tributaries.
	iii		East Fork Johnson Creek from its confluence with Johnson Creek upstream including all named and unnamed tributaries.
	iii		Elk Spur Branch from its confluence with Lovills Creek upstream including all named and unnamed tributaries.
	i		Little Fisher Creek from the Virginia-North Carolina state line upstream including all named and unnamed tributaries.
	ii		Little Pauls Creek in the vicinity of Route 692 (4 miles above its confluence with Pauls Creek) upstream including all named and unnamed tributaries.
	iii		Lovills Creek and its tributaries from the headwaters of the impoundment formed by the Natural Resource Conservation Service dam to their headwaters.
	ii		North Fork Stewarts Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries.
	ii		Pauls Creek (Carroll County) from 10.9 miles above its confluence with Stewarts Creek upstream including all named and unnamed tributaries.
	i		South Fork Stewarts Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries.
	iii		Stewarts Creek below Lambsburg in the vicinity of Route 696 (10.4 miles above its confluence with the Ararat River) to the confluence of the North and South Forks of Stewarts Creek.
	iii		Sun Run from its confluence with the Ararat River upstream including all named and unnamed tributaries.
	iii		Thompson Creek from its confluence with the Ararat River upstream including all named and unnamed tributaries.
	ii		Turkey Creek from its confluence with Stewarts Creek upstream including all named and unnamed tributaries.
	ii		Waterfall Branch from its confluence with Lovills Creek upstream including all named and unnamed tributaries.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.11, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. January 24, 2018.

9VAC25-260-470. Chowan and Dismal Swamp (Chowan River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II	NEW-21	Blackwater River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately State Route 611 at river mile 20.90; Nottoway River and its tidal tributaries from the Virginia-North Carolina state line to the end of tidal waters at approximately Route 674.
2	VII	NEW-21	Blackwater River from the end of tidal waters to its headwaters and its free flowing tributaries in Virginia, unless otherwise designated in this chapter.
2a	VII	PWS	Blackwater River and its tributaries from Norfolk's auxiliary raw water intake near Burdette, Virginia, to points 5 miles above the raw water intake, to include Corrowaugh Swamp to a point 5 miles above the raw water intake.
2b	III		Nottoway River from the end of tidal waters to its headwaters and its free flowing tributaries in Virginia, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2b
			Assamoosick Swamp and its tributaries from river mile 2.50 to its headwaters.
			Black Branch Swamp from its confluence with the Nottoway River to its headwaters.
			Butterwood Creek from river mile 4.65 (near Route 622) upstream to river mile 14.59 (near Route 643).
			Cabin Point Swamp from its confluence with the Nottoway River to its headwaters.
			Cooks Branch from its confluence with Butterwood Creek to river mile 1.08
			Gosee Swamp and its tributaries from its confluence with the Nottoway River to river mile 6.88.
			Gravelly Run and its tributaries from its confluence with Rowanty Creek to river mile 8.56.
			Harris Swamp and its tributaries from its confluence with the Nottoway River to river mile 8.72.
			Hatcher Run and its tributaries from its confluence with Rowanty Creek to river mile 19.27 excluding Picture Branch.
			Hunting Quarter Swamp and its tributaries from its confluence with the Nottoway River to its headwaters.
			Moores and Jones Holes Swamp and tributaries from their confluence with the Nottoway River to its headwaters.
			Nebletts Mill Run and its tributaries from its confluence with the Nottoway River to its headwaters.
			Raccoon Creek and its tributaries from its confluence with the Nottoway River to its headwaters.
			Rowanty Creek and its tributaries from its confluence with the Nottoway River to Gravelly Run.
			Southwest Swamp and its tributaries from its confluence with Stony Creek to river mile 8.55.
			Three Creek and its tributaries from its confluence with the Nottoway River upstream to its headwaters at Slagles Lake.
2c	III	PWS	Nottoway River and its tributaries from Norfolk's auxiliary raw water intake near Courtland, Virginia, to points 5 miles upstream unless otherwise designated in this chapter.
	VII		Swamp waters in Section 2c
			Assamoosick Swamp and its tributaries from its confluence with the Nottoway River to river mile 2.50.
2d			(Deleted)
2e	III	PWS	Nottoway River and its tributaries from the Georgia-Pacific and the Town of Jarratt's raw water intakes near Jarratt, Virginia, to points 5 miles above the intakes.
2f	III	PWS	Nottoway River and its tributaries from the Town of Blackstone's raw water intake to points 5 miles upstream.
2g	III	PWS	Lazaretto Creek and its tributaries from Crewe's raw water intake to points 5 miles upstream.
2h	III	PWS	Modest Creek and its tributaries from Victoria's raw water intake to their headwaters.
2i	III	PWS	Nottoway River and its tributaries from the Town of Victoria's raw water intake at the Falls (about 200 feet upstream from State Route 49) to points 5 miles upstream.
2j	III	PWS	Big Hounds Creek from the Town of Victoria's auxiliary raw water intake (on Lunenburg Lake) to its headwaters.
3	III		Meherrin River and its tributaries in Virginia from the Virginia-North Carolina state line to its headwaters, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 3
			Cattail Creek and its tributaries from its confluence with Fontaine Creek to their headwaters.
			Tarrara Creek and its tributaries from its confluence with the Meherrin River to its headwaters.
			Fontaine Creek and its tributaries from its confluence with the Meherrin River to Route 301.
3a	III	PWS	Meherrin River and its tributaries from Emporia's water supply dam to points 5 miles upstream.
3b	III	PWS	Great Creek from Lawrenceville's raw water intake to a point 7.6 miles upstream.
3c	III	PWS	Meherrin River and its tributaries from Lawrenceville's raw water intake to points 5 miles upstream.
3d	III	PWS	Flat Rock Creek from Kenbridge's raw water intake upstream to its headwaters.
3e	III	PWS	Meherrin River and its tributaries from South Hill's raw water intake to points 5 miles upstream.
3f	III		Couches Creek from a point 1.6 miles downstream from the Industrial Development Authority discharge to its headwaters.
4	III		Free flowing tributaries to the Chowan River in Virginia unless otherwise designated in this section.
	VII		Swamp waters in Section 4
			Unnamed tributary to Buckhorn Creek from its headwaters to the Virginia-North Carolina state line.
			Somerton Creek and its tributaries from the Virginia-North Carolina state line at river mile 0.00 upstream to river mile 13.78.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.12, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-480. Chowan and Dismal Swamp (Albemarle Sound Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	II		Back Bay and its tributaries in the City of Virginia Beach to the Virginia-North Carolina state line and the Northwest River and its tidal tributaries from the Virginia-North Carolina state line to the free flowing portion, unless otherwise designated in this chapter and North Landing River and its tidal tributaries from the Virginia-North Carolina state line to the Great Bridge Lock of the Intracoastal Waterway and Salem Canal up to its intersection with Timberlake Road at N36°48'35.67"/W76°08'31.70". Includes West Neck Creek to the Dam Neck Road bridge at N36°47'20.00"/W76°04'12.10".
1a	III		The free flowing portions of streams in Section 1 and tributaries of Stumpy Lake.
1b	III	PWS	Stumpy Lake (raw water supply for the City of Norfolk) and feeder streams to points 5 miles upstream.
1c	II	PWS	Northwest River and its tributaries from the City of Chesapeake's raw water intake to points 5 miles upstream and points 5 miles downstream.
2	III		Intracoastal Waterway (portions not described in Section 1).
	VII		Swamp Waters in Section 2
			Dismal Swamp Canal and tributaries from the Deep Creek Locks downstream to the Virginia/North Carolina state line.
3	III	dd, ESW-3	Lake Drummond, including feeder ditches, and all interstate tributaries of the Dismal Swamp between Virginia and North Carolina.
	VII		Swamp Waters in Section 3
			Feeder Ditch to Lake Drummond and tributaries.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.13, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 23, Issue 26, eff. August 14, 2007; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-490. Tennessee and Big Sandy River Basins (Big Sandy River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV		All tributaries of Tug Fork in Virginia.
2	IV		All tributaries of Jacobs Fork and Dry Fork in Virginia.
2a	IV	PWS	Crockett Cove, a tributary to Jacobs Fork, from Bishop's raw water intake to its headwaters.
3	IV		Levisa Fork and its tributaries and Knox Creek and its tributaries, unless otherwise designated in this chapter, from the Virginia-Kentucky state line upstream to their headwaters.
	V		Stockable Trout Waters in Section 3
	vi		Dismal Creek from its mouth to its headwaters.
4	IV		Russell Fork and its tributaries, unless otherwise designated in this chapter, from the Virginia-Kentucky state line upstream to their headwaters.
	V		Stockable Trout Waters in Section 4
	***		Caney Creek from Long Branch Creek upstream 5.5 miles.
	vi		Frying Pan Creek from 1.3 miles above its confluence with Russell Fork 8.6 miles upstream (in vicinity of Bucu).
	vi		North Fork Pound River from the town limits of Pound upstream to the water supply dam.
	***		Russell Fork from the confluence of Pound River to the Virginia-Kentucky state line.
	VI		Natural Trout Waters in Section 4
	iii		Pound River from its confluence with Russell Fork upstream to the John W. Flannagan Dam.
4a	IV	PWS	Pound River and its tributaries from the John W. Flannagan Dam, including the Cranes Nest River and its tributaries to points 5 miles above the John W. Flannagan Water Authority's raw water intake.
4b	IV	PWS	North Fork Pound River and its tributaries from North Fork Pound River Dam and the Town of Pound's raw water intake upstream to their headwaters, unless otherwise designated in this chapter.
4c			(Deleted)
4d	IV		Phillips Creek from its mouth to its headwaters and the North Fork Pound River from Wise County's swimming area around the mouth of Phillips Creek to a point 1/2 mile upstream.
4e	IV	PWS	Russell Fork River and its tributaries from the Kentucky state line 2.2 miles upstream (Elkhorn City, Kentucky raw water intake including Grassy Creek from its confluence with Russell Fork northeast to the Kentucky state line, Hunts Creek from its confluence with Grassy Creek to 1 mile upstream, Laurel Branch to its headwaters including Laurel Lake (Breaks Interstate Park raw water intake).
	V		Stockable Trout Waters in Section 4e
	***	PWS	Russell Fork from the Kentucky state line 2.2 miles upstream.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.14, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-500. Tennessee and Big Sandy River Basins (Clinch River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV		Powell River and its tributaries from the Virginia-Tennessee state line to their headwaters; Indian Creek and Martin Creek in Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 1
	vi		Batie Creek from its confluence with the Powell River 0.8 mile upstream.

	vi		Dry Creek from its confluence with Hardy Creek to its headwaters.
	vi		Hardy Creek and its tributaries to their headwaters.
	vi		Lick Branch from its confluence with Indian Creek 1.4 miles upstream.
	vi		Martin Creek (Lee County) from the Virginia-Tennessee state line to its headwaters.
	vii		North Fork Powell River from the confluence of Straight Creek to its headwaters.
	vi		Poor Valley Branch from its confluence with Martin Creek 1.4 miles upstream.
	vi		Sims Creek from its confluence with the Powell River 1.1 miles upstream to Sims Spring.
	vi		Station Creek at the boundary of the Cumberland Gap National Historical Park (river mile 2.2) 2.6 miles upstream.
	vi		Wallen Creek above its confluence with the Powell River (at Rasnic Hollow) to its headwaters.
	vi		White Branch from its confluence with Poor Valley Branch 0.7 mile upstream (to the Falls at Falling Water Gap).
1a	IV	PWS	Powell River and its tributaries from Pennington Gap's raw water intake to 5 miles upstream.
1b	IV	PWS	Bens Branch from Appalachia's raw water intake to its headwaters.
1c	IV	PWS	South Fork Powell River from Big Stone Gap's raw water intake to its headwaters.
1d	IV	PWS	Benges Branch from Norton's raw water intake to its headwaters.
1e	IV	PWS	Robinette Branch from Norton's raw water intake to its headwaters.
1f	IV	PWS	Fleenortown Creek and its tributaries from the Winn #1 and Barker Springs intakes (which provide raw water to the Town of Jonesville WTP) to points 5 miles upstream.
2	IV		Clinch River and its tributaries from the Virginia-Tennessee state line to their headwaters; North Fork Clinch River and its tributaries, Blackwater Creek and its tributaries, and Little Creek in Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 2
	vi		Amos Branch from its confluence with Copper Creek 3.3 miles upstream.
	***		Big Cedar Creek from its confluence with Little Cedar Creek to the mouths of Elk Garden Creek and Loop Creek.
	viii		Burns Creek from its confluence with the Guest River to its headwaters.
	viii		Clear Creek (Wise County) from 1/2 mile above its confluence with the Guest River to its headwaters.
	vi		Copper Creek (Russell County) from Route 678 below Parsonage - river mile 52.5 - 4.3 miles upstream.
	vi		Cove Creek from river mile 6.5 (above Stanleytown) 5.5 miles upstream.
	vi		Cowan Creek from its confluence with Sinking Creek 2.7 miles upstream.
	vi		Devil Fork from its confluence with Straight Fork 3.2 miles upstream.
	vi		Fall Creek from its confluence with the Clinch River 4.6 miles upstream.
	vi		Gillinswater Branch from its confluence with Obeys Creek 2.8 miles upstream.
	vi		Gray Branch from its confluence with Mill Creek (Scott County) 1.6 miles upstream.
	vi		Jessee Branch from its confluence with Copper Creek at Thompson Ford 2 miles upstream.
	vi		Lark Creek from its confluence with Copper Creek 3 miles upstream.
	viii		Laurel Fork (Scott County) from its confluence with Stock Creek 4 miles upstream.
	vi		Liberty Creek from its confluence with Little River 1.6 miles upstream.
	vi		Little Stony Creek from the intersection of the stream and Route 72 upstream to its headwaters.
	vi		Mill Creek (Scott County) from its confluence with the Clinch River at Grays Ford 1.6 miles upstream.
	vi		Obeys Creek from 2.5 miles above its confluence with Copper Creek 6 miles upstream.
	vi		Palmer Branch from its confluence with the Clinch River 1.8 miles upstream.
	vi		Powers Branch from its confluence with the Clinch River 2.4 miles upstream.
	vi		Stock Creek from 0.25 mile north of Sunbright to 1.5 miles north of Mabe.
			Stony Creek from Fort Blackmore upstream to its headwaters.
	***		(Stony Creek from Fort Blackmore (river mile 0.56) 5.5 miles upstream.)
	vi		(Stony Creek from 5.5 miles above its confluence with the Clinch River (in the vicinity of Greens Chapel) 7.2 miles upstream.)
	vi		Straight Fork (Scott County) from its confluence with Stony Creek 5.1 miles upstream.
	vi		Valley Creek from 1.1 miles above its confluence with Copper Creek 6.8 miles upstream.
	viii		Wolf Creek (Scott County) from its confluence with Laurel Fork 1.8 miles upstream.
	VI		Natural Trout Waters in Section 2
	iii		Maiden Spring Creek from 15 miles above its confluence with Little River at Route 602 above Benbow 5.3 miles upstream.
	iii		Mill Creek (Russell County) from its confluence with the Clinch River 2.7 miles upstream.
2a	IV	PWS, x	Clinch River and its tributaries to their headwaters from the Wise County Public Service Authority's raw water intakes to 5 miles upstream from St. Paul's raw water intake.
2b	IV	PWS	Clinch River and its tributaries to their headwaters from Raven-Doran's raw water intake to a point 5 miles upstream of the Richland's raw water intake.
2c	IV	PWS	Clinch River and its tributaries from Tazewell's raw water intake to their headwaters.
2d	IV	PWS	North Fork Clinch River and its tributaries, including Spurlock Branch, from Duffield Development Authority's raw water intake at the confluence with Spurlock Branch and the intake on Spurlock Branch to 5 miles upstream.
2e	IV	PWS	Bear Creek from Wise's raw water intake to its headwaters.
2f	IV	PWS	Toms Creek from Coeburn's raw water intake to its headwaters.
2g	IV	PWS	Little River and its tributaries from the Tazewell County Water and Sewer Authority's (Claypool Hill Water Treatment Plant) raw water intake to points 5 miles upstream.
2h	IV	PWS	Unnamed tributary to the North Fork Clinch River from the Divides raw water intake upstream to its headwaters.
2i	IV	PWS	Big Cedar Creek and its tributaries from Lebanon's raw water intake to points 5 miles upstream.
2j	IV	PWS	Cavitts Creek from the proposed Baptist Valley raw water intake to its headwaters.
2k	IV	PWS	Unnamed tributary to Big Creek (Tazewell County) from the Tazewell County Water and Sewer Authority's Jewell Ridge raw water intake upstream to its headwaters.
2l			(moved to 1f)

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; 33 USC § 1251 et seq. of the federal Clean Water Act; 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.15, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010.

9VAC25-260-510. Tennessee and Big Sandy River Basins (Holston River Subbasin).

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	IV		North Fork Holston River and its tributaries, unless otherwise designated in this chapter, from the Virginia-Tennessee state line to their headwaters, and those sections of Timbertree Branch and Boozy Creek in Virginia.
	V		Stockable Trout Waters in Section 1
	vi		Greendale Creek from its confluence with the North Fork Holston River 4.1 miles upstream.
	v		Laurel Bed Creek from its confluence with Tumbling Creek 1.8 miles upstream.
	vi		Laurel Creek within the Thomas Jefferson National Forest boundaries.
	***		Laurel Creek from Route 16 to its confluence with Roaring Fork.
	vi		Lick Creek (Bland County) from 5.5 miles above its confluence with the North Fork Holston River 10.9 miles upstream.
	vi		Little Tumbling Creek from Tannersville upstream to where the powerline crosses the stream.
	vi		Lynn Camp Creek from its confluence with Lick Creek 3.9 miles upstream.
	vi		Punch and Judy Creek from its confluence with Laurel Creek 3.2 miles upstream.
	v		Tumbling Creek from its confluence with the North Fork Holston River upstream including all named and unnamed tributaries.
	VI		Natural Trout Waters in Section 1
	ii		Barkcamp Branch from its confluence with Roaring Fork upstream including all named and unnamed tributaries.
	ii		Beartown Branch from its confluence with Sprouts Creek upstream including all named and unnamed tributaries.
	ii		Beaver Creek (Smyth County) from its confluence with the North Fork Holston River 2.8 miles upstream.
	ii		Brier Cove from its confluence with Tumbling Creek upstream including all named and unnamed tributaries.
			Brumley Creek from its confluence with the North Fork Holston River upstream to the Hidden Valley Lake dam including all named and unnamed tributaries.
	***		Brumley Creek from its confluence with the North Fork Holston River (at Duncanville) 4 miles upstream.
	iii		Brumley Creek from 4 miles above its confluence with the North Fork Holston River (at Duncanville) 6.9 miles upstream.
	iii		Campbell Creek (Smyth County) from its confluence with the North Fork Holston River at Ellendale Ford 1 mile upstream.
	ii		Coon Branch from its confluence with Barkcamp upstream including all named and unnamed tributaries.
	ii		Cove Branch from its confluence with Roaring Fork upstream including all named and unnamed tributaries.
	ii		Henshaw Branch from its confluence with Lick Creek upstream including all named and unnamed tributaries.
	ii		Little Sprouts Creek from its confluence with Sprouts Creek upstream including all named and unnamed tributaries.
	ii		Little Tumbling Creek from the powerline crossing upstream including all named and unnamed tributaries.
	v**		Red Creek from its confluence with Tumbling Creek upstream including all named and unnamed tributaries.
	ii		Roaring Fork (Tazewell County) from its confluence with Laurel Creek upstream including all named and unnamed tributaries.
	ii		Sprouts Creek from its confluence with the North Fork Holston River upstream including all named and unnamed tributaries.
	ii		Toole Creek from its confluence with the North Fork Holston River 5.9 miles upstream.
1a	IV		North Fork Holston River from the Olin Corporation downstream to the Virginia-Tennessee state line.
1b	IV	PWS	Big Moccasin Creek and its tributaries from Weber City's raw water intake to points 5 miles upstream from Gate City's raw water intake.
1c			(Deleted)
1d	IV	PWS	Unnamed tributary to the North Fork Holston River from Hilton's Community No. 2 public water supply raw water intake to its headwaters.
2	IV	PWS	South Holston Lake in Virginia and South Holston Lake and its tributaries from the Bristol Virginia Utilities Board's raw water intake to points 5 miles upstream.
3	IV		Tributaries of the South Holston Lake, and Sinking Creek and Nicely Branch in Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 3
	vi		Berry Creek from its confluence with Fifteenmile Creek (Washington

			County) 2 miles upstream.
	vi		Spring Creek from its confluence with the South Holston Lake to its headwaters.
	VI		Natural Trout Waters in Section 3
	ii		Cox Mill Creek from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
3a			(Deleted)
4	IV		Steel Creek and Beaver Creek and their tributaries in Virginia.
	V		Stockable Trout Waters in Section 4
	vi		Beaver Creek (Washington County) and its tributaries from the flood control dam (near Route 11) to their headwaters.
	vi		Sinking Creek (tributary to Paperville Creek-Washington County) from the Virginia-Tennessee state line at Bristol 3.4 miles upstream.
5	IV		Middle Fork Holston River and its tributaries, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5
	vi		Dry Run from its confluence with the Middle Fork Holston River 1.6 miles upstream.
	vi		Dutton Branch from its confluence with the Middle Fork Holston River 2 miles upstream.
	vi		Laurel Springs Creek from its confluence with the Middle Fork Holston River 2 miles upstream.
	vi		Middle Fork Holston River from 5 miles above Marion's raw water intake (river mile 45.83) to the headwaters.
	vi		Preston Hollow from 0.5 mile above its confluence with the Middle Fork Holston River 1.5 miles upstream.
	vi		Staley Creek from its confluence with the Middle Fork Holston River 1 mile upstream.
	VI		Natural Trout Waters in Section 5
	iii		East Fork Nicks Creek from its confluence with Nicks Creek upstream including all named and unnamed tributaries.
	iii		Nicks Creek within the Jefferson National Forest boundary (river mile 1.6) upstream including all named and unnamed tributaries.
	iii		Staley Creek from 1 mile above its confluence with the Middle Fork Holston River upstream including all named and unnamed tributaries.
5a	IV		Middle Fork Holston River and its tributaries from Edmondson Dam upstream to the Route 91 bridge.
5b	IV		Hungry Mother Creek from the dam upstream including all named and unnamed tributaries.
5c	IV	PWS	Middle Fork Holston River and its tributaries from Marion's raw water intake to points 5 miles upstream, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 5c
	vi		Middle Fork Holston River from Marion's raw water intake at Mt. Carmel at river mile 45.83 to a point 5 miles upstream (river mile 50.83).
5d	IV	PWS	Middle Fork Holston River and its tributaries from Washington County Service Authority's raw water intake to points 5 miles upstream.
6	IV	ESW-10	South Fork Holston River and its tributaries in Virginia, unless otherwise designated in this chapter.
	V		Stockable Trout Waters in Section 6
	vi		Grosses Creek from its confluence with the South Fork Holston River 3.4 miles upstream.
	vi		Rush Creek (Washington County) from its confluence with the South Fork Holston River 2.2 miles upstream.
	vi		Straight Branch from its confluence with Whitetop Laurel Creek 2.5 miles upstream.
	VI		Natural Trout Waters in Section 6
	iii		Barkcamp Branch from its confluence with Rowland Creek upstream including all named and unnamed tributaries.
	iii		Beaverdam Creek (Washington County) from its confluence with Laurel Creek to the Virginia-Tennessee state line 2 miles upstream.
	iii		Bell Hollow from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
	iii		Big Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
			Big Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
	iii		Big Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek 2.6 miles upstream.
	ii		Big Laurel Creek (Smyth County) from 2.6 miles above its confluence with Whitetop Laurel Creek (at Laurel Valley Church) upstream including all named and unnamed tributaries.
	iii		Brush Creek from its confluence with Rush Creek upstream including

	all named and unnamed tributaries.
iii	Buckeye Branch from its confluence with Green Cove Creek upstream including all named and unnamed tributaries.
ii	Charlies Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
iii	Cold Branch from its confluence with Jerrys Creek upstream including all named and unnamed tributaries.
iv	Comers Creek from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
ii	Cressy Creek from 1.7 miles above its confluence with the South Fork Holston River at Route 16 upstream including all named and unnamed tributaries.
ii	Daves Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
iii	Dickey Creek from 0.6 mile above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
ii	Dry Fork from 1.2 miles above its confluence with St. Clair Creek upstream including all named and unnamed tributaries.
ii	Feathercamp Branch from its confluence with Straight Branch upstream including all named and unnamed tributaries.
ii	Grassy Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
ii	Green Cove Creek from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
ii	Grindstone Branch from its confluence with Big Laurel Creek upstream including all named and unnamed tributaries.
iii	High Trestle Branch from its confluence with Buckeye Branch upstream including all named and unnamed tributaries.
iii	Hopkins Branch from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
iii	Houndshell Branch from its confluence with Cressy Creek upstream including all named and unnamed tributaries.
ii	Hurricane Creek (Smyth County) from its confluence with Comers Creek upstream including all named and unnamed tributaries.
iii	Hutton Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
iii	Jerrys Creek (Smyth County) from 1.5 miles above its confluence with Rowland Creek upstream including all named and unnamed tributaries.
ii	Little Laurel Creek (Smyth County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
***	Laurel Creek from its confluence with Beaverdam Creek (Washington County) to the Virginia-North Carolina state line.
ii	London Bridge Branch from its confluence with Beaverdam Creek (Washington County) 0.6 mile upstream.
iii	Long Branch from its confluence with Jerrys Creek upstream including all named and unnamed tributaries.
ii	Mill Creek (Washington County) from its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
iii	Parks Creek from its confluence with Cressy Creek upstream including all named and unnamed tributaries.
ii	Pennington Branch from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
iii	Quarter Branch from 1.1 miles above its confluence with Cressy Creek upstream including all named and unnamed tributaries.
iii	Raccoon Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
ii	Rowland Creek from 2.5 miles above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
ii	Rush Creek (Washington County) from 2.2 miles above its confluence with the South Fork Holston River upstream including all named and unnamed tributaries.
iii	Scott Branch from its confluence with Dickey Creek upstream including all named and unnamed tributaries.
iii	Slemp Creek from 2 miles above its confluence with Cressy Creek upstream including all named and unnamed tributaries.
ii	South Fork Holston River from 101.8 miles above its confluence with the Holston River to the Thomas Bridge Water Corporation's raw water intake (see Section 6a).
ii	South Fork Holston River from 5 miles above the Thomas Bridge Water Corporation's raw water intake to a point 12.9 miles upstream (see Section 6a).
ii	Star Hill Branch from its confluence with Green Cove Creek upstream

			including all named and unnamed tributaries.
	ii		St. Clair Creek from 3.3 miles above its confluence with the South Fork Holston River (at Route 600) above Horseshoe Bend upstream including all named and unnamed tributaries.
	ii		Sturgill Branch from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
	iii		Valley Creek (Washington County) from its confluence with Whitetop Laurel Creek upstream including all named and unnamed tributaries.
			Whitetop Laurel Creek from its confluence with Laurel Creek upstream including all named and unnamed tributaries.
	ii		Whitetop Laurel Creek from its confluence with Laurel Creek 8.1 miles upstream.
	i		Whitetop Laurel Creek from 8.1 miles above its confluence with Laurel Creek 4.4 miles upstream.
	iii		Whitetop Laurel Creek from 12.5 miles above its confluence with Laurel Creek 3.8 miles upstream.
6a	IV	PWS	South Fork Holston River and its tributaries from Thomas Bridge Water Corporation's raw water intake between Route 658 and Route 656 to points 5 miles upstream.
	VI		Natural Trout Waters in Section 6a
	ii		South Fork Holston River from Thomas Bridge Water Corporation's raw water intake to a point 5 miles upstream.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.16, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-520. Chesapeake Bay, Atlantic Ocean and small coastal basins.

SEC.	CLASS	SP. STDS.	SECTION DESCRIPTION
1	I	a	The Atlantic Ocean from Cape Henry Light (Latitude 36°55'06" North; Longitude 76°00'04" West) east to the three mile limit and south to the Virginia-North Carolina state line. The Atlantic Ocean from Cape Henry Light to Thimble Shoal Channel (Latitude 36°57'30" North; Longitude 76°02'30" West) from Thimble Shoal Channel to Smith Island (Latitude 37°07'04" North; Longitude 75°54'04" West) and north to the Virginia-Maryland state line.
1a	III		All free flowing portions of the streams, creeks and coves in Section 1 east of the east-west divide boundary on the Eastern Shore of Virginia.
1b	II	a	Tidal portions of streams, creeks and coves in Section 1 east of the east-west divide boundary on the Eastern Shore of Virginia.
2	II	a	Chesapeake Bay and its tidal tributaries from Old Point Comfort Tower (Latitude 37°00'00" North; Longitude 76°18'08" West) to Thimble Shoal Light (Latitude 37°00'09" North; Longitude 76°14'04" West) to and along the south side of Thimble Shoal Channel to its eastern end (Latitude 36°57'03" North; Longitude 76°02'03" West) to Smith Island (Latitude 37°07'04" North; Longitude 75°54'04" West) north to the Virginia-Maryland state line following the east-west divide boundary on the Eastern Shore of Virginia, west along the Virginia-Maryland state line, to the Virginia Coast, (Latitude 37°53'23" North; Longitude 76°14'25" West) and south following the Virginia Coast to Old Point Comfort Tower (previously described), unless otherwise designated in this chapter.
2a	III		Free flowing portions of streams lying on the Eastern Shore of Virginia west of the east-west divide boundary unless otherwise designated in this chapter.
2b	III		Drummonds Millpond including Coards Branch.
2c	III		The Virginia Department of Agriculture experimental station pond and its tributaries.
2d	III		The free flowing streams tributary to the western portion of the Chesapeake Bay lying between the Virginia-Maryland state line and Old Point Comfort.
	VII		Swamp waters in Section 2d
			Briery Swamp and tributaries from the confluence with Dragon Swamp to their headwaters.
			Contrary Swamp from the confluence with Dragon Swamp to its headwaters.
			Crany Creek from its confluence with Fox Mill Run to its headwaters.
			Dragon Run and its tributaries from the confluence with Dragon Swamp to their headwaters.
			Dragon Swamp and tributaries from the head of tidal waters at river mile 4.60 to their headwaters.
			Exol Swamp and tributaries from the confluence with Dragon Swamp to their headwaters.
			Fox Mill Run from the head of tidal waters to its headwaters.
			Holmes Swamp and its tributaries from the confluence with Exol Swamp to their headwaters.
			Northwest Branch Severn River from the head of tidal waters near Severn Hall Lane to its headwaters.
			Timber Branch Swamp and its tributaries from the confluence with Dragon Swamp to their headwaters.
			Yorkers Swamp and its tributaries from the confluence with Dragon Swamp to their headwaters.

			White Marsh and its tributaries from the confluence with Dragon Swamp to their headwaters.
2e	III	PWS	Harwood's Mill Reservoir (in Poquoson River's headwaters - a source of water for the City of Newport News) and its tributaries.
2f	III	PWS	Brick Kiln Creek and its tributaries from Fort Monroe's raw water intake (at the Big Bethel Reservoir) to points 5 miles upstream.
2g	III	PWS	Beaverdam Swamp and its tributaries (including Beaverdam Swamp Reservoir) from the Gloucester County Water System raw water intake to its headwaters.
3	II	a	Chesapeake Bay from Old Point Comfort Tower (Latitude 37°00'00" North; Longitude 76°18'08" West) to Thimble Shoal Light (Latitude 37°00'09" North; Longitude 76°14'04" West) along the south side of Thimble Shoal Channel to Cape Henry Light (Latitude 36°55'06" North; Longitude 76°00'04" West).
3a	II	a,z	Little Creek from its confluence with Chesapeake Bay (Lynnhaven Roads) to end of navigable waters.
3b	II	a	Tidal portions of Lynnhaven watershed from its confluence with the Chesapeake Bay (Lynnhaven Roads) to and including Lynnhaven Bay, Western Branch Lynnhaven River, Eastern Branch Lynnhaven River, Long Creek, Broad Bay and Linkhorn Bay, Thalia Creek and its tributaries to the end of tidal waters. Great Neck Creek and Little Neck Creek from their confluence with Linkhorn Bay and their tidal tributaries. Rainey Gut and Crystal Lake from their confluence with Linkhorn Bay.
3c	III		Free flowing portions of streams in Section 3b, unless otherwise designated in this chapter.
3d	III	PWS	The impoundments on the Little Creek watershed including Little Creek Reservoir, Lake Smith, Lake Whitehurst, Lake Lawson, and Lake Wright.
3e	II		London Bridge Creek from its confluence with the Eastern Branch of Lynnhaven River to the end of tidal waters. Wolfsnare Creek from its confluence with the Eastern Branch Lynnhaven River to the fall line.
3f	III		Free flowing portions of London Bridge Creek and Wolfsnare Creek to the Dam Neck Road Bridge at N36°47'20.00"/W76°04'12.10" (West Neck Creek) and their free flowing tributaries.
3g	III		Lake Joyce and Lake Bradford.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.17, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-530. York River Basin.

SEC.	CLASS	SP. STDS	SECTION DESCRIPTION
1	II	a,aa	York River and the tidal portions of its tributaries from Goodwin Neck and Sandy Point upstream to Thorofare Creek and Little Salem Creek near West Point; Mattaponi River and the tidal portions of its tributaries from Little Salem Creek to the end of tidal waters; Pamunkey River and the tidal portions of its tributaries from Thorofare Creek near West Point to the end of tidal waters.
2	III		Free flowing tributaries of the York River, free flowing tributaries of the Mattaponi River to Clifton and the Pamunkey River to Romancoke, unless otherwise designated in this chapter.
2a	III	PWS	Waller Mill Reservoir and its drainage area above Waller Mill dam which serves as a raw water supply for the City of Williamsburg.
2b	III	PWS	Jones Pond (a tributary of Queen Creek near Williamsburg which serves as the raw water supply for Cheatham Annex Naval Station) and its tributaries to points 5 miles upstream.
3	III		Free flowing portions of the Mattaponi and Pamunkey Rivers, free flowing tributaries of the Mattaponi above Clifton, and free flowing tributaries of the Pamunkey above Romancoke, unless otherwise designated in this chapter.
	VII		Swamp waters in Section 3.
			Garnetts Creek and tributaries from the head of tidal waters upstream to include Dickeys Swamp and its tributaries.
			Herring Creek from its headwaters at river mile 17.2 downstream to the confluence with the Mattaponi River and three named tributaries: Dorrell Creek, Fork Bridge Creek and Millpond Creek from their headwaters to their confluence with Herring Creek.
			Hornquarter Creek from its confluence with the Pamunkey River to its headwaters.
			Jacks Creek and tributaries from the head of tidal waters to their headwaters.
			Matadequin Creek and its tributaries, from below an unnamed tributary to Matadequin Creek at river mile 9.93 (between Route 350 and Sandy Valley Creek) downstream to its confluence with the Pamunkey River.
			Mattaponi River from its confluence with Maracossic Creek at river mile 57.17 to the head of tidal waters.
			Mechumps Creek from the confluence with Slayden Creek to the Pamunkey River, Slayden Creek and its tributaries to their headwaters, and Campbell Creek from the unnamed tributary at river mile 3.86 downstream to the confluence with Mechumps Creek.
			Monquin (Moncuin) Creek and its tributaries from the head of tidal waters to their headwaters.
			Reedy Creek from its headwaters to its confluence with Reedy Millpond at river mile 1.06.
			Totopotomoy Creek from its confluence with the Pamunkey River to its headwaters.

3a	III	PWS	South Anna River and its tributaries from Ashland's raw water intake to a point 5 miles upstream.
3b	III	PWS	Northeast Creek and its tributaries from the Louisa County Water Authority's impoundment dam (approximately 0.125 mile upstream of Route 33) to their headwaters.
3c	III		South Anna River from Route 15 upstream to a point 1.5 miles below the effluent from the Gordonsville Sewage Treatment Plant.
3d	III	PWS	Ni River and its tributaries from Spotsylvania's raw water intake near Route 627 to their headwaters.
3e	III	PWS	The North Anna River and its tributaries from Hanover County's raw water intake near Doswell (approximately 0.5 mile upstream from State Route 30) to points 5 miles upstream.
3f	III	PWS	Stevens Mill Run from the Lake Caroline water impoundment and other tributaries into the impoundment upstream to their headwaters.

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.18, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Volume 20, Issue 09, eff. February 12, 2004; Volume 22, Issue 11, eff. January 12, 2006; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

9VAC25-260-540. New River Basin.

SEC.	CLASS	SP. STDS	SECTION DESCRIPTION
1	IV	u	New River and its tributaries, unless otherwise designated in this chapter, from the Virginia-West Virginia state line to the Montgomery-Giles County line.
	V		Stockable Trout Waters in Section 1
	***		Laurel Creek (a tributary to Wolf Creek in Bland County) from Rocky Gap to the Route 613 bridge one mile west of the junction of Routes 613 and 21.
	viii		Laurel Creek (Bland County) from its confluence with Hunting Camp Creek 3.2 miles upstream.
	viii		Little Wolf Creek (Bland County) from its confluence with Laurel Creek 2.6 miles upstream.
	v		Sinking Creek from 5.1 miles above its confluence with the New River 10.8 miles upstream (near the Route 778 crossing).
	vi		Sinking Creek from the Route 778 crossing to the Route 628 crossing.
	vi		Spur Branch from its confluence with Little Walker Creek to its headwaters.
	v		Walker Creek from the Route 52 bridge to its headwaters.
	***		Wolf Creek (Bland County) from Grapefield to its headwaters.
	VI		Natural Trout Waters in Section 1
	ii		Bear Spring Branch from its confluence with the New River upstream including all named and unnamed tributaries.
	iii		Clear Fork (Bland County) from river mile 8.5 upstream including all named and unnamed tributaries.
	ii		Cove Creek (Tazewell County) from its confluence with Clear Fork upstream including all named and unnamed tributaries.
	ii		Cox Branch from its confluence with Clear Fork to Tazewell's raw water intake (river mile 1.6).
	iii		Ding Branch from its confluence with Nobusiness Creek upstream including all named and unnamed tributaries.
	ii		Dry Fork (Bland County) from 4.8 miles above its confluence with Laurel Creek upstream including all named and unnamed tributaries.
	ii		East Fork Cove Creek (Tazewell County) from its confluence with Cove Creek upstream including all named and unnamed tributaries.
			Hunting Camp Creek from its confluence with Wolf Creek upstream including all named and unnamed tributaries.
	***		Hunting Camp Creek from its confluence with Wolf Creek 8.9 miles upstream.
	iii		Hunting Camp Creek from 8.9 miles above its confluence with Wolf Creek 3 miles upstream.
	ii		Laurel Creek (tributary to Wolf Creek in Bland County) from Camp Laurel in the vicinity of Laurel Fork Church, upstream including all named and unnamed tributaries.
	ii		Laurel Creek from a point 0.7 mile from its confluence with Sinking Creek upstream including all named and unnamed tributaries.
	ii		Little Creek (Tazewell County) from 1.5 miles above its confluence with Wolf Creek above the Tazewell County Sportsmen's Club Lake upstream including all named and unnamed tributaries.
	ii		Mercy Branch from its confluence with Mill Creek upstream including all named and unnamed tributaries.
	ii		Mill Creek from the Narrows Town line upstream including all named and unnamed tributaries.
	ii		Mudley Branch from its confluence with the West Fork Cove Creek upstream including all named and unnamed tributaries.
			Nobusiness Creek from its confluence with Kimberling Creek upstream including all named and unnamed tributaries.
	***		Nobusiness Creek from its confluence with Kimberling Creek 4.7 miles upstream.
	iii		Nobusiness Creek from 4.7 miles above its confluence with Kimberling Creek upstream including all named and unnamed tributaries.
	ii		Oneida Branch from its confluence with the West Fork Cove Creek upstream including all named and unnamed tributaries.
	iii		Panther Den Branch from its confluence with Nobusiness Creek upstream including all named and unnamed tributaries.
	ii		Piney Creek from its confluence with the New River upstream including all named and unnamed tributaries.
	ii		Wabash Creek from its confluence with Walker Creek upstream including all named and unnamed tributaries.
	ii		West Fork Cove Creek from its confluence with Cove Creek upstream including all named and unnamed tributaries.

1a			(Deleted)
1b	IV	u	Wolf Creek and its tributaries in Virginia from its confluence with Mill Creek upstream to the Giles-Bland County line.
1c			(Deleted)
1d	IV	u	Stony Creek and its tributaries, unless otherwise designated in this chapter, from its confluence with the New River upstream to its headwaters, and Little Stony Creek and its tributaries from its confluence with the New River to its headwaters.
	V		Stockable Trout Waters in Section 1d
	vi		Stony Creek (Giles County) from its confluence with the New River to its confluence with Laurel Branch.
	VI		Natural Trout Waters in Section 1d
	iii		Dismal Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Dixon Branch from its confluence with North Fork Stony Creek upstream including all named and unnamed tributaries.
	ii		Hemlock Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	ii		Laurel Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Laurel Creek from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	ii		Little Stony Creek from its confluence with the New River upstream including all named and unnamed tributaries.
	ii		Maple Flats Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	ii		Meredith Branch from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	iii		Nettle Hollow from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	ii		North Fork Stony Creek from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	iii		Pine Swamp Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Pond Drain from its confluence with Little Stony Creek upstream including all named and unnamed tributaries.
	iii		Stony Creek (Giles County) from the confluence of Laurel Branch at Olean upstream including all named and unnamed tributaries.
	ii		White Rock Branch from its confluence with Stony Creek upstream including all named and unnamed tributaries.
	ii		Wildcat Hollow from its confluence with Stony Creek upstream including all named and unnamed tributaries.
1e	IV	PWS,u	Kimberling Creek and its tributaries from Bland Correctional Farm's raw water intake to points 5 miles upstream.
	VI	PWS	Natural Trout Waters in Section 1e
	iii		Dismal Creek from its confluence with Kimberling Creek upstream including all named and unnamed tributaries.
	iii		Pearis Thompson Branch from its confluence with Dismal Creek upstream including all named and unnamed tributaries.
	iii		Standrock Branch from its confluence with Dismal Creek upstream including all named and unnamed tributaries.
1f			(Deleted)
1g	IV	u	Bluestone River and its tributaries, unless otherwise designated in this chapter, from the Virginia-West Virginia state line upstream to their headwaters.
1h	IV	PWS,u	Bluestone River and its tributaries from Bluefield's raw water intake upstream to its headwaters.
	VI	PWS	Natural Trout Waters in Section 1h
	iii		Bluestone River from a point adjacent to the Route 650/460 intersection to a point 5.7 miles upstream.
1i	IV	PWS	Big Spring Branch from the Town of Pocahontas's intake, from the Virginia-West Virginia state line, including the entire watershed in Abbs Valley (the Town of Pocahontas's intake is located in West Virginia near the intersection of West Virginia State Route 102 and Rye Road.
1j			(Deleted)
1k	IV	PWS	Walker Creek and its tributaries from the Wythe-Bland Water and Sewer Authority's raw water intake (for Bland) to points 5 miles upstream.
1l	VI ii	PWS	Cox Branch and its tributaries from Tazewell's raw water intake at the Tazewell Reservoir (river mile 1.6) to headwaters.
2	IV	v, NEW-5	New River and its tributaries, unless otherwise designated in this chapter, from the Montgomery-Giles County line upstream to the Virginia-North Carolina state line (to include Peach Bottom Creek from its confluence with the New River to the mouth of Little Peach Bottom Creek).
	V		Stockable Trout Waters in Section 2
	v		Beaverdam Creek from its confluence with the Little River to its headwaters.
	v		Big Indian Creek from its confluence with the Little River to a point 7.4 miles upstream.
	vi		Boyd Spring Run from its confluence with the New River to its headwaters.
	***		Brush Creek from the first bridge on Route 617 south of the junction of Routes 617 and 601 to the Floyd County line.
	vi		Camp Creek from its confluence with the Little River to its headwaters.
	vi		Cove Creek (Wythe County) from Route 77, 8.1 miles above its confluence with Reed Creek, 10.5 miles upstream.
			Dodd Creek from its confluence with the West Fork Little River to its headwaters.
	***		Dodd Creek from its confluence with the West Fork Little River 4 miles upstream.
	vi		Dodd Creek from 4 miles above its confluence with the West Fork Little River to its headwaters.
	vi		East Fork Stony Fork from its confluence with Stony Fork 4 miles upstream.
	***		Elk Creek from its confluence with Knob Fork Creek to the junction of State Routes 611 and 662.
	vi		Gullion Fork from its confluence with Reed Creek 3.3 miles upstream.
	vi		Little Brush Creek from its confluence with Brush Creek 1.9 miles upstream.
	vi		Lost Bent Creek from its confluence with the Little River to its headwaters.
	vi		Middle Creek from its confluence with Little River to its headwaters.
	vi		Middle Fox Creek from its confluence with Fox Creek 4.1 miles upstream.
	vi		Mill Creek (Wythe County) from its confluence with the New River 3.7 miles upstream.
	v		North Fork Greasy Creek from its confluence with Greasy Creek to its headwaters.

vi	Oldfield Creek from its confluence with the Little River to its headwaters.
vi	Peach Bottom Creek from the mouth of Little Peach Bottom Creek to its headwaters.
vi	Pine Branch from its confluence with the Little River to its headwaters.
vi	Pine Creek (Carroll County) from its confluence with Big Reed Island Creek to its headwaters.
vi	Piney Fork from its confluence with Greasy Creek to its headwaters.
vi	Poor Branch from its confluence with the New River to its headwaters.
vi	Poverty Creek (Montgomery County) from its confluence with Toms Creek to its headwaters.
vi	Reed Creek (Wythe County) within the Jefferson National Forest from 57 miles above its confluence with the New River 6.8 miles upstream, unless otherwise designated in this chapter.
vi	Shady Branch from its confluence with Greasy Creek to its headwaters.
vi	Shorts Creek from 6.2 miles above its confluence with the New River in the vicinity of Route 747, 3 miles upstream.
vi	South Fork Reed Creek from river mile 6.8 (at Route 666 below Groseclose) 11.9 miles upstream.
vi	St. Lukes Fork from its confluence with Cove Creek 1.4 miles upstream.
vi	Stony Fork (Wythe County) from 1.9 miles above its confluence with Reed Creek at the intersection of Routes 600, 682, and 21/52 at Favonia 5.7 miles upstream.
***	Toms Creek from its confluence with the New River to its headwaters.
vi	West Fork Big Indian Creek from its confluence with Big Indian Creek to its headwaters.
vi	Wolf Branch from its confluence with Poor Branch 1.2 miles upstream.
VI	Natural Trout Waters in Section 2
ii	Baker Branch from its confluence with Cabin Creek upstream including all named and unnamed tributaries.
ii	Baldwin Branch from 0.2 mile above its confluence with Big Horse Creek at the Virginia-North Carolina state line upstream including all named and unnamed tributaries.
ii	Bear Creek (Carroll County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iii	Beaver Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
iii	Beaverdam Creek (Carroll County) from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
ii	Big Branch from its confluence with Greasy Creek upstream including all named and unnamed tributaries.
iii	Big Horse Creek from 12.8 miles above its confluence with the North Fork New River (above the Virginia-North Carolina state line below Whitetop) upstream including all named and unnamed tributaries.
ii	Big Indian Creek from a point 7.4 miles upstream of its confluence with the Little River upstream including all named and unnamed tributaries.
ii	Big Laurel Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
iii	Big Laurel Creek from its confluence with Pine Creek upstream including all named and unnamed tributaries.
iii	Big Reed Island Creek from Route 221 upstream including all named and unnamed tributaries.
iii	Big Run from its confluence with the Little River upstream including all named and unnamed tributaries.
	Big Wilson Creek from its confluence with the New River upstream including all named and unnamed tributaries.
***	Big Wilson Creek from its confluence with the New River 8.8 miles upstream.
ii	Big Wilson Creek from 8.8 miles above its confluence with the New River 6.6 miles upstream.
iii	Blue Spring Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
ii	Boothe Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
ii	Bournes Branch from its confluence with Brush Creek upstream including all named and unnamed tributaries.
iii	Brannon Branch from its confluence with Burks Fork upstream including all named and unnamed tributaries.
ii	Brier Run from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.
ii	Buffalo Branch from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iii	Burgess Creek from its confluence with Big Horse Creek upstream including all named and unnamed tributaries.
iii	Burks Fork from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
ii	Byars Creek from its confluence with Whitetop Creek upstream including all named and unnamed tributaries.
	Cabin Creek from its confluence with Helton Creek upstream including all named and unnamed tributaries.
ii	Cabin Creek from its confluence with Helton Creek 3.2 miles upstream.
i	Cabin Creek from 3.2 miles above its confluence with Helton Creek upstream including all named and unnamed tributaries.
ii	Cherry Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
ii	Chisholm Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iv	Crigger Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
***	Cripple Creek from the junction of the stream and U.S. Route 21 in Wythe County upstream including all named and unnamed tributaries.
iii	Crooked Creek (Carroll County) from Route 707 to Route 620.
ii	Crooked Creek from Route 620 upstream including all named and unnamed tributaries.
iii	Daniel Branch from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
iii	Dobbins Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
iv	Dry Creek from 1.9 miles above its confluence with Blue Spring Creek upstream including all named and unnamed tributaries.
iii	Dry Run (Wythe County) from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
iii	Earls Branch from its confluence with Beaver Creek upstream including all named and unnamed tributaries.
iii	East Fork Crooked Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
ii	East Fork Dry Run from its confluence with Dry Run upstream including all named and unnamed tributaries.
ii	East Prong Furnace Creek from its confluence with Furnace Creek upstream including all named and unnamed tributaries.

ii	Elkhorn Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
ii	Fox Creek from its junction with Route 734 upstream including all named and unnamed tributaries.
iii	Francis Mill Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
ii	Furnace Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
***	Glade Creek (Carroll County) from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
iii	Grassy Creek (Carroll County) from its confluence with Big Reed Island Creek at Route 641, upstream including all named and unnamed tributaries.
vi**	Grassy Creek (Carroll County) from its confluence with Little Reed Island Creek at Route 769, upstream including all named and unnamed tributaries.
iii	Greasy Creek from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
iii	Greens Creek from its confluence with Stone Mountain Creek upstream including all named and unnamed tributaries.
iii	Guffey Creek from its confluence with Fox Creek upstream including all named and unnamed tributaries.
ii	Helton Creek from the Virginia-North Carolina state line upstream including all named and unnamed tributaries.
ii	Howell Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
ii	Jerry Creek (Grayson County) from its confluence with Middle Fox Creek upstream including all named and unnamed tributaries.
iii	Jones Creek (Wythe County) from its confluence with Kinser Creek upstream including all named and unnamed tributaries.
ii	Killinger Creek from its confluence with Cripple Creek and White Rock Creek upstream including all named and unnamed tributaries.
iii	Kinser Creek from 0.4 mile above its confluence with Crigger Creek above the Mount Rogers National Recreation Area Boundary at Groseclose Chapel upstream including all named and unnamed tributaries.
iii	Laurel Branch (Carroll County) from its confluence with Staunton Branch upstream including all named and unnamed tributaries.
iii	Laurel Creek (Grayson County) from its confluence with Fox Creek upstream including all named and unnamed tributaries.
ii	Laurel Fork from the Floyd-Carroll County line upstream including all named and unnamed tributaries.
iii	Laurel Fork (Carroll County) from its confluence with Big Reed Island Creek to the Floyd-Carroll County line.
i	Lewis Fork from its confluence with Fox Creek upstream including all named and unnamed tributaries.
iii	Little Cranberry Creek from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
ii	Little Helton Creek from the Virginia-North Carolina state line upstream including all named and unnamed tributaries.
***	Little Reed Island Creek from its junction with State Routes 782 and 772 upstream including all named and unnamed tributaries, unless otherwise designated in this chapter.
***	Little River from its junction with Route 706 upstream including all named and unnamed tributaries.
ii	Little Snake Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
ii	Little Wilson Creek from its confluence with Wilson Creek (at Route 16 at Volney) upstream including all named and unnamed tributaries.
ii	Long Mountain Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
iii	Meadow Creek (Floyd County) from its confluence with the Little River upstream including all named and unnamed tributaries.
iii	Meadow View Run from its confluence with Burks Fork upstream including all named and unnamed tributaries.
iii	Middle Creek from its confluence with Crigger Creek upstream including all named and unnamed tributaries.
ii	Middle Fork Helton Creek from its confluence with Helton Creek 2.2 miles upstream.
i	Middle Fork Helton Creek from 2.2 miles above its confluence with Helton Creek upstream including all named and unnamed tributaries.
iii	Middle Fox Creek from 4.1 miles above its confluence with Fox Creek upstream including all named and unnamed tributaries.
iii	Mill Creek (Carroll County) from its confluence with Little Reed Island Creek upstream including all named and unnamed tributaries.
ii	Mill Creek (Grayson County) from its confluence with Fox Creek upstream including all named and unnamed tributaries.
iii	Mira Fork from its confluence with Greasy Creek upstream including all named and unnamed tributaries.
ii	North Branch Elk Creek from its confluence with Elk Creek upstream including all named and unnamed tributaries.
iii	North Prong Buckhorn Creek from its confluence with Buckhorn Creek upstream including all named and unnamed tributaries.
ii	Oldfield Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
ii	Opossum Creek from its confluence with Fox Creek upstream including all named and unnamed tributaries.
iii	Payne Creek from its confluence with the Little River upstream including all named and unnamed tributaries.
iii	Peak Creek from 19 miles above its confluence with the New River above the Gatewood Reservoir upstream including all named and unnamed tributaries.
iii	Pine Creek (Carroll County) from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
iii	Pine Creek (Floyd County) from its confluence with Little River upstream including all named and unnamed tributaries.
iii	Pipestem Branch from its confluence with Big Reed Island Creek upstream including all named and unnamed

			tributaries.
	i		Quebec Branch from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.
	iv		Raccoon Branch from its confluence with White Rock Creek upstream including all named and unnamed tributaries.
	***		Reed Creek (Wythe County) from 5 miles above Wytheville's raw water intake upstream including all named and unnamed tributaries.
	ii		Ripshin Creek from its confluence with Laurel Creek upstream including all named and unnamed tributaries.
	iii		Road Creek (Carroll County) from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
	ii		Road Creek (Carroll County) from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
	iv		Rock Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
	iii		Silverleaf Branch from its confluence with the Little River upstream including all named and unnamed tributaries.
	iii		Snake Creek from Route 670 (3.2 miles above its confluence with Big Reed Island Creek) upstream including all named and unnamed tributaries.
	ii		Solomon Branch from its confluence with Fox Creek upstream including all named and unnamed tributaries.
	vi**		South Branch Elk Creek from its confluence with Elk Creek upstream including all named and unnamed tributaries.
	iii		Spurlock Creek from its confluence with the West Fork Little River upstream including all named and unnamed tributaries.
	iii		Staunton Branch from its confluence with Crooked Creek upstream including all named and unnamed tributaries.
	iii		Stone Mountain Creek from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
	iii		Straight Branch (Carroll County) from its confluence with Greens Creek upstream including all named and unnamed tributaries.
	ii		Sulphur Spring Branch from its confluence with Big Reed Island Creek upstream including all named and unnamed tributaries.
	iii		Tory Creek from its confluence with Laurel Fork upstream including all named and unnamed tributaries.
	iii		Tract Fork from the confluence of Fortnerfield Branch upstream including all named and unnamed tributaries.
	ii		Trout Branch from its confluence with Little Reed Island creek upstream including all named and unnamed tributaries.
	iii		Turkey Fork from 2.6 miles above its confluence with Elk Creek upstream including all named and unnamed tributaries.
	ii		Venrick Run from its confluence with Reed Creek upstream including all named and unnamed tributaries.
	iii		West Fork Comers Rock Branch from its confluence with Comers Rock Branch upstream including all named and unnamed tributaries.
	iii		West Fork Dodd Creek from its confluence with Dodd Creek upstream including all named and unnamed tributaries.
	iii		West Fork Dry Run from its confluence with Dry Run 2 miles upstream.
	iii		West Fork Little Reed Island Creek (Carroll County) from its confluence with Little Reed Island Creek upstream including all named and unnamed tributaries.
	***		West Fork Little River from its confluence with Little River upstream including all named and unnamed tributaries.
	iii		West Prong Furnace Creek from its confluence with Furnace Creek upstream including all named and unnamed tributaries.
			White Rock Creek from its confluence with Cripple Creek upstream including all named and unnamed tributaries.
	***		White Rock Creek from its confluence with Cripple Creek 1.9 miles upstream.
	iv		White Rock Creek from 1.9 miles above its confluence with Cripple Creek upstream including all named and unnamed tributaries.
	ii		Whitetop Creek from its confluence with Big Horse Creek upstream including all named and unnamed tributaries.
	i		Wilburn Branch from its confluence with Big Wilson Creek upstream including all named and unnamed tributaries.
2a	IV	PWS,v	New River from Radford Army Ammunition Plant's raw water intake (that intake which is the further downstream), upstream to a point 5 miles above the NRV Regional Water Authority's raw water intake and including tributaries in this area to points 5 miles above the respective raw water intakes.
2b	IV	PWS,v	New River from Radford's raw water intake upstream to Claytor Dam and including tributaries to points 5 miles above the intake.
2c	IV	v, NEW-4	New River and its tributaries, except Peak Creek above Interstate Route 81, from Claytor Dam to Big Reed Island Creek (Claytor Lake).
	V		Stockable Trout Waters in Section 2c
	vi		Chimney Branch from its confluence with Big Macks Creek to its headwaters.
	vi		White Oak Camp Branch from its confluence with Chimney Branch to its headwaters.
	VI		Natural Trout Waters in Section 2c
	ii		Bark Camp Branch from its confluence with Big Macks Creek upstream including all named and unnamed tributaries.
	ii		Big Macks Creek from Powhatan Camp upstream including all named and unnamed tributaries.
	iii		Little Macks Creek from its confluence with Big Macks Creek upstream including all named and unnamed tributaries.
	ii		Puncheoncamp Branch from its confluence with Big Macks Creek upstream including all named and unnamed tributaries.
2d	IV	PWS,v,NEW-5	Peak Creek and its tributaries from Pulaski's raw water intake upstream, including Hogan Branch to its headwaters and Gatewood Reservoir.
	V		Stockable Trout Waters in Section 2d

	***		(West Fork) Peak Creek from the Forest Service Boundary to its headwaters.
2e			(Deleted)
2f	IV	PWS,v	Little Reed Island Creek and its tributaries from Hillsville's upstream raw water intake near Cranberry Creek to points 5 miles above Hillsville's upstream raw water intake, including the entire watershed of the East Fork Little Reed Island Creek.
	VI	PWS	Natural Trout Waters in Section 2f
	iii		East Fork Little Reed Island Creek from its confluence with West Fork Little Reed Island Creek upstream including all named and unnamed tributaries.
	***		Little Reed Island Creek from Hillsville's upstream raw water intake to a point 5 miles upstream.
	Iii		Mine Branch from its confluence with the East Fork Little Reed Island Creek 2 miles upstream.
2g	IV	PWS,v	Reed Creek and its tributaries from Wytheville's raw water intake to points 5 miles upstream.
	VI	PWS,v	Natural Trout Waters in Section 2g
	***		Reed Creek from the western town limits of Wytheville to 5 miles upstream.
2h	IV	PWS,v	Chestnut Creek and its tributaries from Galax's raw water intake upstream to their headwaters or to the Virginia-North Carolina state line.
	VI	PWS	Natural Trout Waters in Section 2h
	***		Coal Creek from its confluence with Chestnut Creek upstream including all named and unnamed tributaries.
	ii		East Fork Chestnut Creek (Grayson County) from its confluence with Chestnut Creek upstream including all named and unnamed tributaries.
	iii		Hanks Branch from its confluence with the East Fork Chestnut Creek upstream including all named and unnamed tributaries.
	iii		Linard Creek from its confluence with Hanks Branch upstream including all named and unnamed tributaries.
2i	IV		Fries Reservoir section of the New River from river mile 141.36 to river mile 144.29.
2j	IV	PWS	Eagle Bottom Creek from Fries's raw water intake upstream to its headwaters.
2k	IV		New River from Stuart Dam at N36°36'08"/W81°18'40" upstream 2.29 miles.
2l	IV	PWS	New River and its tributaries inclusive of the Wythe County Water Department's Austinville intake near the Route 636 bridge, and the Wythe County Water Department's Ivanhoe intake on Powder Mill Branch just upstream of the Wythe-Carroll County line to points 5 miles above the intakes.
	V	PWS	Stockable Trout Waters in Section 2l
	vi		Powder Mill Branch (from 0.6 mile above its confluence with the New River) 2.1 miles upstream.
2m	IV	PWS, NEW-4,5	New River (Claytor Lake) from the Klopman Mills raw water intake to the Pulaski County Public Service Authority's raw water intake and tributaries to points 5 miles upstream of each intake.
2n			(Deleted)

Statutory Authority

§ 62.1-44.15 of the Code of Virginia; Clean Water Act (33 USC § 1251 et seq.); 40 CFR Part 131.

Historical Notes

Derived from VR680-21-08.19, eff. May 25, 1988; amended, Volume 14, Issue 04, eff. December 10, 1997; Errata, 14:12 VA.R. 1937 March 2, 1998; amended, Virginia Register Volume 20, Issue 09, eff. February 12, 2004; Volume 26, Issue 12, eff. February 1, 2010; Volume 32, Issue 26, eff. June 27, 2017.

Part X
Designations of Authority

9VAC25-260-550. Designations of authority.

The director or his designee may perform any act of the board provided under this chapter, except as limited by § 62.1-44.14 of the Code of Virginia.

Statutory Authority

§ 62.1-44.15(3a) of the Code of Virginia.

Historical Notes

Derived from Volume 14, Issue 04, eff. December 10, 1997.

FORMS (9VAC25-260).

Site-Specific for Sewage Discharges Equal to or less then 1000 GPD Chlorine Standard Exception Form for Streams with Intermittent Flows (eff. 1/89).

Site-Specific Chlorine Standard Exception Form for Streams with Intermittent Flows.

Modified Disinfection Requirements Protocol.

Forms (9VAC25-260-9999)

Chesapeake Bay Program Analytical Segmentation Scheme - Revisions, Decisions and Rationales 1983-2003, EPA 903-R-04-008, CBP/TRS 268/04, October 2004, US EPA Region III Chesapeake Bay Office

Chesapeake Bay Program Analytical Segmentation Scheme - Revisions, Decisions and Rationales 1983-2003, EPA 903-R-05-004, CBP/TRS 278-06, 2005 Addendum, December 2005, US EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-03-002, April 2003 and 2004 Addendum, October 2004, US EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-07-003, CBP/TRS 285/07 2007 Addendum, July 2007, US EPA Region III Chesapeake Bay Office

Technical Support Document for Identification of Chesapeake Bay Designated Uses and Attainability, EPA 903-R-03-004, October 2003 and 2004 Addendum, October 2004, US EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and its Tidal Tributaries - 2007 Chlorophyll Criteria Addendum, EPA 903-R-07-005, CBP/TRS 288/07, November 2007, U.S. EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and its Tidal Tributaries - 2008 Technical Support for Criteria Assessment Protocols Addendum, EPA 903-R-08-001, CBP/TRS 290-08, September 2008, U.S. EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and its Tidal Tributaries - 2010 Technical Support for Criteria Assessment Protocols Addendum, EPA 903-R-10-002, CBP/TRS 301-10, May 2010, U.S. EPA Region III Chesapeake Bay Office

Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll a for the Chesapeake Bay and Its Tidal Tributaries - 2017 Technical Addendum, EPA 903-R-17-002, CBP/TRS 320-17, November 2017, U.S. EPA Region III Chesapeake Bay Office